mail.ru group

annual report

Mail.ru Group Limited

2019

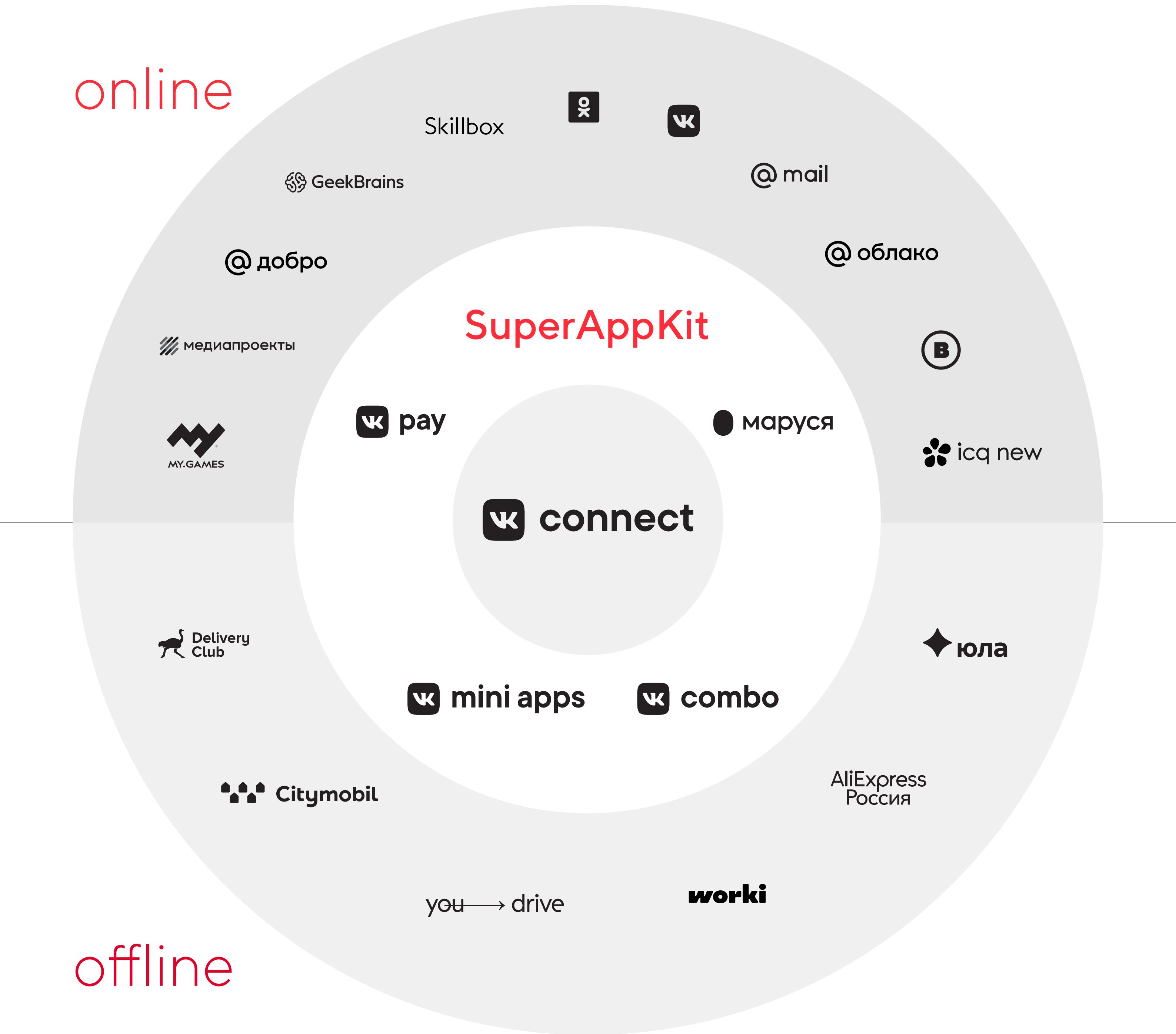
contents

intro

Our mission

We believe that technologies are created and developed for the good of society. Our mission is to improve people's lives by making technologies simple and accessible to as many users as possible.

Throughout our 21-year history, we have constantly evolved by recognising and adapting to existing trends as well as creating new trends, with a sharp focus on the digitalisation of daily user needs. Today, we are a user-focused consumer and entertainment company, with the largest direct audience access in Russia, a mass-market and high-frequency focus, and an international presence via games. We are a strong B2C player, with ambitions in B2B.



The year 2019 was pivotal for us in our strategic goal of making the transition into an ecosystem. Our next phase is focused on making our ecosystem the biggest in Russia via deeper integration and cross-selling of the Group's assets. Group ID and VK Pay are being scaled across the Group, VK Mini Apps will turn into a unified Group platform for developers, and the VK Super App Software Development Kit will be the technology uniting all these initiatives, alongside the Combo loyalty offer and the Marusia virtual assistant.

7:00 a.m.

Wake up and listen to the news

маруся медиапроекты

Find out what's new with your friends

Start the morning with a good deed

@ добро

8:00 a.m.

Check your Combo subscription

Combo mail.ru group

Select a car to drive to work

you drive

9:00 a.m.

Start the working day

@ mail

morning with us

10:00 a.m.

Listen to your special work playlist

Choose a contractor for your project

worki

12:00 a.m.

Work with Mail.ru Group projects

mail.ru cloud solutions

myTarget

PREDICT

TARANTOOL

vision

mail.ru digital tech

MAIL.RU для бизнеса

2:00 p.m.

Order a hot lunch

Delivery Club

Take care of your health

ВСЕ АПТЕКИ

4:00 p.m.

Keep in touch with your colleagues

icq new

ТамТам

агент

MYTEAM

Look for relevant information and save important documents

облако

поиск

пульс

the day with us

8:00 p.m.

Return home after work

Citymobil

9:00 p.m.

Order the goods you need

AliExpress Россия

Sell your stuff

юла

10:00 p.m.

Relax after a busy day

MY.GAMES

Support your favourite creators

DONATION ALERTS

Learn new and useful skills

GeekBrains

Skillbox

all cups

evening with us

Mail.ru Group in brief

Mail.ru Group offers a variety of online communication products, entertainment and e-commerce services.

Communications and Social

The two largest Russian-language social networking services and communication platforms VKontakte (VK) and Odnoklassniki (OK), Russia's leading email service (Mail.ru), media projects, search and music services (UMA and BOOM).

Games

Represented by the MY.GAMES brand, a global digital entertainment provider with leading positions in Russia, which creates and delivers immersive gaming experiences on mobile, PC, and console to millions of players worldwide.

New Initiatives

A location-based marketplace (Youla), online learning platforms (GeekBrains & Skillbox), new B2B projects including Mail.ru Cloud Solutions, and MRG Tech Lab services.

our people

Our main asset is our people. Each year the whole company votes for the strongest employees and teams as part of the Mail.ru Group People Awards. We celebrate professional achievements and formidable expertise in 9 categories. You can see photographs of our 2019 winners throughout this report.

Mail.ru Group People Awards

2019

We are grateful to everyone for their contribution to the company's development.

our history

1998-2001
Communications

Launch of Email & Portal

2006
Social

We enter the social network business

2008
Games

We enter the games market

2015-2019
New Initiatives

Launch of e-commerce & O2O

2019 key highlights

01 January

Launch of Space Justice, a vertical scrolling shooter for iOS and Android developed by IT Territory studio.

Launch of Pulse, a Suggestions Feed offering personalised content based on user interests with the help of extensive analysis of user behaviour and machine learning (ML) algorithms.

02 February

Calls in VK Messenger come out of beta; users can share their screens and minimise video calls to continue chatting.

All business pages on VK can place ads in the format of Stories with up to 3 photo/video objects and call-to-action buttons.

OK Creative studio becomes available to all video content creators, who can now use its interactive mechanics such as polls, quizzes, clickable descriptions and texts, which can be added to videos.

Mail.ru for Business introduces Vision, a computer vision-based technology for the B2B market.

Launch of Atom, a new browser focused on user privacy and security.

03 March

OK integrates an AI-based technology developed by Mirror AI which turns photos into images in the style of emoji.

Mail.ru for Business launches Sitebox, a website builder for creating promo and corporate websites, online marketplaces and personal blogs.

The Big Deal Game Conference, held by Mail.ru Group, gathers the largest international game companies such as Blizzard, Tencent, Ubisoft, Riot Games, etc.

04 April

VK launches QR codes for personal pages, communities or posts; making it easier for users to download, send and post them.

OK adds a post scheduler; the new tool is useful for SMM specialists, bloggers and other users who frequently post content on OK.

OK introduces Playable Ads, a new ad format for games: gameplay and mechanics are displayed in the News Feed, which helps boost audience engagement and downloads.

Launch of Bombastic Brothers, a mobile run-and-gun platformer inspired by the arcade and action games of the 80s, developed by Fast Forward game studio.

Mail.ru Cloud Solutions launches Mail.ru Cloud Managed Services, a new service providing outsourced maintenance of IT infrastructure.

The Mail.ru email service now supports AMP technology, allowing users to edit information right in the email interface.

Mail.ru Group, ivi, a media-streaming service, and ADV Lab introduce target video ads for Smart TV.

Launch of MADE Academy for product managers.

Warface, the top PC game in our portfolio, marks 7th anniversary.

05 May

VK communities now feature an actions history for admins to keep track of content management, changes to settings, etc.

VK users can add surveys and posts to their articles, either new or imported from other social networks.

VK Stories now get archived 24h after posting and are available to the author only.

OK and VK launch Games Cup 2019, a tournament for developers of HTML-5 mobile games with a prize fund of RUB 1.4m and traffic for their projects on OK and VK.

DonationAlerts launches a monetisation service for all authors, including bloggers, journalists, artists etc.

Mail.ru Group introduces an international version of Disk-O which transforms cloud services into hard drives.

Mail.ru Group launches Direct deals, a new tool for advertisers to buy specific ad placements from publishers based on preset parameters such as price, ad format, and location.

MY.GAMES, a global gaming brand, is launched to unite all gaming projects of Mail.ru Group under one umbrella.

MY.GAMES launches Evolution 2: Battle for Utopia, a sequel to the popular sci-fi mobile shooter developed by IT Territory.

MY.GAMES announces the consolidation of Panzerdog studio, the developer of Tacticool, a brand new fast-paced 5v5 multiplayer mobile shooter.

06 June

Start of open-beta testing of our virtual assistant Marusia.

Launch of DonationAlerts in Brazil.

GeekUniversity, an online university run by GeekBrains, launches a product management programme.

MY.GAMES started OBT of Conqueror's Blade, a new client MMO RPG/RTS title licensed from Booming Games.

07 July

Stickers featuring music, surveys and geolocation can now be attached to Stories on VK.

Admins of VK communities get access to all important metrics, gathered on one page.

VK starts testing of its advertising account update, with a new design, navigation, statistics, etc.

VK launches its own hosting service for podcasts; episodes can now be exported to external blogs, websites and other podcast services.

OK launches its own advertising account: all users can now set parameters for their ads with any forms of content such as video, photos and links.

OK launches shared photo albums where users can upload and discuss photos of each other.

Admins of OK groups can upload animated covers with up to 5 images.

MY.GAMES acquires SWAG MASHA studio, the developer of Love Sick: Interactive Stories.

08 August

MY.GAMES partners with iDreamSky, one of the leading Chinese mobile game developers, which will allow them to strengthen their positions in key international markets.

VK apps now offer access to the whole range of goods on AliExpress, including the ability to place an order.

VK users can upload subtitles for their videos in up to 5 languages.

OK groups can now leave comments on their behalf.

OK launches local news suggestions: the service automatically identifies what will be relevant for users in certain regions and cities.

MY.GAMES announces MY.GAMES Store, a global game platform for both F2P and premium games.

Mail.ru Group and Proxima Capital acquire a controlling stake in the carsharing platform YouDrive.

Mail.ru Group ranks 4th in the European mobile developer ranking compiled by AppAnnie as of H1 2019.

Mail.ru Cloud Solutions launches a new PaaS for analytical data, making storage and processing 3-5 times cheaper.

Mail.ru Group launches DOOH (digital-out-of-home) target ads.

09 September

Mail.ru Group launches Myteam, a new messaging app for corporate users.

VK launches Worki, a mini app for job seekers where they can upload their CVs and respond to vacancies suggested to them based on their professional interests.

VK launches Biblio, a mini app for streaming audiobooks; audiobooks can be purchased individually or listened to with a subscription.

VK Music now features a “Similar Artists” section with suggestions based on musical genre.

VK opens an AI Lab at the Moscow Institute of Physics and Technology, one of Russia’s leading technical universities.

OK introduces a new feature that blurs the background during video calls, including group calls.

Youla launches in-app P2P calls in cooperation with OK: users’ contact details are not disclosed.

Tarantool launches Cartridge, a platform for developing business apps with tools for solving typical problems with cluster management, testing, deployment and scaling.

Mail.ru Group ranks first in terms of daily mobile audience in all Russian cities according to Mediascope.

VK and OK rank as the 2nd and 3rd most popular websites in the C.I.S., according to Deloitte.

Launch of Big Data MADE Academy for data scientists.

10 October

Youla introduces Stories, a new promo tool for sellers.

Mail.ru Group launches the Combo loyalty programme.

MY.GAMES launches American Dad! Apocalypse Soon, a strategy mobile game based on the Emmy®-nominated series from 20th Century Fox Television, developed by Fast Forward studio.

MY.GAMES launches a CBT of Lost Ark, a highly anticipated MMOARPG licensed from Smilegate, on PC in Russia and the C.I.S.

Tarantool releases Data Grid, an enterprise solution for developing distributed business apps.

Mail.ru Group, Alibaba Group, MegaFon and RDIF announced the completion of the AER JV transaction.

Mail.ru's Email and Cloud apps are the only Russian services listed in the top 20 most secure apps in Google Play.

11 November

Large VK communities and verified pages can now attach call-to-action buttons to their videos.

VK simplifies the verification process by adding an interface to apply for a verification badge.

OK becomes the first social network to launch a virtual telephony system (ATS) for OK groups.

OK sets a new record of new friendships – 6m in one day.

Launch of Dom Mail.ru, a special vertical content project inside Realty Mail.ru devoted to housekeeping.

Mail.ru Group, Sberbank, Yandex, MTS, Gazpromneft and RDIF announce the AI-Russia Alliance.

DonationAlerts becomes the biggest service for stream monetisation in Russia.

Mail.ru Group launches indoor advertising solutions.

Youla launches video calls for users to evaluate the quality of online goods.

12 December

Sberbank and Mail.ru Group complete the creation of the leading Russian O2O (online-to-offline) services platform.

Mail.ru Group announces its unified authorisation system Mail ID to ensure seamless and convenient access to all the products of its ecosystem.

Youla introduces AI technology which can detect product type from a photo and estimate time to sale based on the price.

VK launches thematic news feeds featuring posts selected by both algorithms and participants of a content rating programme.

VK Mini Apps launches Split the Bill, a mini app that allows users to quickly split the bill with friends.

MY.GAMES launches an OBT of MY.GAMES Store platform.

VK launches Memories, where users can see posts and photos that they added to their wall on the same day several years ago.

OK launches geo-targeting, allowing advertisers to target audiences who live close to a specific location.

OK launches an overhauled Music section with a new algorithm for suggestions.

Mail.ru Digital Technologies announces a fully-fledged solution designed to build an integrated social platform for large corporates.

Launch of Hi-Chef, a new convenient mobile website with recipes featuring a voice interface.

Mail.ru Group launches the Data Management Platform, which brings together our omni-channel marketing solutions and services.

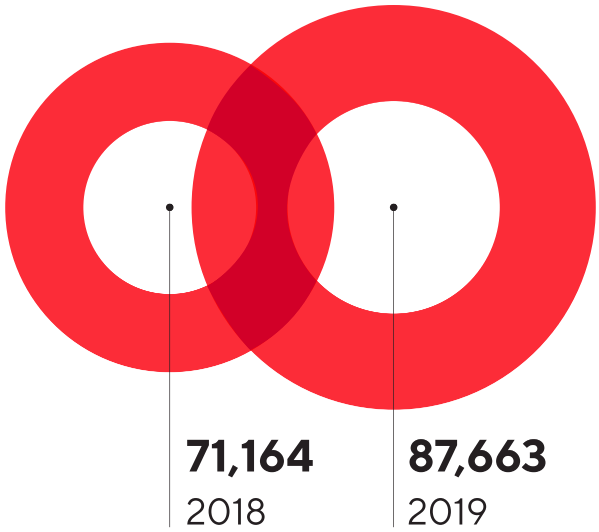
Mail.ru Group and VEB.RF launch a financial marketplace for businesses featuring a smart selection of financial products based on basic company details.

financial highlights

Revenue

RUB mln

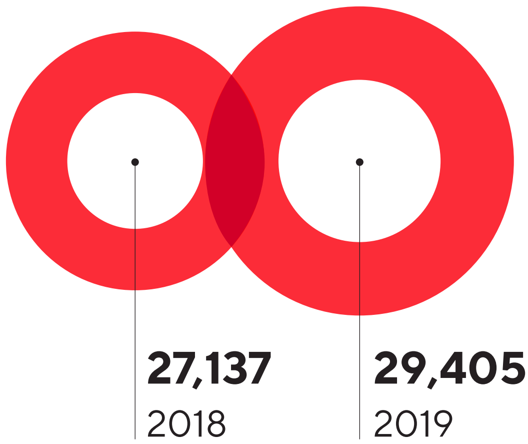
23%↗



EBITDA

RUB mln

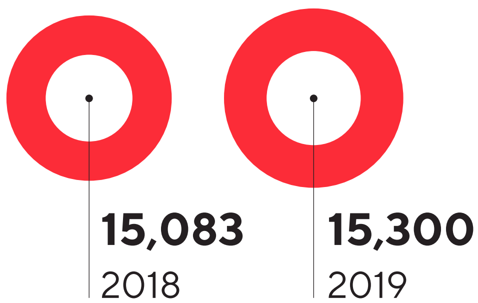
8%↗



Net profit

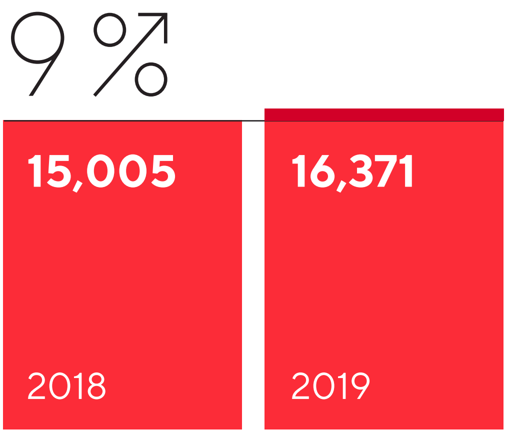
RUB mln

1%↗



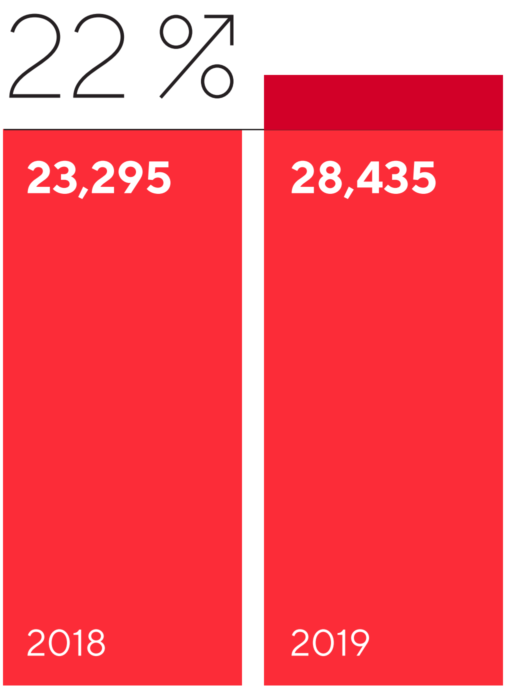
Community IVAS

RUB mln



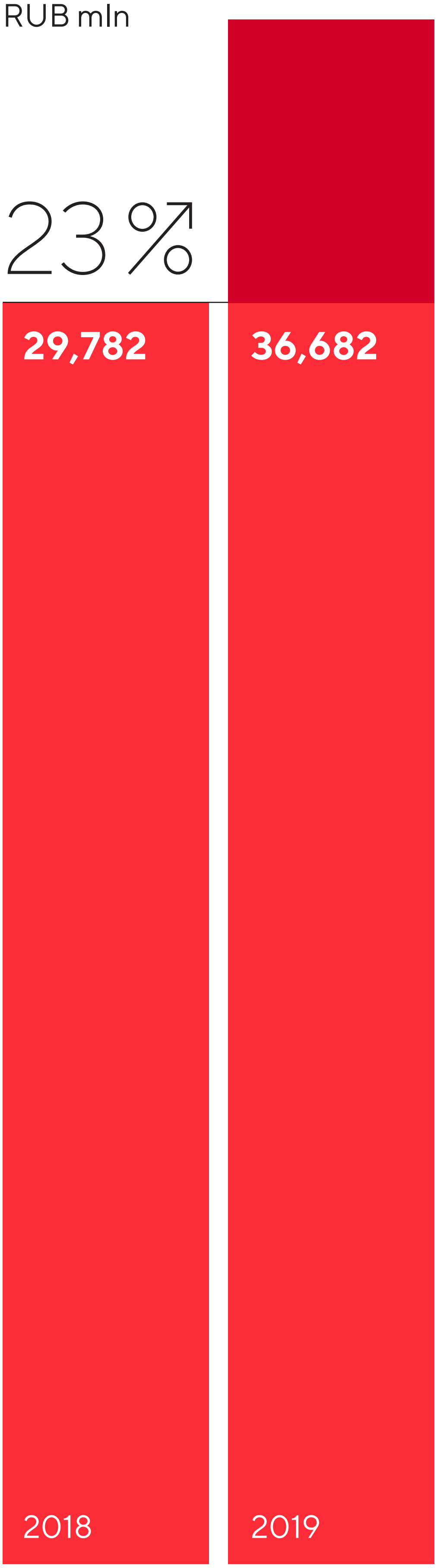
MMO revenue

RUB mln



Online advertising

RUB mln



chairman and CEO statement

The year 2019 has been pivotal for us in our strategic goal of making the transition into an internet ecosystem, to be formed on the basis of our strong and well-diversified product portfolio as well as complementary and well-funded partnerships.

Boris Dobrodeev
CEO (Russia)
Mail.ru Group

Dmitry Grishin
Co-Founder
and Chairman of the Board

Throughout our 21-year history, we have constantly evolved by recognising and adapting to existing trends and creating new ones, with a strong focus on the digitalisation of daily user needs. Today, we are a user-focused consumer and entertainment company, with the largest direct audience access in Russia (at ~58.4m, which means daily access to ~48% of the local population[1]), a mass-market and high-frequency focus, and an international presence via Games. Russians spend 168 minutes on mobile on average per day (web+apps)[2], and key Mail.ru Group platforms account for 17% of this time.

1 Mediascope WEB-Index, Russia 0+, age 12+, December 2019

2 Mediascope WEB-Index, Russia 0+, age 12+, December 2019

Overall strategic focus

Our core communication and social platforms remain among the most popular on the Russian and C.I.S. markets, with our email service being among the top five globally. Our games continue to become more international and increasingly mobile, with a presence across platforms and a focus on our own IP. We finished the year as a global top 50 games company and the largest European games company domiciled in Russia. Youla, the second largest classified site in Russia, demonstrated further strong growth and gained share on the local classifieds market. Our music subscriber numbers continued to show strong growth, exceeding 3m, as we broaden the Group's overall content offering. We have also expanded our reach in EdTech through the consolidation of Skillbox, while our B2B-technology business has grown at a triple-digit rate to reach its first RUB 1bn revenue milestone. In the meantime, we maintain focus on ESG, having launched corporate NGO Kod Dobra, which raised >RUB 1m for 187 verified charity organisations from 46 Russian regions, among multiple other internal initiatives, which also include plans to launch regular publication of a stand-alone Sustainability Report.

In 2019, we managed to complete two planned major transactions with the AliExpress Russia JV in e-commerce and the O2O JV in food tech and mobility. Our new partners include Alibaba, the world's largest e-commerce company, and Sberbank, the largest financial institution in Russia, both of which are now shareholders, along with Prosus and Tencent. In the meantime, Delivery Club, Citymobil and AliExpress Russia are already among the leaders in their respective categories, with significant growth ahead.

Our 2020-22 development phase will be focused on the formation of our ecosystem via cross-selling and deeper integration of the Group's assets, which we have already started to do through the launch of the Combo loyalty programme and unified Group ID. We are transforming VK into the heart of our ecosystem. A VK account will be the foundation for our Group ID, and VK Pay is being scaled across the Group, VK Mini Apps will turn into a unified Group platform for developers and the VK Super App Software Development Kit will be the technology uniting all these initiatives, along with the Combo loyalty offering and our Marusia voice technology.

In advertising, we are targeting a broader presence across performance advertising, while growing exposure to SMEs and broadening our offering in areas like video, as well as omni-channel initiatives. Overall, our improving AdTech and growing ROIs for our clients should allow us to continue to benefit from the ongoing shift of budgets online and to social within digital, as well as to grow our ad market share over the coming years.

Games will continue to increase their global reach and mobile focus. We will maintain our dedication to reducing the hit-driven nature of the games business through long-term planning and management of the games pipeline, studios, talent, analytics and marketing budgets.

Among our New Initiatives, we want to continue to invest in Youla, as we believe in its major potential for both audience growth and monetisation, with significant competitive advantages coming not just from the quality of its team and tech stack, but also synergies with the Group. These allow for social and other integrations, which we will increasingly be exploring.

We will look to further develop and expand other New Initiatives, including Marusia and the related Capsula smart speaker. Products like Pulse are a reflection of our strategy to make our services more personalised in order to better satisfy the user's continued demand for information and entertainment. A unified video platform for the whole Group will be launched in 2020 and we will be more active in developing our video product, while also creating more video entry points. We believe in the future of online education and will continue to invest in this area. Our ambition is not only to be a B2C, but also a B2B company, with ongoing related investments within our New Initiatives as well.

Overall, we want to continue to enhance our AdTech and offer more use cases, be active in AI, Big Data and various types of content, while connecting to our user through multiple devices, loyalty and unified ID. There are a large number of synergies within the Group, which we will actively exploit. The goal for all services is to be personalised, with smooth and easy movement for the user between them, which should result in a rise in paying user share and APRU. We believe that such a strategic approach will significantly enhance our market position over the next three years.

Performance review

VK

VK finished the year as a strong leader among communication platforms in Russia, with 71.6m MAU (+2.2% YoY), including 65.2m on mobile (+7.9% YoY) as of December 2019. VK is focused on boosting time spent and stickiness: this was up 12.5% in 2019 to 36 minutes per day, including 16% growth on mobile.

Thanks to more than 200 product updates in 2019 and the development of the VK content platform, engagement continued to rise, with, among others: 1) continued double-digit growth for average daily newsfeed views; 2) +45% for Stories published monthly; 3) +47% for daily live streams; 4) +34% for daily video uploads. According to Mediascope, on average users visit VK every other day, more than any other Russian social network.

VK has been rolling out multiple community tools for interacting with audiences, which led to the number of active communities on VK reaching 3m in December – a 26% increase YoY. The updates also allowed content creators to earn RUB 1.5bn between November 2018 and October 2019 using VK's monetisation tools.

The VK Mini Apps platform continues to expand rapidly, with over 13,000 active Mini Apps and ~23m MAU in December, with over 3m MAU for the AliExpress mini app offering the full range of products available on the AliExpress marketplace, which was launched on VK at the end of August 2019.

VK has added new statistics, improved its optimisation algorithms, introduced ad auction predictions, launched retargeting using QR codes and updated the ad formats. These updates have had a positive effect on advertisers' ROI. The launch of the new HTML5-based interactive ad format and the development of VK Mini Apps and QR codes have provided opportunities for an even deeper connection between offline and online, increasing the sales of special offers for brands by 40%. The number of active businesses on VK has reached the 1m mark. The introduction at the end of 2019 of quick launches for ad campaigns via mobile, in which a smart system suggests a target audience and budget, has significantly simplified the use of ads for SMEs or for those who want to launch campaigns on the go. All these efforts resulted in VK delivering 27.3% revenue growth YoY in Q4, with top-line tracking in line with medium-term guidance of doubling VK revenue over the next 3-4 years, as compared to the 2018 level.

OK

The OK audience was stable YoY in 2019, at 43m MAU in Russia, with rising engagement driving +2.8% growth in DAU, including +11% on mobile.

In 2019, OK focused on the enhancement of its features as a communication services platform for sharing emotions with friends and family. IVAS was one of the key drivers behind the growth in engagement, along with other communication services in 2019. OK users exchanged 45bn in virtual gifts, growing 4x YoY. The number of virtual gift senders grew by 45%. On peak days, during national holidays, gift numbers exceeded half a billion per day. The monthly number of stickers and their senders doubled YoY.

OK's mobile gaming platform continues to grow. OK made RUB 3.2bn in total payouts to game developers in 2019, including RUB 600m for the mobile share, which has grown 2x YoY.

Thanks to new machine learning and neural network-based algorithms as well as new functionality allowing friends to be tagged in photos and videos, OK posted a record of 240m daily likes. In Q4 2019 OK also set a record of 6m new daily friendships. AI-based friend recommendation algorithms helped to increase monthly friend requests by 50% YoY.

OK also improved its video call service throughout 2019, resulting in the average daily number of calls growing by 56%. Average video viewing time increased by 27% YoY, with OK continuing to successfully monetise its own content.

In 2019, OK continued to expand the SME ecosystem, which resulted in a 2.2x YoY growth in SME-related ad revenues. In Q4 2019, OK launched new business profiles for entrepreneurs. As of now, over 1m users run a business through their OK pages.

OK's Chinese goods marketplace underwent a major update, with enhanced personalisation algorithms and improved social features. This resulted in 29.4% revenue growth, with over 4.5m in orders made and 42% of users making a second purchase within a month of their initial order.

3 Newzoo, 2019 forecast: 7.2% YoY global games growth, including 9.7% YoY for mobile

Games

At 26% for 2019, the growth of our gaming segment continues to outperform the global games market for the fourth year in a row[3], with full-year revenue of RUB 31,262m. Our mobile-focused international expansion is progressing, including through partnerships with regional players. We increased the number of registered users of our games by 26% in 2019, to 605m. We finished the year with 13 in-house studios and 22 studios within our gaming investment arm (MRGV). In 2019, international revenues accounted for 68% of total MMO revenue. The share of mobile revenues stood at 61% in Q4 vs. 57% in 2018. We expect mobile revenue share to further rise towards 80% in the coming two-three years.

The Warface franchise, one of our top three revenue-generating game franchises, continues to perform well, supported by community management. In 2018 the franchise expanded to consoles and was among the top F2P games on the PS4 in the U.S. in terms of downloads. We are continuing to expand Warface's footprint by bringing it to new platforms, including the 2020 releases of the first mobile and Nintendo Switch versions. A new console game project will launch in Q2 for PS4 and Xbox One. As such, we continue to see Warface as one of our key franchises.

War Robots (>150m installs) is in the mature phase of its lifecycle and hence is showing EBITDA improvement, which is expected to continue in 2020. Hustle Castle continues to perform strongly, with revenue growth of 36% in 2019, a new daily revenue record of RUB 100m and 55m downloads at year-end. Over the three years since its release, Hustle Castle continues to be a strong margin generator. The product's metrics remain consistent, and our development team has a full pipeline of updates, with the title remaining core in our portfolio.

The American Dad! Apocalypse Soon mobile game, developed in-house in partnership with FOX Next, was launched in November 2019, with 3.6m installs today. Lost Ark MMOARPG was launched on PC within Russia/the C.I.S. in October 2019 and has seen 1.7m in registered users. The PC title Conqueror's Blade, with 1.7m registered users at year-end, continues to show strong potential for growth on international markets, with a full publishing pipeline in 2020. Left to Survive, our own title developed by the Whalekit studio and released in July 2018, remains among the top five revenue-generating games in our portfolio with around 15m downloads. The narrative-driven mobile game Love Sick: Interactive Stories from the SWAG MASHA studio remains among the top 10 titles, with 4m downloads since its launch in February 2019. We will continue to allocate resources to all of these games in 2020.

We launched our international games platform MY.GAMES Store in open beta-test mode in December 2019. We have a full pipeline of releases for 2020, including from the studios acquired by Mail.ru Games Ventures (MRGV), many of which have games suitable for global launch.

New Initiatives

Revenue from the New Initiatives segment in Q4 2019 grew 85.0% YoY to RUB 2,349m, with 126.7% growth to RUB 6,233m for the year. Among the key drivers was continued progress on the monetisation of Youla, as well as scaling up our cloud, online education and other new initiatives.

Youla is the largest component here, and the platform's solid growth continued in 2019 with RUB 2.1bn in revenues (above budget), with a RUB 2bn EBITDA loss (in line with budget). Youla has 27m MAU[4] and has become one of the largest mobile-first classifieds globally[5] in less than five years since its launch. Our strategic goal in Classifieds is to remain a mobile-focused technological leader among domestic players with a serious attitude to security and safety, and differentiation through extensive social and e-commerce functionality, accessible through the Group.

Our B2B-technology business surpassed RUB 1bn in revenues in 2019, showing 140% YoY growth.

Sales of Capsula, our Marusia-powered smart speaker, started in April 2020. Marusia now has more than 60 skills and will be more deeply integrated with the Group's services throughout 2020.

The Pulse personalised content recommendation platform, launched in January 2019, continues to expand, having reached 45m MAU and 3.5m DAU in Q4. It is attracting users with over 300,000 unique news items from more than 3,000 sources, with the average time spent at 10 minutes per user per day. We will start initial monetisation projects in 2020.

4 Internal statistics on MAU on all platforms
5 AIM Group Marketplaces Report, May'19

2019 financial performance

Despite the somewhat challenging macro and significant base effects throughout 2019 for the core advertising and games businesses, they continued to grow strongly. FY 2019 revenues grew 23% YoY to RUB 87,663m, excluding high-growth businesses in foodtech and e-commerce, compared to a revenue guidance of 22-24%. FY 2019 EBITDA was up 8% to RUB 29,405m, in line with our guidance of "around RUB 30bn".

Despite the backdrop to the 2019 advertising market being more challenging and a high base as a result of FY 2018 growth of >30%, advertising revenue trend remained solid, with H2 performance better than H1 (+24.4% vs +21.6% YoY). VK will be among the pillars for continued growth, having expanded revenues by >20% in 2019. Having nearly doubled during the previous two years, MMO revenues continued to expand, rising by 22% in FY 2019, above the global average. Youla continued its rapid growth, being one of the largest mobile-focused classifieds globally in terms of Android DAU. Having started monetisation only in Q4 2017, Youla delivered RUB 2.1bn in revenues in 2019.

In Q4, the cash-generating capacity of our business remained strong, though it was affected by the funding for Delivery Club, Citymobil and Pandao ahead of the closure of the JV deals. The free cash flow (FCF) generation of our business is expected to normalise in 2020. Our net debt position, post-M&A costs (including a USD 100m contribution to the AER JV and RUB 8.5bn contribution to the O2O JV), at the end of Q4 2019 was RUB 13,736m. We have another USD 82m contribution to make towards the AER JV in October 2020 and a potential RUB 4.6bn payment due to the O2O JV in November, subject to KPIs. In Q4 we utilised RUB 8.5bn in credit lines with an average effective interest rate of 7.2% vs a 7.7% rate on prior borrowing.

Outlook

Despite near-term hurdles resulting from COVID-19 as well as the oil price and related macroeconomic effects, our current three-year vision sees potential for an acceleration of revenue growth into 2022 vs. 2019.

In 2020 we will remain focused on advertising solutions and technologies as well as driving content consumption. In the coming years we will centre our efforts on growing the effectiveness of our advertising through ongoing AdTech development and innovative new ad products, while attracting new types of advertisers, such as SMEs and offline retailers, and expanding our advertising network.

We set our ambitions high and aim to deliver above-market ad revenue growth as macro stabilises. We see a large improvement in conversions from our recent initiatives and will use any macro weakness to deepen our exposure to performance ad formats.

As core to our ecosystem, we will focus on further growth in VK revenues and engagement. We aim to develop VK into a core Russian super-app and boost engagement among the 30+ audience. We will invest in VK's content platform (including video and music), messaging, Mini Apps and other areas. We will be highly focused on growing engagement and time spent. Our goal remains to double VK revenues by 2022 vs. 2018 levels. We aim to boost the advertising revenue share on OK. Gaming, social commerce and SME will be a major focus for both of our core social networks, with cross-pollination of video and Mini Apps.

We are confident in our 2020 games pipeline as well as the continued performance of existing titles, including War Robots, Warface, Hustle Castle and others. We continue to expect Games EBITDA to double its 2018 level in 2022 with a margin in the low to mid-twenties through the cycle, with broadly similar revenue growth in 2020, subject to balance between the potential positive impacts of COVID-19 on one hand and the magnitude of macroeconomic weakness on the other hand.

We want to continue to invest into Youla as we believe in its significant audience growth and monetisation potential, including through further synergies with the Group through social and other integrations. Potential macroeconomic weakness in 2020 could serve as a supportive factor for classifieds vs. other retail platforms.

There are a large number of unrealised synergies within the Group, which will be leveraged through the integration of a single ID, a broad loyalty programme, and VK Pay across the ecosystem. Our Unified ID service and the Combo loyalty programme are being rolled out across products as tools that will provide the user with smooth integration, simple authorisation and added value. The goal for all services is to be personalised, with smooth and easy navigation between them.

Recently deconsolidated projects like Delivery Club and Pandao are now part of the AER and O2O JVs and are equity accounted. Both have ambitions to be industry leaders and will therefore see an active investment phase in the coming years. In 2020, we expect to see deeper integration between AER and our social networks and further collaboration in distribution. In 2020, Citymobil will work on further enhancement of its mapping, routing and matching services, along with deeper integration with the Sberbank and Mail.ru Group ecosystems, as well as other product initiatives. Delivery Club is aiming to significantly scale its business in 2020, with potential support coming from its rising exposure to e-grocery business, including the recent consolidation of Samokat, the largest local express e-grocery delivery player.

Our people and culture

In every annual report we have said, and it is worth re-iterating, that our main asset is our people and the technology-driven culture which they create. Our unique culture remains one of the guiding principles for us, and Mail.ru Group's future success is very dependent on our ability to attract, retain and motivate the best engineers and other human talent. We continue to recognise this fact and very much value the contribution of every Mail.ru Group employee to the overall success of our business.

Thanks and appreciation

For the last few years we have chosen to close this section with an acknowledgement to a number of key groups. In view of the success that we saw in 2019 and the motivation that we all need to successfully manage through turbulent times, it is quite right that we continue to do this. First off, our employees. Since the start of the Group, our success has been down to the dedication, commitment and passion that they show every day. Our employees are highly skilled and continue to show great loyalty to the Group. Underlying retention rates remain unchanged, and we believe that this is mainly a function of our continued focus on a tech-heavy culture. The Board is again delighted to extend its thanks to all the Mail.ru Group staff and to recognise their contribution. Secondly, on behalf of the Board, we want to thank our shareholders, who continue to believe in, encourage and support us. The year 2019 saw a number of major strategic partnerships materialise and these have been showing strong results, with a number of our New Initiatives demonstrating significant long-term potential. Despite the required investments, we have been able to deliver on guidance on both growth and profitability. We aim to continue to build on our success and use any weakness as a potential opportunity to further strengthen our business and grow our audience base. As Russia's largest social and communications company, with significant exposure to games and therefore international markets, we are approaching 2020 with confidence in the long-term success of our Group and acknowledging the opportunities that this year can present, even in turbulent times.

”

Mail.ru Group
People Awards
2019

Marusia voice assistant

startup of the year

Alexey Krivenkov


Mail.ru Group
People Awards
2019
Worki
startup
of the year
Alla Arshevskaia, Anton Vorobyev,
Anna Tishchenko, Sergey Sharapov

Mail.ru Group People Awards

2019

Combo

startup of the year

Vladimir Sukhodoev, Anna Tseytlina, Alena Semichastnova, Sergei Potapov

MAIL.RU GROUP MONTHLY REACH
Mediascope, Russia, cities 0+, age 12+, Dec 2019

operating review

89%
of Russian mobile internet users

93%
of Russian internet users

operating review

Our services attract millions of users each day. Whether they are using email, instant messaging (IM), our social networks or our games, we aim to increase the time they spend on our sites and mobile applications by continuously offering new features and services.

Communications & Social

We operate the two largest Russian language social networks: VKontakte (VK) and Odnoklassniki (OK). They enable users to find, connect and communicate with friends, families and colleagues. Our products include a newsfeed, messaging services, status updates, photos, videos, stories and other features. Users can play games together, send each other online gifts, recommend websites and keep track of events such as birthdays. We frequently add new products and services to maintain and increase user engagement.

VK

VK remains a strong leader among communication platforms in Russia, with 72m MAU[1], including 65m mobile users as of December 2019. Throughout 2019 the VK team launched over 200 product updates, driving user engagement and revenue. These updates include:

- a major mobile app redesign
- significant updates to the VK Mini Apps platform
- the launch of key O2O Mini Apps: VK Taxi, Delivery Club, AliExpress, etc.
- simplified verification for profiles and communities
- dark mode for apps
- major updates to Stories
- curated content feeds arranged by theme
- an overhaul of ad management
- chats in VK communities, etc.

1 Monthly active users in Russia

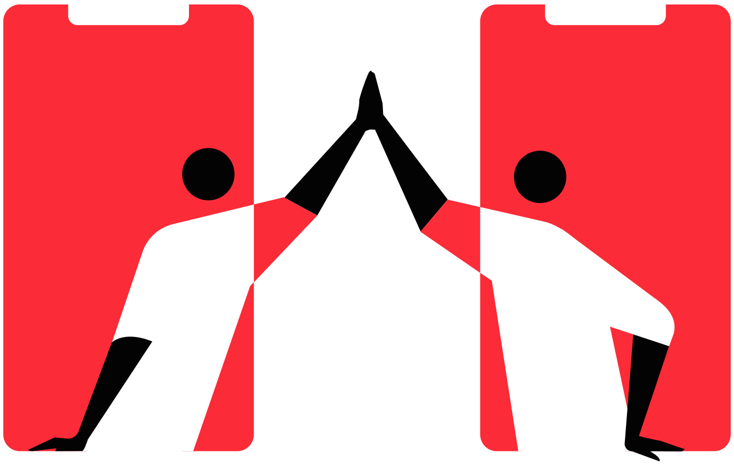
Given the existing high internet penetration and the related slowdown in the overall growth of the Runet audience, VK is more focused on boosting time spent and stickiness: up 12.5% in 2019 to 36 minutes per day, including 16% growth on mobile. According to Mediascope, users visit VK every other day, more than other social networks. Our ultimate goal is to grow the VK audience in Russia and the C.I.S. to over 100m within the next two-three years.

To accomplish this, VK will expand its line of products and continue moving towards becoming a Super App. VK will also expand its ecosystem beyond its main app and increase its audience using VK Mini Apps, a unified ID system, VK Pay, a broad loyalty programme, and other integrations with Mail.ru Group products.

Young people aged 12–24 are VK's most engaged users, they spend on average 68 minutes per day on the platform. However, we are investing resources into making VK equally relevant to all age groups in our ambition to make VK the main Super App in Russia.

Thanks to product updates and the development of the VK content platform, engagement continued to grow in 2019:

- +45% in Stories published monthly
- +47% in daily live streams and +34% in daily video uploads, with > 80m people watching video content monthly
- +15% in messages delivered daily, to > 10bn
- +42% in money transfers between VK users
- +27% in the number of monthly audio and video calls, to 55m a month in Q4 2019
- +10% in the number of likes
- +42% in active music subscriptions



The two largest Russian language social networking services and communication platforms, VKontakte (VK) and Odnoklassniki (OK)

VK Music, one of the largest licensed social music ecosystems in Russia, is one of the most important drivers of growth in time spent and user engagement. This is why we continued developing our music platform throughout 2019 and integrated it even further into VK's content ecosystem. Over the course of the year, VK improved its personalised music recommendations so users would get the exact kind of content they are interested in. VK became the first Russian platform to launch music stickers in Stories, based on its own music platform.

A platform to support independent artists was also launched in 2019. A special app provides a simplified way to contact record labels, set up an artist profile and enable monetisation. In November, VK introduced 50% student discounts on music subscriptions to VK Music and BOOM. These updates resulted in more than 3m active paid and trial subscriptions on the Group's platforms and in the integrated BOOM app by UMA (+42% YoY) in January 2020.

VK aims to cover all the needs of its users and is actively developing the open Mini Apps platform for third-party developers; this allows users to play games, shop, communicate, order food, look for jobs and much more all inside the VK ecosystem without having to download third-party apps. In 2019 the VK Mini Apps platform expanded rapidly, with over 13,000 Mini Apps active. The platform has seen 14x growth in MAU since January 2019, to 23m in December.

QR codes are an important tool that can be used to connect people with services and communities, which is why VK has invested in developing a product for generating and scanning QR codes. This resulted in over 10m QR code scans in Q4 versus 300,000 in Q1. Users can scan QR codes to launch Mini Apps, join communities, add friends, get cashback, etc.

The Mini Apps platform allows for strong synergy between various Mail.ru Group products, in which business units can help each other meet all the needs of their customers. This also helps promote products more efficiently and improves conversion rates. For example, the AliExpress Mini App, which offers the full range of products available on the AliExpress marketplace, was launched on VK at the end of August. Over 3m people use this Mini App every month.

>3,000,000

active subscribers to the Group's music ecosystem

In June 2019, VK teamed up with Citymobil, one of Russia's leading taxi aggregators, to launch VK Taxi: a taxi booking service on the VK Mini Apps platform. Using VK Taxi, users can book and pay for a taxi on any device directly via VK. For example, 25% of Citymobil taxi bookings in Tolyatti were made using the VK Mini App in October 2019.

Last year also saw the launch of the Worki Mini App on the VK Mini Apps platform. Worki allows users to look for jobs without leaving the social network. Integrating Worki into VK has made the job and candidate search process even more effective. The Mini App takes full advantage of VK's communication tools and provides personalised job search results based on user information.

VK has simplified user and community verification, allowing more business representatives, influencers and talented content creators to be able to receive the verified badge. Now that all communities can publish Stories on VK, it is easier for businesses to promote their products and inform users about special offers. Content creators can use them to draw their audience's attention to their most important or successful content.

Throughout the year, VK worked on developing community tools for interacting with audiences, which saw the number of active communities on VK reach 3m in December. These updates also allowed content creators to earn RUB 1.5bn using VK's monetisation tools between November 2018 and October 2019.

The VK podcast service, which was launched in September 2018, hosted over 2,000 podcasters in 2019. VK users can now share videos containing links to polls, products, articles and other content. This feature will make ads more effective for advertisers and more interactive for content creators.

In 2019, we actively developed the Recommendations section and started to integrate it into the main News Feed. We expect further development in the synergy of the News Feed and the Recommendations Feed, which complement each other, with the various themed content increasing overall content consumption and audience retention.

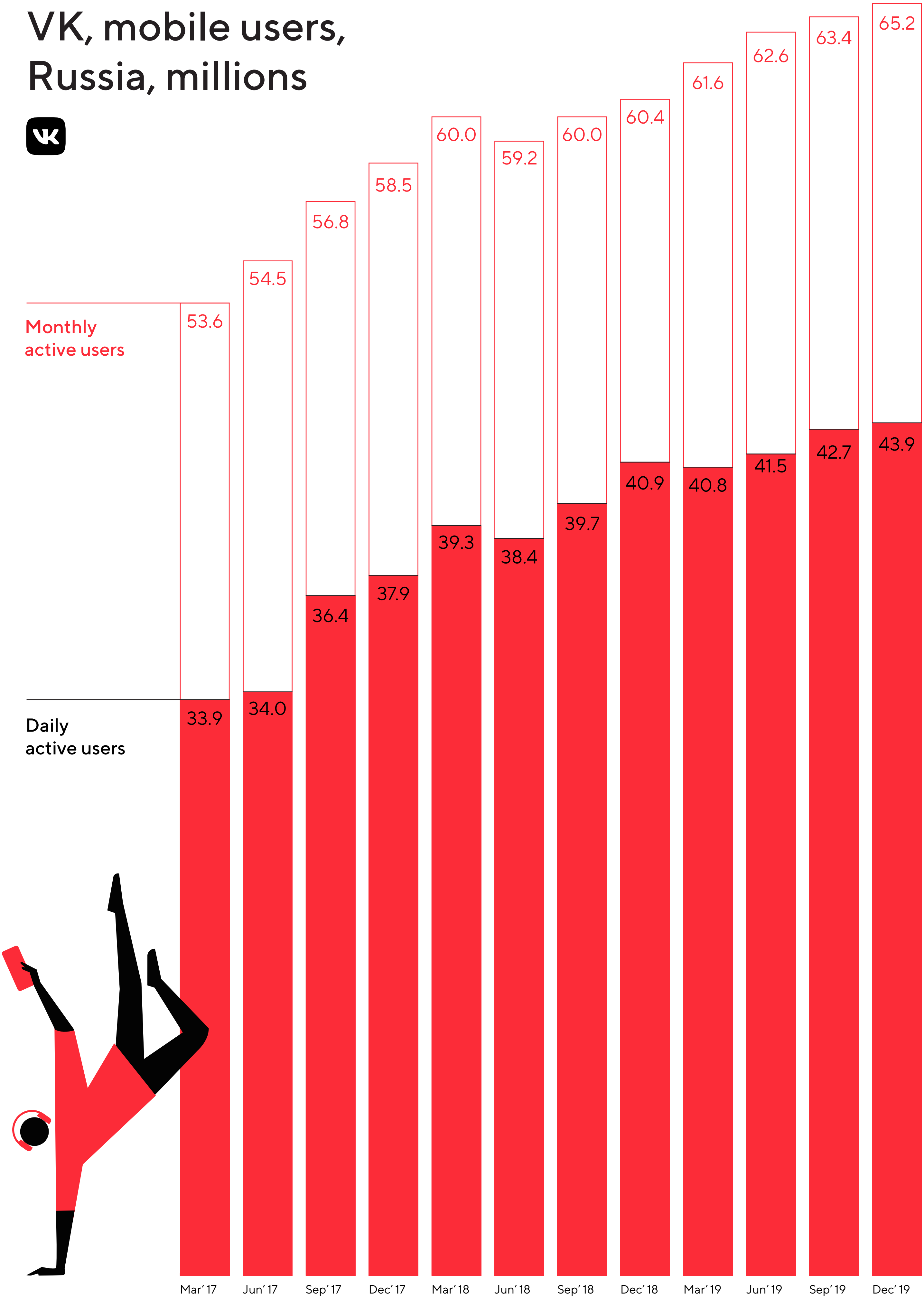
To make Recommendations more varied, VK has launched thematic feeds by adding 11 tabs to the Recommendations section. Content suggestions are made by algorithms as well as human editors and cover topics such as tourism, photos, science, cinema, music, games, IT, style, humour, art and sports. There is also a separate For You tab that suggests personalised content unrelated to any particular theme. VK has also launched its own infotainment media product, Focus, which dives into the most popular topics discussed on VK as well as some VK products.

VK has also changed its smart News Feed approach. Instead of just promoting the newest content, VK is aiming to promote older posts, as long as they continue to be well-received by the community's core audience.

In 2020, users will be able to support content creators and media projects using VK Donut, with monthly content subscriptions and payments processed using VK Pay or payment cards. There will be a 5% commission received on such transfers at launch.

Stories continue to be one of the most engaging and fast-growing content formats, so VK has released a number of major updates such as interactive stickers, music and location stickers, GIFs, feedback, story archives and memories. Additionally, VK has made Stories available to all communities and introduced Story replies 2.0.

VK, mobile users, Russia, millions



23,000,000

active users
of VK Mini Apps

One key update was the integration of Stories and Mini Apps. Now any developer can create their own interactive stickers for Stories. These stickers make it possible to collect feedback, take orders, increase brand awareness and implement various game mechanics. This integration distinguishes VK Stories from those of other social networks and provides enormous potential for developers and content creators.

As a result of these updates, the number of Stories published in Q4 increased by 45% YoY, and views by 40% YoY. In December, 9m content creators published 114m stories, gathering more than 7.6bn views from 42m viewers.

VK ad effectiveness continued to increase in 2019: click-through rate (CTR) grew 35% for CPC ads. As for the lead ads, cost per lead (CPL) declined by 50%, and the proportion of lead ads grew 1.5x, following the latest optimisation. The overhaul of the advertising account played an important part in this. VK added new statistics, improved optimisation algorithms, introduced ad auction predictions, launched retargeting using QR codes, and updated the ad formats. These updates had a positive effect on advertisers' ROI. Advertisers' average ticket size grew by 12% and the number of advertisers by 17%. VK launched further automation of ad pricing: advertisers are now able to simply set a daily ad budget limit, with the system determining the rate that will allow the ad to achieve maximum reach.

The launch of the new HTML5-based interactive ad format and the development of VK Mini Apps and QR codes have provided opportunities for an even deeper connection between offline and online, increasing the sales of special offers for brands by 40%. The number of active businesses on VK reached the 1m mark following the development of the business ecosystem and the launch of new tools. The introduction of the ability to quickly launch ad campaigns via mobile at the end of 2019, in which a smart system suggests a target audience and budget, has significantly simplified the use of ads for SMEs or for those who want to launch campaigns on the go.

Stickers are one of the key communication tools for VK users and an important driver in revenue growth. A total of 166 sticker packs were released in 2019, and revenue growth from stickers amounted to 57% YoY.

Stories, video, music, communities, messaging and social commerce are among the key growth areas for social networks, which is why our focus is centred on them. In 2020, we will invest resources in the micro-video and short-form video formats, which are the main underlying drivers of both the video platform's growth and the growth of the content platform in terms of time spent. We will also provide support to bloggers and influencers while continuing to stimulate and promote user-generated content (UGC) and professionally generated content (PGC) through the VK Talents platform.

We aim to increase the penetration of the VK Mini Apps and expand the platform throughout Mail.ru Group products while simultaneously establishing VK as the core of the Group's user identification system. We will also invest resources in our key products, including our content platform and messaging service, to grow our 30+ audience and increase their engagement. A new, adult paying audience will become one of the drivers of SME and social commerce.

7,600m

story views every month on VK

1,000m

virtual gifts sent on New Year's Day

OK

In 2019, OK's communication services demonstrated solid growth, including virtual gifts, friendship-related services, likes, calls, stickers and postcards. These were followed in turn by overall increased engagement and a 3% DAU growth in Russia YoY with an 11% increase in mobile DAU. MAU remained stable with 43m users in Russia.

The development of OK's business platform, new hi-tech ad instruments and close liaison with key ad market players have seen the social network's advertising share of total revenue almost double over the past five years, from just over 20% in 2014 to more than 40% in 2019. The ad revenue model retains high growth potential. News feed ads will be one of the key drivers within the next years, including mobile and video ads. This forecast is based on the growth of engagement with the OK news feed, an increase in the mobile audience and the development of the video platform.

Another OK revenue driver, its mobile gaming platform, continues to grow. OK made over RUB 3bn in total payouts to games developers in 2019 under the revenue-sharing scheme, including RUB 600m in payments to mobile game developers, double that of 2018. Payouts to mobile games developers are expected to triple to RUB 1.8bn by 2022. OK also actively developed game monetisation, adding an in-game advertising model along with in-game purchases. As a result, payments to developers for in-game ads in their games increased 3x in 2019 YoY.

For the second consecutive year, OK held the Games Cup tournament for mobile games developers. This year the competition grew in scale as it was organised together with VK. The competition, with a total prize value of RUB 1.4m, drew over 100 participants, 70% of them novice developers. The tournament helps to attract developers' attention to the OK and VK gaming platforms and the game promotion tools that the social networks provide to the winners.

Throughout the year, OK launched a number of up-to-date products that boosted users' activity on the social network:

- Photo-powered friend requests and a new friendship platform
- Face recognition in video and live streams
- An updated music platform
- An ad manager for SME
- Business profiles for entrepreneurs
- A virtual telephony system (ATS)
- A donation system on OK Live
- AR-based background blur during video calls
- Shared photo albums for up to 20 friends

OK made communication services for sharing emotions with friends and family a focus, and they paid off with sustainable growth. Virtual gifts, OK's crucial feature, hit new record highs in 2019. OK users sent 45bn gifts (paid and free) to each other in 2019, a fourfold increase YoY. Sender numbers grew 45%. On peak days, during national holidays, gift numbers would exceed half a billion per day. Notably, on Mother's Day, which in Russia is celebrated on 24 November, users sent 662m gifts, meaning 25% of Russian women received virtual gifts on OK. On International Women's Day on 8 March, users sent 500m gifts. New Year brought a historic new record, with over 1bn gifts sent by OK users.

OK was the first social network to launch an AI-based algorithm capable of recognising users in pictures in order to easily find and add them on OK. As user privacy has always been important to OK, the profile information is visible only after the request is accepted. Thanks to this launch and a new neural network-powered friendship platform with a personalised recommendation algorithm, the number of confirmed monthly friendship requests grew 50%. In Q4 2019 OK also set a record of 6m new daily friendships. This has boosted user engagement and the number of user interactions on the social network.

Additionally, OK was the first in Russia to launch proprietary face-recognition technology for automatic friend tagging on video and live streams. The service is intended for fast reactions from friends after uploading videos to OK and aims to boost communication activity. Together with the new algorithms for the smart news feed, users' activity helped to post a record of 240m daily likes and over 5,000 likes per second in 2019, helping to stimulate usage of OK Live, OK's mobile streaming app (with 65m daily views of OK Live streams).

Hundreds of new sticker sets were added by the OK team in 2019, with the wide variety of content triggering an increase in audience numbers and user engagement. There was robust growth in 2019 in the use of stickers in direct messages and comments: 5.4x YoY. The use of postcards, meanwhile, increased 5.3x YoY.

240,000,000

likes daily on OK

In terms of video and audio calls, some new features were launched, including a blurred background for video calls, which allows users to avoid demonstrating what is around them and focus the visual picture on themselves – for example during interviews, online classes or in other situations. The functionality is based on machine learning and neural network technologies, and has been developed as part of OK.

The social network's content and entertainment services found new audiences in 2019, becoming one of the drivers behind user engagement growth. The OK video platform, No. 1[2] in Russia for video uploads, attracted audiences not only with UGC but also with professional content that gained millions of views. The latter included live sports broadcasts, a new season of the OK Online late-night show, OK's own New Year show as well as the exclusive launch of the Star Wars Roll Out animated video series. Thanks to long-form content consumption, the average video viewing time on OK increased by 27% in 2019 YoY. Overall, OK can boast 870m daily video views, including 130m streams.

The OK Live mobile app has grown in popularity, with 50% of live stream views attributed to the streams created in the app. The number of OK Live installs has surpassed 6.9m on iOS and Android. In 2019, OK Live launched a dark theme, compatible with the latest updates of the app on Android and iOS. A new donation-based monetisation system for streamers was also unveiled on the app. Any content creator who streams online on the app can accept donations in the form of virtual gifts with a specific price tag. After the stream is finished, the author can convert the total price value of the gifts into rubles.

OK's music service went through a major update in 2019. The music platform's web and mobile interface were given a new design and navigation as well as improved track recommendation technology. Thanks to the latter, OK has seen a major increase in playback sessions: recommended tracks were played three times more often YoY. Apart from personal music recommendations based on users' interests, OK users can listen to tracks shared by their friends via a special music feed that has been added to the platform. In 2019, OK introduced a machine learning-based service that searches for similar tracks.

OK has started to develop some products for local users and launched local news suggestions: the service automatically identifies what would be relevant for users in certain regions and cities based on AI and neural network technology. OK has also started to promote regional news providers on its network, applying personalised recommendations using machine learning. Initial tests have demonstrated that local content is popular on OK, with local media reach rising by 25% on average and subscriber numbers rising by 20%.

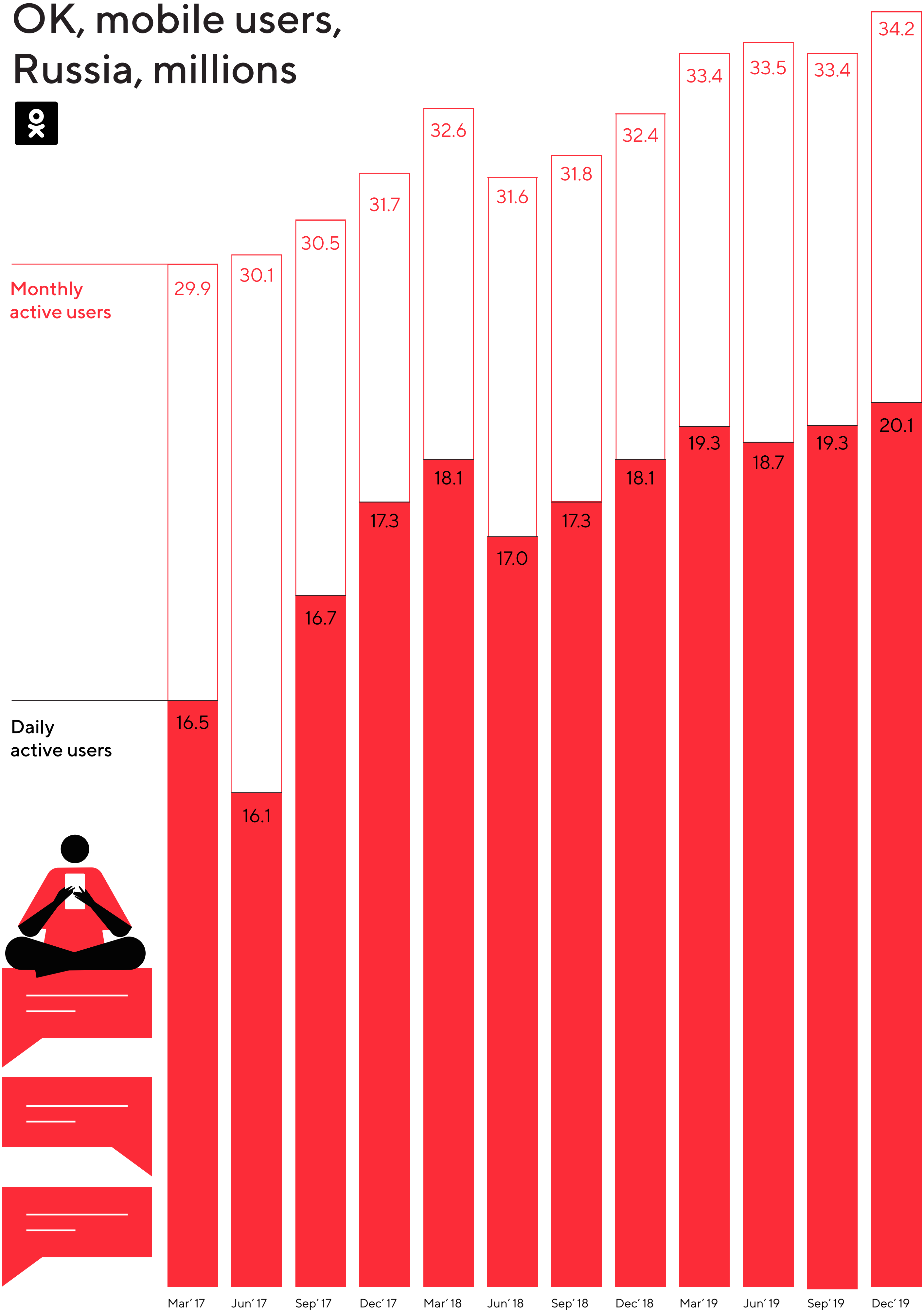
SME promotion and the online marketplace offering goods from China are the major growth drivers OK will focus on in 2020. The marketplace underwent some updates in 2019 by boosting personalisation and expanding user content. Personalisation algorithms helped to ramp up revenue by 29%, with the total number of orders exceeding 4.5m. In the meantime, the marketplace maintained high retention levels: 42% of users made a second purchase within a month of placing their first order. In 2020, OK will introduce technology and tools from its marketplace in joint products with AliExpress Russia – a joint venture between Mail.ru Group, MegaFon, RDIF (Russian Direct Investment Fund) and Alibaba Group.

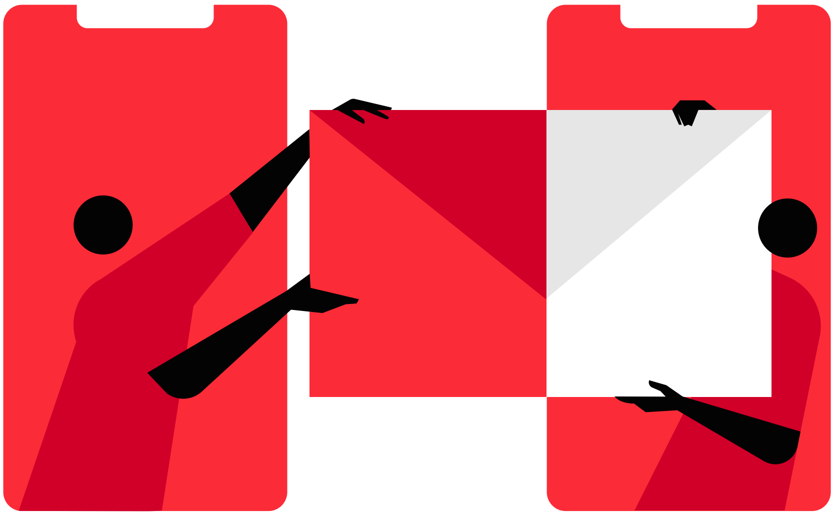
As part of its SME promotion efforts in 2019, OK launched an ad manager, suitable for those with minimal marketing experience and minimal budget requirements. More sophisticated advertising tools for brands and specialists are still available through myTarget. Another major SME product is business profiles that allow users to run a business from their personal profiles. Entrepreneurs can set up online listings, add action buttons and promote posts within a profile. These two SME-related launches have opened up new opportunities for small businesses on OK. In 2019, the number of business profiles created by entrepreneurs exceeded 1m. Ad Revenue from SME increased 2.2x in 2019 year-on-year.

On top of that, OK added several communication tools for companies, content creators and their followers, including a virtual phone solution for groups, launched in November 2019. Based on OK's voice and video calls platform, it allows businesses to set up a call centre. Action buttons were also added to groups, for immediate communication with an entrepreneur or a company. The ad manager, which was launched in 4Q 2019, now boasts the SuperGeo ad instrument, for location targeting within a range of 500m-10km. Additionally, users with more than 100 friends now have access to their profile statistics.

2 Brand Analytics, April 2019

OK, mobile users, Russia, millions





Russia's leading email service (Mail.ru) and media projects

OK has also continued to develop products in collaboration with other MRG business units. The Atom browser now offers customisation for OK with integration of OK services and instruments, which allows users to navigate smoothly to various OK pages. Youla has used OK's technology to launch video calls for sellers and buyers. As part of the Mail.ru Group ecosystem, the OK team has launched some products for different business units based on neural networks and intended for content filtering: automatic photo processing for ICQ public chats, monitoring of the content of the websites advertised via the myTarget network, online game chat moderation for MY.GAMES, and verification of drivers' documents for Citymobil, as well as on-image text in Youla ads.

In 2020 OK will also continue developing services for sharing emotions, as well as the OK SME platform, and new gaming and content projects.

Email

Mail.ru continues to lead in the Russian-speaking email segment in terms of monthly and daily audience, with 11.69m daily active users and 27.25m monthly active users[3]. In 2019 our email service showed strong 25% year-on-year growth in the daily mobile audience, outperforming its competitors in Russia[3].

The product continues to develop and introduce new features in accordance with the previously announced strategy of becoming a smart, practical and secure service:

- Smart – helps organise an overwhelming flow of emails effectively; sorts, hides and removes unwanted messages and brings important information to the foreground.
- Practical – upgrades from just notifying to handling daily tasks.
- Secure – ensures data privacy and permanent access to emails.

In 2019, the team continued to focus on improving and scaling previously launched features. As a result, the number of users accessing the function of smart email grouping increased 18x to 6.1m per day, and the improved smart reply algorithm suggests answers for 34.1% of emails (an improvement of 1.4x YoY)[4].

New technologies based on machine learning and artificial intelligence now detect mailings that the user does not read and suggest unsubscribing from them. The total number of unsubscribes from unwanted newsletters has increased 1.9x YoY[4]. Another algorithm determines the important text information in the email and displays it in notifications on mobile devices.

Searching for emails has become more intelligent and convenient: it searches the content of attachments, identifying their type (contract, passport, driving licence, tax ID, etc.) by similar words and corrects spelling mistakes. Attachments are also immediately visible in the search results.

To help users with a range of everyday tasks, we added grouping of online orders by ID, displaying order details, a payment button and payment status. In addition, we launched smart cards for emails with event details, with "Find on the map" and "Add to calendar" options.

Thanks to improved interfaces, work with large partners (JSON LD integration) and a new payment centre (11 categories, 8,000 suppliers), the total number of payments via Mail.ru increased by 269% YoY[4].

Along with Google and Microsoft, in 2019 we began to support the new AMP standard for emails, meaning mailers are now able to create interactive newsletters.

The security of our service continues to be a priority. New authorisation methods have been launched: via the use of a one-time SMS code and the use of a physical token according to the WebAuthN standard. Now all users undergo security checks on a periodical basis and receive an extensive list of notifications about any activity on the account related to security. Mail.ru's Email and Cloud applications have been included on the list of the 20 most secure apps for Android as part of the Google Play Security Reward Programme.

In order to better integrate all new features into the user experience, the service has transferred all desktop web users, as well as users of Android and iOS applications, to a new interface. Dark themes have also been added to the new interface.

3 Source: Mediascope, Russia, cities 100k+, age 12-64, December 2019

4 Source: Internal data

Media projects

Every month our media projects help 70m users find the right information for any situation. The key achievements in 2019 were the transformation of the editorial process, the establishment of a team for e-commerce projects and active collaboration with large retailers such as AliExpress.

In 2019, we launched Hi-chef, an online cooking project based on a collection of recipes selected by the editors of Lady Mail.ru. A voice interface helps search and scroll the recipes via short voice commands. The product was developed specially for smartphones, and the recipes are read out by Marusia, our in-house developed virtual assistant. Having now integrated its grocery delivery service, METRO Cash & Carry became Hi-chef's first partner.

Realty Mail.ru presented a special content project called Dom Mail.ru. The new project is dedicated to housekeeping: repair, design, utility bills, personal experience etc. This expands the potential advertiser base: from developers to large brands in construction, repair and design. The Realty Mail.ru team released an overhauled property listings database and improved the functionality of commercial clients' personal accounts.

Hi-Tech Mail.ru announced the list of winners for The Best Gadgets 2019 online award chosen by Russian users from among 200 nominees in 45 categories. Supported by an incredible amount of PR around the award, the website experienced a significant influx of young users.

Best Bloggers 2019, another annual award, where users vote for the best influencers in 15 nominations, was held by Lady Mail.ru. Among the social initiatives undertaken by the Lady Mail.ru team was a series of articles about domestic violence and abuse.

Marusia can now read out top articles of the day on News, Sport and Weather Mail.ru. The News Mail.ru team has developed an algorithm for detecting potentially offensive content, making sure that our partners' ads will not appear next to it.

Auto Mail.ru released a redesigned version of the main page for PC and mobile. The team also continued to focus on UGC, resulting in an increased number of articles about key industry events, electric vehicles, and car-sharing.

Kids Mail.ru presented a special educational project about child security and safety created with the support of Liza Alert, a non-profit volunteer organisation. Another socially important project initiated by the Kids Mail.ru team was devoted to large families with adopted children, and won the Word and Kindness award held by the Life Line charity fund and the Russian TV Academy.

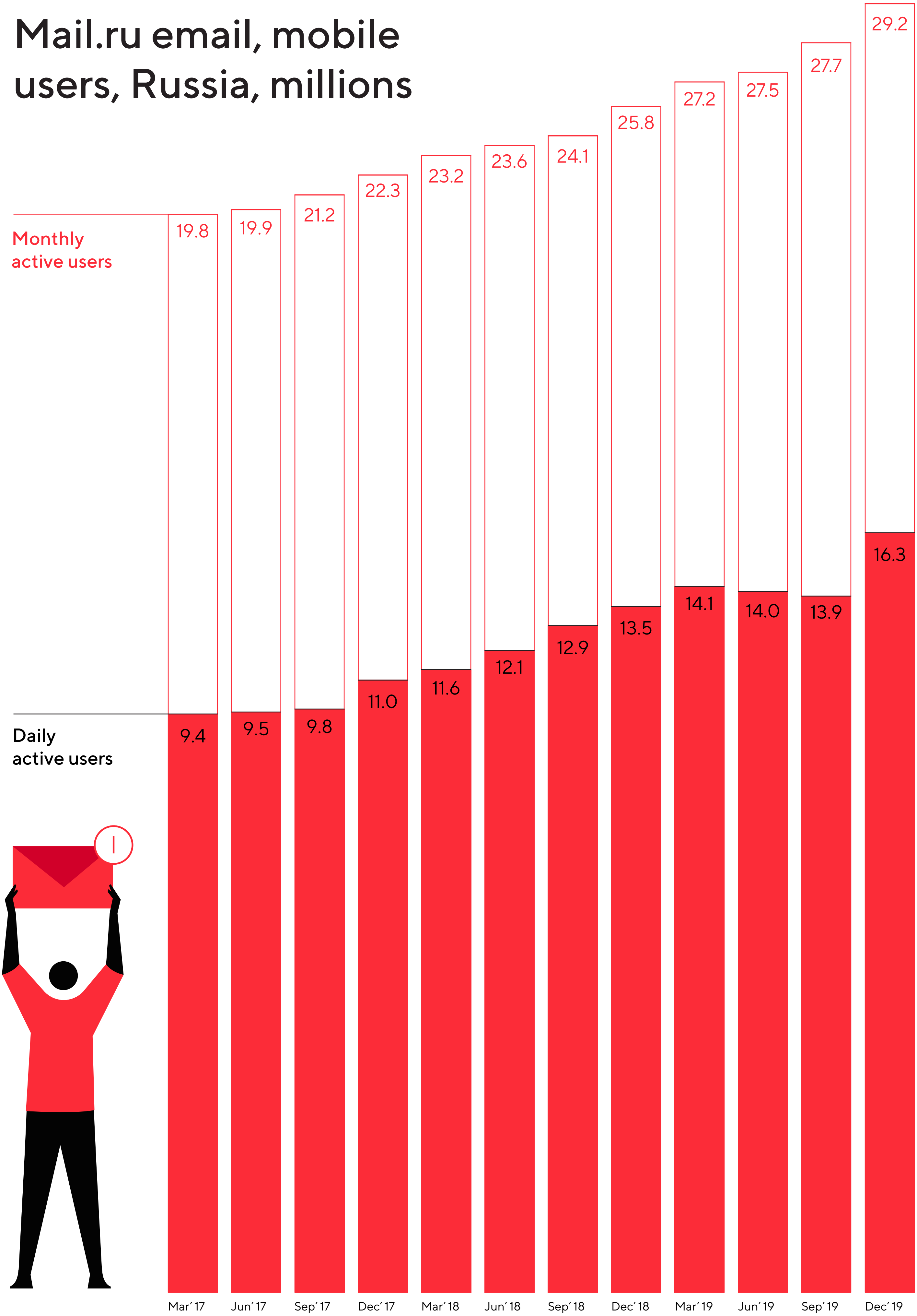
Health Mail.ru and VseApteki added info cards with details on medicines and rolled out an updated medicine database in partnership with Bionika. Health Mail.ru also launched Serov, a new big data technology helping to create customer profiles of a brand and thus improve ad targeting.

Cinema Mail.ru introduced a new touch version of the Films & Series page and the homepage, with a focus on the promotion of film premieres and events. Users now have an opportunity to buy cinema tickets or online subscriptions in order not to miss premieres. Cinema Mail.ru has now partnered with EPG Service, which has allowed us to improve functionality and content distribution.

Pets Mail.ru launched the Pet Owners Club and created a special project called Pet of the Year, as part of which over 80,000 questionnaires were collected from pet owners. Our content was generally focused on informing and raising awareness, and the editorial team launched several social and research projects, which were cited in popular Russian media.

VseApteki rolled out a lot of new features: a goods catalogue, simple sign-in, and personal accounts with information on users' previous orders. The team also developed an innovative analytics tool to track results of any advertising campaigns all the way through to purchase. Purchases made via the VseApteki apps increased by 50%. In January 2020 VseApteki released a special version of its apps for visually impaired users, featuring a special font and voice commands for searching for and reading information about medicines.

Mail.ru email, mobile users, Russia, millions



Online Games

General overview

The year 2019 was a landmark for MY.GAMES, our international gaming brand: A complex approach to our portfolio of game titles as well as further international expansion resulted in a 26% growth in revenue. In 2019 MY.GAMES outperformed the global games market by 16pp and the global mobile games market by ~10pp . The total audience increased by 26%, reaching 605m registered players around the world.

Launched in Q2 2019, MY.GAMES unites all our gaming projects and strengthens our commitment to expanding the global reach of our titles. In 2019 international markets accounted for 68% of the total MMO revenue of the Group (vs. 63% in 2018). The U.S., Germany, and Japan remain our largest overseas markets and we are looking forward to further expanding into the North American and Asian markets with the support of strong partnerships with local players.

We are continuing to build our talent pool and diversify our business in terms of genres and geography, and there are currently 13 in-house studios and 22 partner studios working with Mail.ru Games Ventures (MRGV), our investment arm. In 2019 MRGV successfully consolidated two new studios, Panzerdog (developer of Tacticool) and SWAG MASHA (developer of Love Sick: Interactive Stories). As part of the partnership with MY.GAMES, the studios gained access to our business solutions for project management, a wide selection of analytical tools, marketing support, legal consulting and much more.

The Big Deal Conference for gaming experts was held for the first time in 2019. Among the 1,000+ conference attendees were experts from the largest international gaming companies such as Ubisoft, Riot Games, Tencent, Blizzard, Google, Unity Technologies, and iDreamSky. The conference was devoted to the importance of product analytics and quantitative analysis in the gaming industry. Inspired by the success of the conference, MY.GAMES hosted a range of other meet-ups throughout the year.

Major online game launches in FY2019 - 1Q2020

Game	Ownership	Platform	Launch date
Space Justice	In-house	Mobile	Jan 2019
Tacticool	In-house	Mobile	Jan 2019
Love Sick: Interactive Stories	In-house	Mobile	Feb 2019
Evolution 2: Battle for Utopia	In-house	Mobile	May 2019
Conqueror's Blade	Licensed	PC	Jun 2019
Bombastic Brothers	In-house	Mobile	Jul 2019
Lost Ark	Licensed	PC	Oct 2019
American Dad! Apocalypse Soon	In-house	Mobile	Oct 2019
Warface: GO	In-house	Mobile	Jan 2020
Warface	In-house	Console (Switch)	Feb 2020
World Above: Cloud Harbor	In-house	Mobile	Mar 2020

PC and console games

The year 2019 marked the 7th anniversary of Warface, which boasts over 85m registrations worldwide and remains the third-largest revenue-generating game in our portfolio. Warface was among the top F2P games on the PS4 in the U.S. in terms of downloads in 2019 . It was also successfully released on the Nintendo Switch, becoming the first CryEngine-based game on the platform. In 2020 MY.GAMES will continue investing in the franchise with the launch of a new console title within the Warface franchise tailored to U.S. and European markets.

In 2019 we launched Lost Ark, a highly anticipated MMOARPG licensed from Smilegate, on PC in Russia and the C.I.S., which became the first overseas markets for this title. The game was well received by our gaming community, with 1.7m registered users by the end of the year after only two months in operation. Conquerors' Blade, another recently launched PC title, also reached 1.7m registered users and is set for further growth in international markets.

Mobile games

Throughout 2019, mobile games were one of the key drivers of revenue growth, generating 61% of total revenue in Q4 2019 vs. 57% in 2018. Around 93% of mobile revenue in Q4 was generated outside Russia, with 72% coming from North America and Europe. The top three European markets were Germany, France, and the U.K. We will continue focusing on expanding our international presence, and we are expecting the share of mobile revenue to further rise to 80% in the coming two-three years.

Hustle Castle showed exceptional performance throughout 2019, with revenue growth of 36% YoY in 2019. In the two years since its release, Hustle Castle has built a solid core audience and continues to generate strong margins, with downloads reaching 55m. In 2019, Hustle Castle set a new daily revenue record for MY.GAMES, earning RUB 100m (USD 1.6m) in one day.

War Robots, a popular mobile game developed by Pixonic and launched nearly six years ago, has reached 150m installs and, now in the mature phase of its lifecycle, is showing sustainable EBITDA improvement. The Pixonic studio also plans to release a new game for all mobile platforms later in 2020.

In summer 2019, MY.GAMES, in cooperation with FOX Next, a subsidiary of 20th Century Fox Television, announced a long-anticipated mobile game called American Dad! Apocalypse Soon, which was developed by our studio Fast Forward. The game was released in November 2019 and was well received by fans around the world, with 3.6m installs by the end of the year.

Left to Survive, developed by our studio Whalekit in 2018, remained one of our top five revenue-generating games, with around 15m downloads. The release of Warface: Global Operations, a new mobile game within the Warface franchise, was postponed from H2 2019 in order to further improve the product and gameplay experience.

Love Sick: Interactive Stories, a narrative-driven mobile game from the SWAG MASHA studio, remains among our top 10 titles, with 4m downloads since its launch in February 2019. We will continue allocating resources to all of these games in 2020.

Platforms and services

Our international games platform MY.GAMES Store was launched in OBT in December 2019. This user-friendly platform offers our partners an opportunity to effectively promote their games. Moreover, we are working closely with developers on building an infrastructure that would provide them with a toolset for effective self-publishing, allowing players to get the best gaming experience from games, streams and socialising.

Our vision of 2020

According to publicly available data, MY.GAMES is one of the top 50 global gaming companies in the world in terms of revenue. Our medium-term plan is to be among the top 25 largest global players under the MY.GAMES brand. As we continue investing in our gaming brand, the focus for 2020 will remain on expanding internationally and into mobile, which offers a ~USD 150bn global revenue opportunity. We remain committed to our goal of doubling the EBITDA of the Games segment in 2022 vs. 2018 and achieving an EBITDA margin in the low to mid-20s throughout the cycle.

Mail.ru Group People Awards

2019

Notify & SMS API platform

internal solution of the year

Vladimir Nedashkovskiy, Artem Novikov, Igor Makarov, Alexander Orobinsky

Mail.ru Group
People Awards

2019

Intranet

internal solution of the year

Sergey Lihobabin, Alena Elizarova

Mail.ru Group
People Awards
2019

In-house shop for used devices

internal solution of the year

Pavel Belinskiy, Elena Glukhikh, Nikolay Bobrovskiy, Yulia Mazuro

New Initiatives

Youla

Youla, our mobile-focused location-based classifieds business, strengthened its position during 2019. With 27m[1] MAU, it is the second largest classifieds site in Russia, with room for expansion in terms of both audience and its monetisation. Just four years after its launch[2], it has become one of the world's largest mobile-first classifieds in terms of Android DAU. A focus on monetisation and product development resulted in Youla growing revenue 1.9x YoY to RUB 2.1bn, ahead of guidance.

In Q1 2019 Youla conducted its first ever full-scale rebranding, which was positively received by both experts and users. This fresh positioning became the basis for a massive new online and TV marketing campaign with a focus on strong emotions and leading product technologies.

Dominance in product development, supported by a fast-paced release strategy in H2 2019, was a main focus for the team during the year. Keeping user needs in mind, Youla launched free P2P audio calls in September (first-to-market), video calls in November (first globally) and call privacy settings in December. A new Stories format was launched in October, allowing sellers to promote their goods and services through content, driving Youla more into social e-commerce and differentiating it locally through innovation.

As promised before, Youla made multiple enhancements to its B2B platform and monetisation, such as advanced performance and analytical tools for professional sellers, an internal wallet and new subscriptions, tailored for a mobile audience. This led to a 4x increase in paid subscriptions in December 2019 compared to December 2018.

Youla also collaborated with other group assets, using proven technology in audio and video calls as well as computer vision and neural networks to reduce development costs. Youla pioneered the introduction of the Mail.ru Group-wide User ID to simplify onboarding for new users and enhance retention.

During Q2 2019 Mail.ru Group acquired the job board Worki in order to boost the Youla job vertical, launched in Q2 2018. Worki is maintaining its own strong brand while developing synergy with Youla and the Group, which has resulted in a more than twofold increase in revenue during H2 2019 compared to H2 2018. VK, where users spend a lot of time looking for jobs, integrated Worki as a mini app in Q3 2019 and added an interview function on VK Messenger for job seekers in Q4 2019. Job seekers on VK were more active through the Worki mini app compared to other platforms, with conversion from registration to applications as high as 90%.

The near-term goal for the team in 2020 is to focus on general classifieds as well as services and the job board, further expand the B2B platform with more value-added features, and move beyond high-frequency transaction verticals to ones with a higher average bill over the longer term.

[1] All platforms, internal data

[2] AIM Group Marketplaces Report, Vol. 20 No.11, May 2019

Voice assistant & Smart speaker

In June 2019 Mail.ru Group launched Marusia, a virtual assistant. It is capable of providing essential information, answering questions, and helping users with everyday tasks. Marusia is also a voice-enabled gateway to content, news, weather, entertainment and interactive games.

Marusia is being integrated into the Group's most popular mobile apps, supplementing them with a voice interaction capability and an extensive set of popular skills.

In December 2019 we finished development of the Group's first consumer device, the Capsula smart speaker. It delivers powerful acoustic performance, native integration with the VK Music service, a voice calling capability, interactive fairytales for reading with kids, and RFID-activated skills and content. The Marusia virtual assistant is able to place repeat food delivery orders via Delivery Club. Sales of the Capsula smart speaker started in April 2020.

In 2019 the team focused on three search elements: voice, visual and quality.

Voice search was a challenge since people tend to use a more natural language for queries when talking to their virtual assistants compared to a traditional text-based search: They expect to be able to refer to the context of previous queries, receive relevant music suggestions, etc. All of these aspects were addressed and improved by the search team in preparation for the Marusia app and Capsula product launches.

The team also added a significant number of various visual elements to search results (illustrating images, cards, multimedia, icons) to help users to navigate the search results page quicker and in a more intuitive way.

The search quality team made solid progress on the reduction of irrelevant results for high-frequency queries in H1 2019, and in H2 2019 they focused on rare queries by introducing a neural network-based ranking and a more efficient machine learning platform.

Recommendation system

Pulse, a personal feed based on users' interests, was officially launched on the Mail.ru homepage on 31 January, 2019. Recommendations are based on collaborative filtration algorithms – document matching is based on a user's behaviour on the internet and feedback from users' interaction with the Pulse recommendation feed. Pulse has recommended articles from approximately 1,500 media sources, which are selected based on the exclusiveness of the content, subject, and resource quality. By the end of 2019, the Pulse feed was located on the homepage of the Mail.ru and Pulse Mail.ru services, on the start page of the Atom browser and on the websites of approximately 450 partners. Around 3.5m users browse through the Pulse feed daily, while MAU amounts to 45m.

During Q2 the team was developing widgets for instalment on publishers' websites and began improving the traffic exchange network. Partners receive additional traffic for placing widgets on their sites.

Also in Q2, we started developing full-text articles that allow publishers to monetise their content. Pulse publishes content on its platform and shows it to interested users. The partnership is based on a 50/50 revenue-sharing model for showing ads on such pages.

By the end of Q2, Pulse comprised 3,500 websites, with users generating from 1.6 to 2m transitions to partners' sites. By the end of Q2 2019, Pulse DAU and MAU had reached 1.8m and 20m respectively.

In Q3 2019, the Pulse team launched personal accounts for partners. A publisher can now confirm their rights to the domain, add and check the RSS feed for compliance with technical requirements, send the content source to the moderation team and see the basic stats of this source. Partners can also obtain a widget code for their websites from their personal account.

Also in Q3 2019, the team launched a service of full-text articles. DAU doubled to 2.5m QoQ, while MAU tripled to 34m QoQ.

Furthermore, in Q4 2019 we launched several ad products, such as the CPC (cost-per-click) billing method and payment for commercial articles that were read entirely. The team also worked on the quality of recommendations by improving the ranking model for documents, as well as introducing machine learning based on decision trees into the re-ranking of interests based on user behaviour on the internet and Pulse feed. This resulted in a 13% increase in clicks per user.

Mail.ru for Business

In March 2019, Mail.ru for Business launched Sitebox, a service for building websites, landing pages, blogs and online shops. The service offers a selection of business website templates as well as different SEO and analytics tools. There are also free stock photos and a built-in tool to help create professional logos.

In September 2019, Mail.ru for Business introduced Myteam, an instant messaging platform for corporates, offering audio and video conference calls, group chats, file and document sharing etc. Corporate communication can be monitored via the admin settings.

In February 2020, Mail.ru for Business rolled out a special on-premise email solution for the Mail.ru Email service, which is deployed on the client's own server. It gives the client access to all the functionality necessary for the management and administration of the email service.

Combo

In October 2019, Mail.ru Group launched Combo, a loyalty programme in the form of a subscription service to the products and offerings provided by us and our partners. For customers, Combo provides an exclusive-value proposition to boost cross-selling and paying audience share, as well as user loyalty. At the launch, Combo subscribers received attractive offers from Delivery Club, Citymobil, Cloud Mail.ru, YouDrive, McDonald's, the Perekrestok supermarket chain (offline and online) and the VOD service MegaFon TV.

Combo provides seamless integration with several apps (Delivery Club, Citymobil, YouDrive), so access to their special user mechanics is activated automatically. Users can also activate other products via their Combo accounts - seamless integration will be available for these products in the future. The subscription is a single entry point for the best market conditions and additional privileges on the popular services that a person needs in everyday life.

Combo's partners and user mechanics were carefully selected during several pilot launches in H1 2019. However, Combo has continued to evolve after its launch: by the end of the year VK Music and Boom music streaming services had been integrated. At the very beginning of 2020, Combo was strengthened through the addition of an offering for the Okko video streaming service.

Combo is already available on VK as a mini app, with VK Pay integrated as a payment method. In 2020, Combo plans to further enhance its distribution channels: partnerships, retail and product integrations.

GeekBrains

GeekBrains, our online learning platform, has entered the corporate training market in the following six areas: data science and big data analytics, project and product management, web development, mobile app development, internet marketing and design, and the Python training programme for teenagers. Over 7,500 students are currently enrolled in all of the programmes, and the number of registered portal users is now in excess of 4m people.

In 2019, GeekBrains launched 17 new programmes, focusing on programming, design, marketing, and management. The most popular programmes include Big Data Analytics, Internet Marketing, Testing and Design.

Around 10,000 people went through the qualification stage to attend the free training programmes for front-end developers, software testers and online marketing specialists. Over 9,000 people registered for the GeekChange series of webinars featuring GeekBrains and Mail.ru Group experts in order to receive career guidance and learn about IT career options. A total of 450 webinars and 16,300 classes were held in 2019. On 3 December, GeekBrains obtained a new licence to issue official supplementary training certificates.

Skillbox

The Skillbox online university was launched in 2016. Mail.ru Group acquired a controlling stake in Skillbox in December 2019. Today Skillbox offers online programmes in design, marketing, coding, management and gaming, with more than 180 educational products (there were 104 new products in 2019).

Skillbox collaborates with more than 70 industry partners on designing online courses, preparing graduation projects and providing students with further employment assistance (Microsoft, MegaFon, Alfa Bank, Sberbank, Lamoda, Kalashnikov Group, etc.). As of January 2020, the total number of students is 45,000, while the number of registered users interested in all Skillbox products is more than 1.1m. WAU (weekly active users) rose from 13% in 2019 to 20% at the beginning of 2020.

In 2019 the Skillbox team held 850 online lectures with more than 100,000 participants and opened an offline lecture hall in the centre of Moscow for meetups and events. Skillbox also became a regional partner of the OFFF Barcelona design and digital art festival, and held OFFF Moscow 2019, which gathered 900 participants and 14 international speakers.

According to research carried out with Tiburon in January 2020, Skillbox is No. 1 in the top-of-mind awareness ranking in the "online schools" category among respondents with an interest in online education, and No. 2 among all respondents.

Payment processing

Mail.ru Group's payment processing facilitates all of its projects and develops payment infrastructure for online payments within our products. Money Mail.ru has now introduced a single Checkout solution for all the Group's major projects.

Money Mail.ru has improved its infrastructure and can now process up to 2,000 transactions per second.

Money Mail.ru has also launched an Open Platform solution for VK Pay merchants, closing the social e-commerce loop. It has also developed an online solution for paying tips to Delivery Club couriers.

Money Mail.ru is now a principal member of the VISA international payment system and can offer internet acquiring and make money transfers without an external bank as well as issue pre-paid debit cards.

Mail.ru Digital Tech: solutions and infrastructure, including B2B

In April 2019 we launched Mail.ru Digital Tech, a B2B division of Mail.ru Group, where Mail.ru Cloud Solutions, Tarantool, communication and other internally developed tools are offered as a broad digital platform to corporates, with a particular focus on large clients. During the year, Mail.ru Digital Tech made a number of big product announcements. The Group started to provide solutions for companies looking to roll out in-house corporate social networks and increase employee engagement with digital HR technologies.

In May 2019, Mail.ru Cloud Solutions (MCS), our B2B cloud business, started building not only public cloud services, but also private cloud services for strategic customers and made its Internet of Things platform available for both cloud and on-premise deployment options. MCS also launched an Industrial IoT (IIoT) Platform for large enterprises, capable of handling millions of events from hundreds of thousands of connected devices.

In July 2019 MCS received certification from the international Cloud Native Computing Foundation (CNCF), with the Group's Kubernetes platform becoming the first in Russia to achieve Certified Kubernetes status. Mail.ru Group has also joined the Linux Foundation and CNCF to provide global IT specialists with access to Russian technology.

In October 2019 the Tarantool team launched Tarantool Data Grid, a readily available enterprise solution for developers of business apps working with large data sets. Tarantool Data Grid offers efficient integration tools for the smooth transition of new products into the broader enterprise ecosystem. The Tarantool team also launched the Cartridge, a business application development platform which provides off-the-shelf tools for typical cluster management, testing, packaging, deploying and scaling issues to simplify and reduce the cost of developing and operating Tarantool-based services.

The team also significantly increased the number of B2B products, such as a Tarantool-based solution for automating the development of Nokia's industrial Internet of Things, which will extend the capabilities of the Nokia Integrated Operations Center platform, and a Tarantool-based caching system for Yota, which will increase the speed of online processing of user profiles and the interactivity of company services.

In 2020 the Tarantool team will focus on further growth of the B2B portfolio by continuing to work on developing its governance model, risks and stakeholder management as well as on product development, including the core of Tarantool Enterprise, omni-channel, MDM, smart contracts and excellence in technical support. In addition to that, we plan to create a Tarantool cloud offering, allowing Tarantool to be easily used in public clouds like AWS, Google Cloud, DigitalOcean, etc.

A number of big names in Russia have chosen Mail.ru Digital Tech as a technology partner for their digital transformation, including RosAtom, Rostelecom, Rosseti, MegaFon, Sukhoi and many others. We have formed several important partnerships with well-established local system integrators and software distributors, including IBS Group, Merlion, and Axoft.

PREDICT (Predictive Analytic Solutions)

Mail.ru Group is expanding its data analytics expertise by offering clients ML&AI-based solutions.

Our product portfolio includes market research and decision support systems aimed at enhancing sales and marketing performance, risk management, planning, personnel management, etc. Our expertise covers a wide range of economic sectors, such as telecom, banking, insurance, retail, e-com, and FMCG. In 2019 we observed a growing interest from industrial companies and market demand in consulting services for developing individual data-based solutions.

The signing of an agreement with IDGC of Centre, a leading electric utility company in Russia, was an important milestone in 2019. According to the agreement, the companies will work together on introducing analytics services to IDGC of Centre's business processes.

Mail.ru Group People Awards

2019

Email & Portal voice-based technologies

expert of the year

Dmitry Solovyev

Mail.ru Group People Awards

2019

M&A integration

expert of the year

Denis Savuta

Mail.ru Group People Awards

2019

Unix Maintenance Department

expert of the year

Mikhail Petrov

Key partnerships

O2O JV (equal ownership by Sberbank and Mail.ru Group)

On 19 December, Sberbank and Mail.ru Group completed the formation of a joint venture (JV), which aims to create a leading Russian O2O services platform focused on foodtech and mobility.

Delivery Club

Delivery Club is the leading online food delivery service in Russia in terms of both audience[1] and mobile app downloads[2]. Delivery Club revenues were up 131% to RUB 4.46bn in 2019, ahead of the target of doubling revenues for the year. In 2019 Delivery Club twice broke the record for the number of orders. In March Delivery Club completed 2m orders, and by September it had set a new record of 3m orders. Delivery Club is now present in more than 150 cities and was connected to over 13,700 restaurants as of Q4 reporting, compared to 115 cities and 9,400 restaurants at the beginning of last year.

In 2019 Delivery Club completed its transformation into a company with its own delivery service. In Q4 2019, 53% of orders came from 1P versus 23% as of Q4 2018. Its own delivery service was available across 38 cities. In February 2020 Delivery Club launched 1P delivery in its 50th Russian city, and further expanded 1P coverage to 70 cities in April. This will have a strong positive impact on retention, frequency, and average delivery time. Although 1P will continue to increase in the short-term, further stimulated by COVID-19 limitations for restaurants, we are seeking a balanced operational model over the longer term to ensure maximum profitability.

The growth of 1P logistics has stimulated Delivery Club to develop IT logistics infrastructure. In 2019 we launched cashless tips for couriers using VK Pay and Alan, an AI-based demand forecasting system. More than 2,200 riders have already set up VK Pay wallets in order to receive tips. More than RUB 200k in tips was transferred directly to riders in one month, which helps DC motivate riders in terms of customer behaviour and delivery speed. In Q3 Delivery Club started hiring self-employed couriers and has further improved the auto-assignment service. ML-based technologies allowed the average courier search time to be reduced to just 0.5 sec. Delivery Club released a redesigned version of the app for couriers with a focus on the most important information and introduced geo validation for couriers to prevent fraud and improve order tracking. Moreover, the app now shows bonuses to reward couriers for long distance delivery, which will increase acceptance rates for such orders. Penalties, bonuses and money earned during the shift are displayed in the updated app for couriers.

As part of its drive to build a foodtech ecosystem, Delivery Club launched an additional complimentary section for its app: express grocery delivery (from 15 min), with the Verniy retailer and their Bystronom delivery service as the first partner. The service is available in selected areas of Moscow. The initiative was later expanded with a grocery delivery partnership with Samokat, the largest local express delivery player. On 2 April, 2020, O2O announced the signing of binding documents on investment in Samokat. The deal is expected to be closed in H1 2020, pending approval from Russia's Federal Antimonopoly Service. After that, the share of the JV in the service will amount to 75.6%.

In 2019, the Delivery Club team also focused on developing mobile apps for users and partners. It now enables customers to choose whether they want to add plastic utensils to their order, create a list of their favourite restaurants or quickly receive feedback from the customer support service via an in-app chat. The updated mobile app for vendors now lets our partners use a new simple editor for menu updating, with no need for Delivery Club support.

In December 2019, Delivery Club launched an MVP version of the app for the VK Mini Apps platform. Delivery Club is currently gathering user feedback, with further tech and product investments in integration expected in 2020.

In 2020, Delivery Club will focus on further improvements to the efficiency of logistics and order processing through continuous investment in underlying technologies. Delivery Club remains committed to providing the fastest delivery and best selection in the market as well as attractive long-term economics. Delivery Club will test new features for monetisation, including the sale of ads on the mobile app, on couriers' backpacks, leaflets, etc. Overall, Delivery Club is observing a stronger network effect, driven by an increased number of restaurants, higher order counts and increased marketing and logistics efficiencies, which are helping to grow the platform. Its overall offer will be further enhanced in 2020 through broader synergies within the O2O ecosystem as well as its key shareholders.

[1] Source: Mediascope, Russia, cities 0+, age 12+, December 2019.

[2] Source: App Annie, December 2019.

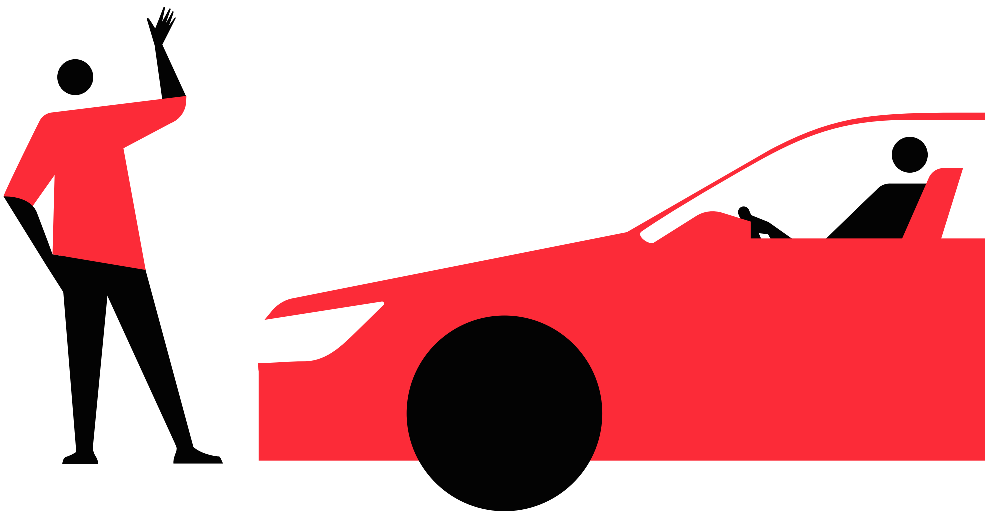
Citymobil

In 2019 the Citymobil ride-hailing app demonstrated exponential growth, increasing rides 3.7x YoY, with monthly rides in December exceeding 13m and 30% growth in rides MoM. This growth was driven by a rapid geographic expansion and an increase in customer engagement among both riders and drivers. Average MAU increased 3.9x YoY and average monthly rides per user grew by 8% YoY, while corresponding indicators on the supply side grew 2.7x and 53% YoY, respectively. GMV reached RUB 3.6bn in December, with a RUB 8.9bn GMV in Q4 2019.

To achieve this growth and lay the ground for long-term development, Citymobil focused on three business areas in 2019:

- **Regional expansion.** Most of the growth in 2019 came from new regional launches. Previously, Citymobil operated only in Moscow and the Moscow Region. In H2 2019 Citymobil started an intense regional expansion, reaching a pace of 1 new 1m+ city per week by the end of 2019. As of Q1 2020, Citymobil is present in all 1m+ cities and in more than 30 smaller ones. Citymobil positioned itself as a strong player from the very beginning, and has become No. 2 in most regions of operation.
- **Product.** A number of product upgrades have driven up ride frequency and retention rates. The technological stack was the team's major focus in 2019. These included introducing new algorithms (self-learning address suggestions, car search time forecasting), revising existing ones (dispatch, subsidy efficiency, routing, pricing), and developing new technologies (computer vision, new geo solutions). On the front-end side, Citymobil introduced new tariffs, smart pick-up points, new design and order flow for both rider and driver apps. Finally, a major revamp of tools for partners and internal teams boosted efficiency in internal business processes.
- **Synergies in the ecosystem.** Citymobil launched a range of cross-company projects to appeal to new audiences. VK Taxi is the result of Citymobil's biggest collaboration in 2019. It operates as a VK mini app and is natively integrated into the VK interface while giving users the full functionality of the main app. It became a breakout hit, reaching up to 30% of Citymobil rides in some regions. Another important milestone was the integration of Sberbank and Mail IDs into the Citymobil rider app. Riders can now log in to the apps in the O2O ecosystem using the same ID. Finally, Citymobil organised a range of cross-promos with companies in the ecosystem, including Delivery Club, Okko, Boom, VK, OK and Sberbank itself.

In 2020 Citymobil will continue its growth by making consistent improvements in all the aforementioned areas. Citymobil will keep increasing its coverage by expanding to smaller cities. Further changes in product and platform for both Citymobil and VK Taxi will improve ETA, completion rate, driving frequency and user retention. Citymobil's offering will be enhanced for both riders and drivers through synergies with other products in the O2O ecosystem. More effective technologies and scaling effects will see higher driver utilisation, further boosting the 30% uplift in contribution margin per trip demonstrated in Q1 2020.



AliExpress Russia (AER) JV
(15% stake held by Mail.ru Group)

AER JV in Russia/C.I.S. was launched in October 2019.

AliExpress continues to be the leading cross-border e-commerce platform in Russia and the C.I.S., given the advantages of its 50m SKU base, a monthly user base of around 25m in Russia, major brand awareness and a mass market focus. The number of buyers of AliExpress in Russia increased by 30% YoY to 24.9m in November, with audience growth driven by the integration of Mail.ru Group's advertising tools and influenced by social commerce.

During the local 11/11 sale AER reported RUB 17.2bn in GMV over two days, the highest among all e-commerce platforms. AliExpress was also the most popular app in the shopping category ahead of Black Friday[1], with turnover over the related three-day period rising by 60% YoY to RUB 22.3bn, setting a new record and exceeding 1/3 of Russia's total e-commerce turnover for the same period[2].

AliExpress Russia is expanding its domestic marketplace, which accounted for 15% of total sales of AER in Q4, rising by ~2x YoY. There are >1.5m SKUs (+38x YoY) from >10,000 local sellers (>100x YoY) on the platform, with >RUB 500m in daily GMV from the local marketplace in March 2020. Local sellers are now present across most categories, with the largest being goods for mothers and children (49% of GMV), accessories (25%), health and beauty (19%) and clothes/shoes (7%). The local GMV share is expected to increase as we move forward.

AER is actively investing in service quality, with all orders in excess of RUB 330 (>30% of all orders) now combined and given a single tracking number. In September AER launched a free returns function at AliExpress to stimulate growth in average spend and demand in categories like fashion. Cainiao (Alibaba's logistics arm) leased seven aircraft in order to improve direct deliveries to AER, with daily flights between China and Novosibirsk, Yekaterinburg and Moscow, which account for ~70% of AER's turnover. Cainiao also opened another warehouse centre. Expansion of the network of pick-up points continues (12,000 in March 2020), with availability across 3,500 cities. These measures are among the multiple steps made towards a better shipping and shopping experience by increasing scale and efficiency. The goal is to reduce delivery time to major Russian cities to 7-10 days.

The three top priorities for AER in 2020 include: a) further enhancement of the cross-border AliExpress platform, with a focus on service improvement, particularly delivery time; b) further scaling of Tmall as the domestic marketplace; c) the development of social commerce, primarily via Mail.ru Group's social networks.

1 App Annie
2 AKIT

Mail.ru Group
People Awards

2019

Lost Ark

release of the year

Ekaterina Sokolova, Andrey Ilyushin

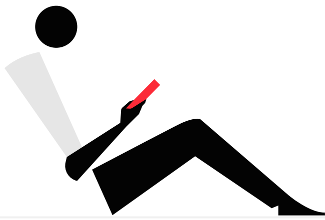
Mail.ru Group
People Awards
2019

Youla

release of the year

Alexander Vydrin, Alexander Orlov, Anton Chernishev


Mail.ru Group
People Awards
2019
Octavius Email & Portal
release
of the year
Alexander Lyskov, Alexander Tsvetkov



Other activities

IT infrastructure

Our network infrastructure is designed to meet the requirements of our operations and to support the growth of our business. This infrastructure includes services supplied internally as well as by third parties.

Our computer servers and networking equipment are located in our own data centres as well as in rented ones. Mail.ru Group also has a number of relationships with third-party IT providers, which provide it with a range of telecommunication services, including internet access and internet (traffic) transit.

In 2019, the peak network traffic increased to 6.9 terabits per second and the total amount of outgoing data reached 12,400 petabytes.

In 2019, the team made a lot of hardware upgrades which, despite the rising demand for server capacity, allowed us to optimise the total number of servers and avoid large YoY increases. Due to the balanced high-density configurations based on the newest CPU generations, we achieved one of the best TCO/performance on the Russian market for new installations.

In Moscow and St. Petersburg, Mail.ru Group has 58,500 servers in nine data centres. This ensures load balancing and protection against the loss of data caused by network or power failures.

New optimised high-density server configurations and a well-organised modernisation process have contributed to increased efficiency in CAPEX and optimised operating costs.

Replacing old servers with new optimised ones has made it possible to reduce the number of servers in use by 15% while significantly increasing computing power.

In 2019, Mail.ru Group continued using three international data centres: two in Amsterdam, the Netherlands, and one in San Jose, California, U.S. They are aimed at serving European and North American users and currently host about 1,550 servers.

The ability to provide products and services depends on the continuous operation of our network and IT infrastructure. It also relies on the provision of network facilities by third-party IT providers and on the performance and reliability of the internet, power and telecommunications infrastructure.

The team believes that its present access to network facilities and broadband capacity is sufficient to support its current operations and can meet the planned growth of its business for at least the next 12 months. A staff of full-time engineers administers the network infrastructure. They handle the day-to-day functioning of its system as well as hardware operations and maintenance. Mail.ru Group's automation, dispatch and monitoring systems are being continuously improved in all infrastructure divisions. The team is committed to increasing the systems' level of autonomy while reducing the human role in the decision-making process.

The team pays close attention to the protection of user data. The Information Security department monitors the entire infrastructure and prevents, detects and responds to security threats.

To achieve the most efficient use of technical and material resources, the team of engineers monitors the changes in load profiles and optimises the infrastructure while ensuring a high level of availability for the Company’s products and services.

High priority is placed on providing users with a consistently high-quality service and support through the technical support staff.

Sales and marketing

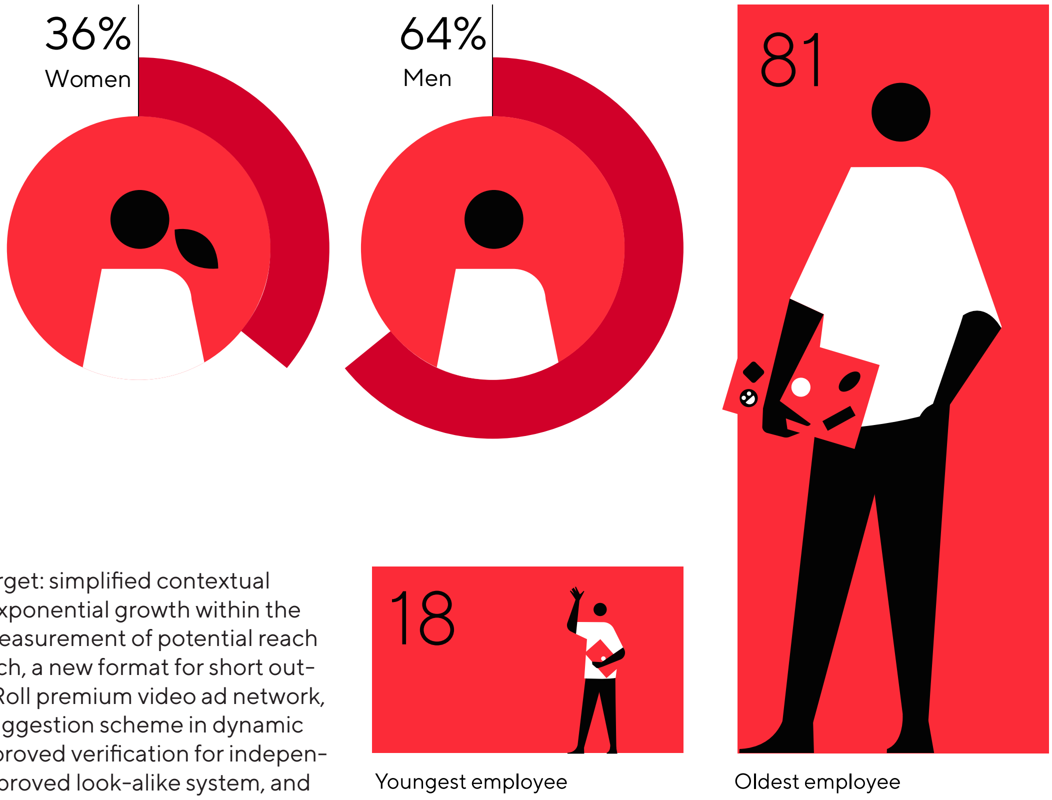
Advertising is sold on our auction-based platforms as well as in direct deals between advertisers and publishers. Mail.ru Group works on ad products, technologies, sales, marketing and client support. The team's main focus is on new technologies that drive effectiveness and improve ROI for clients, as well as strategic partnerships with major market leaders which open up new opportunities for win-win projects and advertisers' business development.

In 2019, the team concentrated their efforts on six key areas of improvement:

- Expanding the target area beyond the traditional internet ads market to cover O2O solutions, including Digital Out-of-Home and the digital indoor markets as well as the Smart TV ads segment;
- Advertising technological developments aimed at further efficiency growth with a focus on ad delivery optimisation (oCPM), the improvement of contextual targeting, retargeting, a look-alike system, geo-targeting, and performance retail in order to make the Group's products more efficient and attractive for advertisers;
- Inventory growth, especially video, mainly through the development of the partner ad network;
- Traffic quality and independent verification improvements, with a focus on traffic measurability and transparency as well as upgrades to third-party verification integrations;
- The development of big data solutions to increase partners' marketing and business performance;
- Expanding the SME base and increasing advertisers' ROI by tightening our ad requirements and thus improving conversion rates, generating higher quality traffic and reducing losses from fake clicks.

Major highlights of the improvements to our marketing product development and ad technology improvement during FY2019:

- The launch of sales of Digital Out-of-Home ads with available ad vehicles in Moscow in August and subsequent expansion to 10+ Russian cities by December, collaborating with two major DOOH operators: Gallery and MAER GROUP. Ads are sold using real-time socio-demographic targeting that allows the most relevant ad to be automatically chosen based on the audience profile;
- The launch of sales of indoor ad placements in partnership with the leading Russian retail company X5 Retail Group, letting advertisers run their ads on loyalty terminals placed inside stores and tracking the O2O results of the campaigns;
- The expansion of the video ad network with a markedly different type of inventory – video ads on Smart TVs – in collaboration with ivi and ADV Lab. The product is integrated with the myTarget platform, so advertisers can reach target households with specific socio-demographic and economic characteristics and run their ads within the licensed content;
- The launch of Mail.ru Group's own Data Management Platform (DMP). Based on Hard IDs instead of cookies, the DMP is a unique product for the market. The solution allows the use of audience segments to be dramatically prolonged and the segmentation of onboarding and audience profile enhancement to be processed within the platform. It is the core of the Group's marketing ecosystem, integrated with crucial O2O tools like Notify CRM, Social CRM, Performance Retail Platform, etc.;
- The establishment of direct deals between advertisers and publishers on both premium ad placements and on special projects. Integration with the Group's marketing tools provides advertisers with an opportunity to promote their brands on Tier 1 media with a variety of specific ad placements and to get end-to-end analytics on integrated campaigns. The launch sparked interest from major advertisers in buying premium inventory via myTarget;
- Major updates to the VK ad account, including the launch of new statistics indexes, the improvement of optimisation algorithms, the launch of ad auction predictor and QR-code-based retargeting;
- Brand-new VK mobile business accounts that allow advertisers to launch ad campaigns on the go via smartphones, using smart targeting and related budget suggestions;
- New opportunities for O2O businesses on VK through the launch of HTML5-based ads, the development of the Mini Apps platform and interaction with BTL through QR codes;
- The VK business platform also adds personalised statistics output, tracking of new parameters like CPL and video views, mass editing of ads, additional statistical data, a simplified top-up function and campaign browsing feature;
- New formats — vertical video and playable ads have been introduced to the OK social network. Playable ads are intended to promote mobile apps and games and fully demonstrate game mechanics right on the social network's news feed;
- OK's new business profile platform and internal ad account has stimulated entrepreneurial growth and activity on personal business pages throughout the network;



- Multiple updates to myTarget: simplified contextual targeting that has led to exponential growth within the segment, the improved measurement of potential reach prior to ad campaign launch, a new format for short out-stream ads on our NativeRoll premium video ad network, the launch of a product suggestion scheme in dynamic retargeting, A/B tests, improved verification for independent ad campaigns, an improved look-alike system, and an extended pre-roll tool that now runs ads in VK apps;
- The extension of the VK inventory by adding the social network's news feed ad placements to the Carousel and Multiformat ad formats in myTarget. Advertisers can now use these formats for running ads throughout the set of Mail.ru Group resources and those of its partner ad network;
- myTarget App Marketplace launched as a platform for advertising the apps and services of AdTech companies. Developers can now integrate their own solutions into the myTarget platform and monetise them, providing clients with a broader set of tools and personalised services;
- The extension of third-party verification tools on the myTarget platform, which has enhanced opportunities for advertisers to audit traffic quality and ad viewability.

In 2019, the team not only developed ad products and technologies but also launched brand-new initiatives for the market by introducing an Expertise Sharing Programme. The programme gives major partners an opportunity to share their talents with the Group in order to get a deep understanding of each others' business processes as well as to improve marketers' digital advertising skills.

During the year, advertisers actively transferred their budgets from traditional media to digital. This shift resulted in online ad budgets making up half of the whole combined Russian advertising market, compared to a 43% share a year ago.

In the course of 2019, Mail.ru Group made three major changes to its organisational structure related to the ad business. Egor Abramets, the founder and CEO of Youla, also took charge of the Group's AdTech, with a focus on expanding the SME offering. Purchased in July 2019, Relap.io combined with myWidget (launched in 2016) to form a native ad platform with improved content personalisation under the Relap brand, resulting in higher user engagement and time spent on the platform. In April 2019, Mail.ru Group purchased 50.8% of the NativeRoll video ad platform. The deal will broaden the Group's prospects in developing AdTech solutions for publishers and advertisers.

myTracker has become one of the global pioneers in predictive app user life-time value (LTV) forecasting, with post-download and cross-device tracking. Users can now access data related to the number of in-app subscriptions (including trials) and also see related conversion data, which allows revenue streams to be split up to understand which model is more profitable.

We are continuing to work on boosting performance marketing efficiency through various channels across the Group's ecosystem. We are focusing on SME and striving for a synergetic effect. Our leadership is the result of a continuous focus on technological advancement and differentiation across mobile and desktop platforms on the one hand, and a great contribution to strategic partnerships on the other hand.

Employees

As of the end of 2019 the Group had 6,334 full-time employees. We highly value our employees and believe that our culture encourages individuality, creativity and a systematic approach to providing excellent service to our users.

The great diversity of our internal projects allows us to grow and constantly develop our potential.

Working at Mail.ru Group offers many challenges and a fast pace. Our teams create products that are used by millions of people. A significant proportion of our employees possess a strong product and technical background that allows them to contribute to our projects by generating new ideas and enhancing existing products.

Our structure by gender and position as of 31 December, 2019 is presented in the chart above.
Youngest employee: 18
Oldest employee: 81
By gender:
Women: 36%
Men: 64%

Our recruitment strategy is to hire the most ambitious, competent, collaborative and innovative people. In 2019, we successfully hired 1,248 new employees through in-house recruitment. Over 25% were hired thanks to a reference from current colleagues, management or HR – this is the most loyal group.

We strive to make the hiring process transparent and informative for our managers, develop B2B services, deepen the expertise of recruiters and permanently enhance the experience of candidates and employees.

We support a healthy and effective life for our employees and their families. All our employees can enjoy top-tier health insurance programmes, as well as additional office wellness initiatives such as healthy snacks, and a juice bar at our HQ. In 2019 we introduced a face-to-face psychological support programme that was highly appreciated by employees at our head office in Moscow.

For many years we have supported our employees with maternity benefits and gifts for newborns.

We also place great emphasis on sports: 500 of our employees take advantage of the eight types of sporting activities we provide.

In 2019, we arranged over 50 meetups for developers and enthusiasts in various IT fields. Over 240 employees gave talks at external events. Family values and traditions are an important part of our culture. We regularly organise family days in our office with a variety of family fun and kids' activities, from shows to coding classes. During 2019 we organised 200 different events.

Education

Mail.ru Group actively develops its own educational projects and invests in people changing Russian education.

First, we strengthen basic education and bring practice to schools and universities. More than 3,000 students attended our full-time programming classes as part of our educational projects and semester courses at BMSTU, Lomonosov MSU, MIPT, MEPhI, Peter the Great SPbPU, and the Voronezh and Penza state universities. In 2019, we introduced a pilot course in machine learning at the Moscow Aviation Institute (MAI), as well as Digital Camp, a free educational project for non-IT students. Classes are held in our office by our employees, with 230 experts teaching 90 different disciplines. A total of 160 of the best graduates from all the programmes have joined us as interns and employees.

In addition, we are developing a community of Mail.ru Group ambassadors. Sixty students and university employees from 40 universities are acting as IT evangelists and promoting our brand and products at different universities and in different regions.

As a result of all our university projects in 2020 we are now in third place in FutureToday's Most Attractive Employers ranking.

As for schools, our team holds programming competitions and helps schoolchildren all over the country with career guidance. Our Technocup contest has become a 1st Level Contest in computer science, meaning winners of the competition can enter universities without taking entrance exams. Over 4,500 schoolchildren from 70 regions took part in Technocup in 2019.

In collaboration with other Russian IT companies, we organised two large career guidance campaigns devoted to Big Data: the Day of IT Studies and Digital Lesson. During the Day of IT Studies, employees of Mail.ru Group and other companies ran thematic lessons for 185,000 students from 4,000 schools. For Digital Lesson we created a special Big Data game simulator. With their parents and teachers, children took part in over 2.5m gaming sessions.

We also help IT professionals to boost their skills. In 2019, we launched a new educational format for specialists with job experience: MADE Academies (Big Data Academy and Product Managers Academy). At the Big Data Academy students can choose one of three specialities: Data Scientist, ML Engineer, and Data Engineer. The course takes a year and a half. Product Managers Academy is a two-month intensive course with a large practical element.

We held several international IT championships in 2019, including the Russian AI Cup, Mail Design Cup, ML Boot Camp, and HighLoad Cup, which were the most prominent events of this kind in the Russian-speaking internet community (about 30,000 participants from 30 countries, from school pupils to leading experts).

And finally, we make quality educational content open and accessible. We release online courses on the Coursera and Stepik platforms, and individual lectures on the Technostream YouTube channel (over 140,000 subscribers). In 2019, our programming courses (Python and Go) on Coursera attracted 25,000 students.

Charity and social projects

In 2019, Mail.ru Group organised a range of projects as part of its social strategy: investing its technologies and experience in social initiatives.

Mail.ru Group carried out research into cyberbullying in Russia, which revealed that more than 50% of Russian internet users face bullying on social media. To attract attention to the phenomenon and accumulate the technologies and NGOs that help bullying victims both offline and online, the company organised a Day of Action Against Cyberbullying on 11 November. Millions of people and more than 20 internet companies were involved in the social campaign.

In 2019, Mail.ru Group launched a corporate NGO called Kod Dobra, which gives business an opportunity to support Dobro Mail.ru charity projects. During its first year Kod Dobra raised over RUB 1m for charities.

Today Dobro Mail.ru comprises 187 verified charity organisations from 46 Russian regions on its platform and allows users to participate in social projects as volunteers or with one-off or regular donations. Donations made in 2019 increased by 10% over the year; the amount of recurring donations increased 2.5x.

In 2019, the Dobro Mail.ru volunteer fundraising service Dobry Den' (Good Day) united 2,623 people and fundraised over 3.2m to charities. Here users can create special events and invite their friends to donate to any Dobro Mail.ru charity project instead of gifts.

Dobro Mail.ru continued to help NGOs boost their professional level and held the DOBRO 2019 educational conference for NGOs in partnership with MegaFon and Metalloinvest, and the Dobraya Kazan (Good Kazan) forum in partnership with the Kazan city administration.

Mail.ru Group also held the PechaKucha: Dobro and Technologies event to showcase IT products and technologies that help to solve social problems and support charities.

Given that Money Mail.ru, our payment processing service, now also facilitates Dobro Mail.ru, donations made via bank transfer are exempt from any commissions.

In August 2019, Citymobil and Dobro Mail.ru launched a joint social project called Miles of Kindness. Miles of Kindness allows every passenger to donate "suspended" rides to charity – these can be used by people receiving charity aid from partner funds. You simply choose how much you would like to donate at the end of your journey on top of your regular fare. With your help, for example, an individual who has come to Moscow to receive treatment will now be able to afford a ride from the railway station to the hospital and back. A total of 500,000 kilometres have been collected to provide to NGOs.

DonationAlerts, Russia's biggest streaming add-on service, and Dobro Mail.ru actively support charity streaming in Russia. We organise charity streams with famous Russian streamers and public figures for charity fundraising. During the Dobry Mart (Kind March) charity marathon, Russian streamers from the Stream Family community raised more than RUB 1.3m for charity funds and animal shelters. Thanks to the technologies used for Dobro Mail.ru and DonationAlerts, donations were transferred directly to the funds selected by the streamers. Other regular charity activities with streamers help to attract attention to the importance of social responsibility and cooperation.

In 2019, VK continued developing its charitable efforts and strengthening its support for charitable organisations. The company also put emphasis on educating users about socially important topics, leading to a considerable increase in user engagement with charitable initiatives. VK continues to provide full support to non-profit organisations by offering them free use of its advertising capabilities, developing special tools and holding professional events.

Over the year, VK launched dozens of large projects, including ones designed to raise awareness about blood donation, autism, HIV, and ecological issues. Additionally, 74 charitable organisations received grants to promote their projects on VK.

VK has launched two special sticker packs – perhaps the first charitable stickers in Russia to be truly appreciated and liked by users. The proceeds from the stickers were donated to two charitable funds.

Before the New Year, VK introduced a charitable gift, the proceeds of which were given to three charitable funds. As a result, the funds received RUB 1.5m.

VK supported World Autism Awareness Day by launching the #IAmSpecial campaign. Users explained what makes them unlike others: strange habits, oddities in appearance, accomplishments and misfortunes. The campaign showed users that everyone is unique.

VK has also released the first-ever sign-language stickers in Russia. With these stickers, users can learn certain words and phrases in Russian sign language as well as find out more about what life is like with hearing disabilities.

For World Blood Donor Day, VK held its large traditional campaign to encourage users to become blood donors. The company created a mini app in collaboration with DonorSearch, where users could enter information about their blood type and share it with friends.

VK also worked alongside Greenpeace to organise a forest fire prevention campaign. A special chatbot taught VK users about how to handle fire with care. It helped users to understand how to properly put out a campfire after a picnic, whether it is dangerous to set fire to dry plants and what to do in case of a fire.

VK held its second annual VK for Good conference, which over 300 people attended. Among the conference participants were representatives of non-profit organisations as well as the best speakers from the world of business, media, and the non-profit sector.

The third VK for Good auction set a new record for the number of hours of ad agency services given to charitable organisations free of charge. Seven non-profit organisations received a total of 1,950 hours of ad agency services. Agency professionals also helped NGOs create and promote creative projects for free.

In 2019, VK Fest 5 helped to arrange a presence at the festival for three charitable organisations. In addition, free HIV testing was available to festivalgoers.

Odnoklassniki (OK) pays a great deal of attention to charity and social projects. OK uses all the available technology and media channels to inform its users and attract their attention to socially important causes and topics. In November 2019, OK teamed up with the anti-violence support centre Nasiliyu.Net and UN Women, the UN entity dedicated to gender equality and the empowerment of women, for an online panel discussion about gendered violence. The broadcast was viewed by over 2.1m users.

In 2019 OK also focused on projects that help to fight stereotypes and discrimination in various areas of life. In September, the Takie Dela online publication and OK launched an educational project focusing on clear language. With the help of OK stickers, Takie Dela explained how language and words affect people and situations. In November, OK and the So-edinenie foundation launched a social project called The Music of Gestures. OK uploaded several tracks to its music platform, all of which had been modified to reflect the way music is heard by those with impaired hearing. The social network also added a set of stickers featuring sign language gestures.

Over the course of 2019, OK carried out a number of anti-HIV projects with UNAIDS and the UNESCO Institute for Information Technologies in Education. The social network was deeply involved in projects related to the problems experienced by those with developmental challenges and dyslexia. The latter was supported by a nationwide campaign called Dobroshrift, for which Russia's largest media and companies turned their logos "dyslexic."

COVID-19 update

The first months of 2020 have seen the world faced with an unprecedented global health issue in the form of the coronavirus outbreak. On 28 February, 2020, the World Health Organisation (WHO) assessed the COVID-19 threat as very high on a global scale, and on 11 March, 2020, the WHO declared COVID-19 a pandemic.

Due to the concerns over the COVID-19 pandemic, we have made remote work mandatory for our staff. To ensure uninterrupted operations, we have adhered to our tested business continuity and resilience plans.

We have seen a boost in demand for our products and services during the lockdown, as people increasingly use social networks, messaging apps and educational platforms, play online games and order food. Our staff are working hard to support this soaring demand by ensuring the uninterrupted operation of our infrastructure.

To ensure users remain up to date with the latest government action and recommendations we have launched special newsfeeds on our OK and VK social networks and a website for education, work and entertainment while at home, with 40+ solutions. Delivery Club and Samokat have launched contactless delivery and increased the number of couriers to ensure our service is safe and convenient. Citymobil has launched a parcel delivery service. It also offers its drivers a full disinfection service for their vehicles and provides free rides for doctors.

The coronavirus situation is evolving and changing rapidly and we are ready to maintain the quality of our services and operations for users and employees. See the Risk Management section of the annual report for further impact assessment of the COVID-19 pandemic.

Mail.ru Group
People Awards

2019

AI photo restoration
Email & Portal

feature of the year

Fedor Kitashov,
Tatiana Zlatina, Dmitry Shkinev

Mail.ru Group People Awards

2019

Citymobil and Dobro Mail.ru Miles of Good

feature of the year

Vladislav Kuzmenko, Aleksandra Babkina, Dmitriy Sushkevich, Oganes Arakelyan

Mail.ru Group People Awards

2019

Email & Portal Authorisation without password

feature of the year

Artur Khineltsev, Aleksandr Fedoseev, Aleksandr Naumov, Anatoliy Ostapenko

REVENUE & YOY GROWTH
RUB MLN

87,663
2019

71,164
2018

financial review

23%

financial review

This review reflects the highlights of our financial performance for 2019. Full details can be found in the annual financial statements presented on pages 117 to 176 of this annual report.

Overview of consolidated results

We are pleased to have demonstrated solid progress throughout 2019 in all key areas, with total revenues growing by 23%, while we continued to put significant resources behind a number of our new projects, especially our O2O initiatives, where we see significant potential. Online advertising showed strong growth, driven by growing user engagement, improved advertising technologies and sales execution. Customer budgets continued shifting online and towards mobile and social networks in particular. Our games business continues to produce very strong performance, with the international share increasing to over 68% of our MMO revenues. As in previous periods, the new mobile IVAS products and also the music subscriptions continued to grow, with the number of active paid and trial subscriptions on our platforms and in the integrated BOOM app by UMA exceeding 3m.

Structure

Our segment reporting is prepared on a pro forma basis, i.e. segment financial information is presented for each period on the basis of an ownership interest as of the date hereof and consolidation of each of our subsidiaries, including for periods prior to the acquisition of control of the entities in question. The financial information of subsidiaries disposed of and operations classified as assets held for sale prior to the date hereof is excluded from the segment presentation, starting from the beginning of the earliest period presented.

Accordingly, our segment reporting presented herein includes the financial information of UMA, NativeRoll, Relap, Skillbox, Panzerdog, Swag Masha, Worki (all acquired in 2019), Beingame (acquired in March 2020) and excludes the financial information of Pandao, ESforce, Delivery Club, all starting from 1 January, 2018. Please refer to the below Reconciliation of Segment results as presented herein to the audited consolidated financial statements for the year ended 31 December, 2019.

In 2019 we changed the composition of the reporting segments in order to better reflect our strategy, the way the business is managed and units' interconnection within its ecosystem. From the first quarter of 2019 we have identified the following reportable segments on this basis:

- Communications and Social
- Games
- New Initiatives

The Communications and Social segment includes email, instant messaging and the portal (main page and media projects). This segment also aggregates the Group's social network Vkontakte (VK) and two other social networks (OK and My World);
The Games segment includes online gaming services, including MMO, social and mobile games operated by the Group;
The New Initiatives reportable segment represents separate operating segments aggregated for their similarity: they are all newly acquired or recently started and dynamically developing businesses.

Please refer to "Basis of preparation" below in the "Operating segment performance" section for more details on operating segment presentation.

Reconciliation of segment results as presented herein to the audited consolidated financial statements for the year ended 31 December, 2019:

RUB millions	Note 5 to Financial Statements	2019 Beingame	ICO elimination	2019 Annual Report	Note 5 to Financial Statements	2018 Beingame	2018 Annual Report
Group aggregate segment revenue							
Online advertising	36,505	177	–	36,682	29,782	–	29,782
MMO games	27,987	634	-186	28,435	23,295	–	23,295
Community IVAS	16,371	–	–	16,371	15,005	–	15,005
Other revenue	6,207	–	-32	6,175	3,082	–	3,082
Total Group aggregate segment revenue	**87,070**	**811**	**-218**	**87,663**	**71,164**	**-**	**71,164**
Group aggregate operating expenses							
Personnel expenses	19,007	21	–	19,028	14,140	–	14,140
Office rent and maintenance	278	–	–	278	199	–	199
Agent/partner fees	21,174	390	-186	21,378	15,787	–	15,787
Marketing expenses	12,246	743	-32	12,957	10,212	–	10,212
Server hosting expenses	702	–	–	702	693	–	693
Professional services	734	1	–	735	498	–	498
Other operating (income)/expenses, excluding amortisation and depreciation	3,177	3	–	3,180	2,498	–	2,498
Total Group aggregate operating expenses	**57,318**	**1,158**	**-218**	**58,258**	**44,027**	**-**	**44,027**
Group aggregate segment EBITDA	**29,752**	**-347**	**-**	**29,405**	**27,137**	**-**	**27,137**
margin, %	34.2%			33.5%	38.1%		38.1%
Depreciation and amortisation	10,012	2	–	10,014	9,302	–	9,302
Other non-operating income/(expense), net	851	–	–	851	-233	–	-233
Profit before tax	**18,889**	**-345**	**-**	**18,540**	**18,068**	**-**	**18,068**
Income tax expense	3,240	–	–	3,240	2,985	–	2,985
Group aggregate net profit	**15,649**	**-345**	**-**	**15,300**	**15,083**	**-**	**15,083**

Acquisitions and disposals in 2019

In February 2019 we completed the acquisition of 100% of Salerton Investments Limited ("UMA"), an internet and mobile music service provider in Russia, for a total cash consideration of RUB 6,391m. The main purpose of the acquisition is to expand our presence in the music services market.

In April 2019 we acquired 50.83% in Native Media LLC ("NativeRoll"), a video ad platform. The primary purpose of the acquisition of NativeRoll was to enhance our position on the advertising solutions market. As of 31 December, 2019 we acquired control over the remaining share of 49.17%.

In May 2019 we acquired 51% in LLC "Iconjob" ("Worki"), a job search platform. The primary purpose of the acquisition of Worki was to leverage our expertise and resources by achieving substantial synergies with Youla, our online classifieds product. As of 31 December, 2019 we acquired control over the remaining share of 49%.

Also, in May 2019 we acquired 100% in Surfingbird LLC ("Relap"), a recommendatory platform. The primary purpose of the acquisition of Relap was to leverage our expertise and resources by achieving substantial synergies with Pulse, our recommendation technologies and solutions.

The total cash consideration for the acquisition of NativeRoll, Worki and Relap was RUB 2.1bn.

In May 2019 we acquired control in the mobile games developer Panzerdog OY ("Panzerdog") by increasing its share to 59.45% (39.45% in addition to a 20% stake as of 31 March, 2019) for a total cash consideration of RUB 626m.

In June 2019 we decided to create a partnership around the ESforce esports business and accordingly, classified it as an asset held for sale.

On 8 July, 2019 we acquired control over the mobile games developer LLC "Swag Masha" ("Swag Masha") by increasing our share to 51% (16% in addition to the previously held 35% stake) for a total cash consideration of RUB 79m. The primary purpose of the acquisition of Swag Masha was to enhance our position on the mobile games market.

On 8 October, 2019, the Group, in collaboration with Alibaba Group, MegaFon and RDIF, completed the formation of the AliExpress Russia Joint Venture (AER or the AER JV). The Group invested its Pandao e-commerce assets and a cash consideration of USD 182m in exchange for a 15.01% stake in the AER JV (voting – 18%). The cash consideration of USD 182m is comprised of USD 100m paid on 8 October, 2019, with the outstanding sum to be contributed by October 2020. Alibaba Group invested USD 100m and contributed its AliExpress Russia business in exchange for a 55.7% stake (voting – 49.9%), RDIF invested USD 100m in exchange for a 5% stake (voting – 1.2%) and MegaFon sold a 9.97% economic stake in Mail.ru Group to Alibaba Group in exchange for a 24.3% stake (voting – 30.2%) in the AER JV. All parties contractually agreed to share control over AER based on the unanimous consent of the parties over decisions related to the AER JV's relevant activities.

In July 2019, the Group and Sberbank entered into an agreement for investment into a new O2O group (O2O or the O2O JV) focused on digital technologies for the food and transportation markets. As of 18 December, 2019 all the necessary corporate governance and regulatory approvals, including the approval from the Federal Antimonopoly Service, had been received, so the formation of the partnership was completed. The Group contributed its stakes in Delivery Club (100%) and Citymobil (29.67%), as well as a cash consideration of RUB 8.5bn and a contingent consideration of RUB 4.6bn, dependent on the achievement of a number of KPIs by contributed businesses by November 2020.

As part of the O2O transaction, the following restructuring steps were also taken: the Group sold to O2O 70% of participation interest in NGCity (owns 65% of YouDrive, a car sharing operator) for RUB 434m, 6.9% in Instamart, a grocery delivery service, for RUB 110m, 25% in Performance Food, a meal kit delivery service, for RUB 381m plus an earn-out of up to USD 3m to be paid in future, subject to meeting of KPI targets specified in the SPA between the Group and previous shareholders (the earn-out amount will be determined not earlier than 31 May, 2020).

Sberbank contributed a total of RUB 39.7bn (used by the O2O JV to acquire an additional 5.8% stake in Citymobil and a 100% stake in Foodplex) and a contingent consideration of RUB 13bn, depending on the achievement of a number of KPIs by contributed businesses by November 2020. The parties have equal 50% stakes in the O2O JV, with up to 10% of shares to be potentially allocated for the long-term motivation programme to incentivise the O2O platform's employees.

In December 2019 we acquired control in the educational online platform LLC "Skillbox" ("Skillbox") by increasing our share to 60.3% (50% in addition to a 10.3% stake as of 14 February, 2019 that was accounted as a financial asset at fair value through profit and loss) for a total cash consideration of RUB 1.6 bn. The primary purpose of the acquisition of Skillbox was to expand our presence on the online education market by achieving substantial synergies with GeekBrains, our online educational platform.In April 2020, O2O signed binding documents on investment in Samokat, the grocery and home goods express delivery service. The deal is expected to be closed in H1 2020, pending approval by Russia's Federal Antimonopoly Service. After that, the share of the O2O JV in the service will amount to 75.6%.

See also Notes 6 and 25 to our consolidated financial statements for further details on acquisitions and disposals.

Goodwill

We account for business combinations by applying the acquisition method. As a result, we record goodwill as the fair value of the consideration transferred, including the recognised amount of any non-controlling interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. The significant goodwill recorded in connection with our acquisitions may lead to charges in future periods if goodwill is impaired.

Total goodwill amounted to RUB 140,665m as of 31 December, 2019, an increase of RUB 219m from 31 December, 2018. The goodwill is allocated to groups of cash-generating units (CGUs) – "Email, Portal and IM", "Search", "Online Games", "Social Networks", "VKontakte", "Pixonic", "E-Commerce", "Skillbox" and others – in accordance with the operating segment structure of our business and IFRS requirements. Please see Note 11 to our consolidated financial statements for further details.

Operating segment performance

Basis of preparation

In reviewing our operational performance and allocating resources, our Chief Operating Decision Maker (CODM) reviews selected items from each segment's income statement, assuming 100% ownership in all of our key operating subsidiaries, based on management reporting.

Management reporting is different from IFRS, because it does not include certain IFRS adjustments that are not analysed by the CODM in assessing the business's core operating performance. Such adjustments affect such major areas as revenue recognition, deferred tax on the unremitted earnings of subsidiaries, share-based payment transactions, the disposal and impairment of investments, business combinations, fair value adjustments, amortisation and impairment thereof, net foreign exchange gains and losses, share in the financial results of associates, as well as irregular non-recurring items that occur from time to time and are evaluated for adjustment as and when they occur. The tax effect of these adjustments is also excluded from management reporting.

The financial information of the key subsidiaries acquired during the reporting period or after the reporting period but prior to the date hereof is included in the segment disclosure, starting from the beginning of the earliest comparative period included herein.

The financial information of subsidiaries disposed of and assets classified as held for sale prior to the date hereof is excluded from the segment presentation, starting from the beginning of the earliest period presented.

Accordingly, segment reporting for the year ended 31 December, 2019 and the respective comparative segment financial information has been retrospectively restated, as applicable, to include the financial information of UMA, NativeRoll, Relap, Skillbox, Panzerdog, Swag Masha, Worki, Beingame and to exclude Pandao, ESforce, and Delivery Club, all starting from 1 January, 2018.

In 2019 we changed the composition of the reporting segments in order to better reflect our strategy, the way the business is managed and units' interconnection within its ecosystem. Since the first quarter of 2019 we have identified the following reportable segments on this basis:

- Communications and Social
- Games
- New Initiatives

The Communications and Social segment includes email, instant messaging and the portal (main page and media projects). It earns substantially all revenues from display and context advertising. This segment also aggregates the social network Vkontakte (VK) and two other social networks (OK and My World) and earns revenues from (i) commissions from application developers based on the respective applications' revenue, (ii) user payments for virtual gifts, stickers and music subscriptions and (iii) online advertising, including display and context advertising. It also includes the Search and music services (UMA). These businesses have a similar nature and economic characteristics as they are represented by social networks and online communications, their products and services are used by a similar type of customer and are regulated under a similar regulatory environment.

The Games segment includes online gaming services, including MMO, social and mobile games operated by the Group. It earns substantially all revenues from (i) the sale of virtual in-game items to users, (ii) royalties for games licensed to third-party online game operators and (iii) in-game advertising.

The New Initiatives reportable segment represents separate operating segments aggregated into one reportable segment for their similarity: they are all newly acquired or recently started and dynamically developing businesses. This segment primarily consists of Youla classifieds, which earn revenues from listing and promotion fees as well as advertising, MAPS.ME, GeekBrains, new B2B projects (including Cloud), as well as MRG Tech Lab initiatives, along with other services which are considered insignificant by the CODM for the purposes of performance review and resource allocation.

We measure the performance of our operating segments through a measure of earnings before interest, tax, depreciation and amortisation (EBITDA). Segment EBITDA is calculated as the respective segment's revenue less operating expenses (excluding depreciation, amortisation and impairment of intangible assets), including our corporate expenses allocated to the respective segment.

EBITDA is not a measure of financial performance under IFRS. Our calculation of EBITDA may be different from the calculations of similarly labelled measures used by other companies and should therefore not be used to compare one company against another or as a substitute for analysis of our operating results as reported under IFRS.

EBITDA is not a direct measure of our liquidity, nor is it an alternative to cash flows from operating activities as a measure of liquidity, and it needs to be considered in the context of our financial commitments. EBITDA may not be indicative of our historical operating results, nor is it meant to be predictive of our potential future results. We believe that EBITDA provides useful information to the users of consolidated financial statements because it is an indicator of the strength and performance of our ongoing business operations, including our ability to fund discretionary spending such as capital expenditure, acquisitions and other investments and our ability to incur and service debt.

Principal revenue drivers

Organic growth in our revenue, including online advertising and IVAS, is primarily driven by the audience of our assets. Advertising revenues also depend on the pricing of our advertisements and availability and sell-through rates of our advertising inventory, while IVAS revenue is also driven by paying user engagement and average revenue per paying user ("ARPPU").

Analysis of 2019 results compared with 2018

The discussion that follows is based on the analysis of segment and supporting management financial information according to the Group's actual structure as of the date of this Annual Report. As discussed under "Basis of Preparation" above, this information differs in certain significant respects from the information presented in accordance with IFRS.

Group aggregate segment financial information*

RUB millions	2019	% of revenue	2018	% of revenue	YoY, %
Group aggregate segment revenue					
Online advertising	36,682	42%	29,782	42%	23%
MMO games	28,435	32%	23,295	33%	22%
Community IVAS	16,371	19%	15,005	21%	9%
Other revenue**	6,175	7%	3,082	4%	100%
Total Group aggregate segment revenue	**87,663**	**100%**	**71,164**	**100%**	**23%**
Group aggregate operating expenses					
Personnel expenses	19,028	22%	14,140	20%	35%
Office rent and maintenance	278	0%	199	0%	40%
Agent/partner fees	21,378	24%	15,787	22%	35%
Marketing expenses	12,957	15%	10,212	14%	27%
Server hosting expenses	702	1%	693	1%	1%
Professional services	735	1%	498	1%	48%
Other operating (income)/expenses, excluding amortisation and depreciation	3,180	4%	2,498	4%	27%
Total Group aggregate operating expenses	**58,258**	**66%**	**44,027**	**62%**	**32%**
Group aggregate segment EBITDA	**29,405**	**34%**	**27,137**	**38%**	**8%**
margin, %	33.5%		38.1%		
Depreciation and amortisation ***	10,014	11%	9,302	13%	8%
Other non-operating expense/(income), net	851	1%	(233)	0%	465%
Profit before tax	**18,540**	**21%**	**18,068**	**25%**	**3%**
Income tax expense	3,240	4%	2,985	4%	9%
Group aggregate net profit	**15,300**	**17%**	**15,083**	**21%**	**1%**
margin, %	17.5%		21.2%		

(*) The numbers in this table and further in the document may not exactly foot or cross-foot due to rounding.

(**) Including Other IVAS revenues.

(***) Including the impairment of Skyforge for RUB 630m in Q2 2019 and the impairment of Armored Warfare for RUB 1,698m in Q2 2018.

The income statement items for each segment for the year ended 31 December, 2019, as presented to the CODM, are presented below:

RUB millions	Communications and Social	Games	New Initiatives	Eliminations	Group
Revenue					
External revenue	50,313	31,144	6,206		87,663
Intersegment revenue	208	118	27	(353)	-
Total revenue	**50,521**	**31,262**	**6,233**	**(353)**	**87,663**
Total operating expenses	23,186	26,365	9,060	(353)	58,258
EBITDA	**27,335**	**4,897**	**(2,827)**	**-**	**29,405**
Net profit					**15,300**

The income statement items for each segment for the year ended 31 December, 2018, as presented to the CODM, are presented below (all numbers include the effect of IFRS 16 adoption – please see Note 2.2 in the financial statement for details):

RUB millions	Communications and Social	Games	New Initiatives	Eliminations	Group
Revenue					
External revenue	43,575	24,841	2,748		71,164
Intersegment revenue	191	4	1	(196)	-
Total revenue	**43,766**	**24,845**	**2,749**	**(196)**	**71,164**
Total operating expenses	18,122	19,839	6,262	(196)	44,027
EBITDA	**25,644**	**5,006**	**(3,513)**	**-**	**27,137**
Net profit					**15,083**

Online advertising

Online advertising includes two major kinds of advertising technology: Display and Context. Display advertising revenue is generated from promo posts on social networks, and video, banner and similar advertisements on our assets. Advertisements are sold based on either the time that they last, or on the number of ad views. Our standard rates depend on a number of factors, including the asset on which the advertisement appears, the amount and length of the contract, the season, and the advertisement's format, size and position.

Context advertising revenue is earned with our myTarget technology, as well as through partnerships with third parties.

myTarget (formerly known as Target Mail.ru), is our proprietary self-service programmatic advertising technology, which sells advertisements through an online auction both on desktop and mobile using various pricing models. The technology is integrated in almost all advertising formats, so the advertiser can choose whether to purchase impressions via display ads based on fixed CPM or use an online auction in the myTarget programmatic system. The technology features several improvements: new cross-device ad formats, the integration of offline user experience and new targeting opportunities.

We generated revenue of RUB 36,682m from online advertising in 2019 (2018: RUB 29,782m). Our advertising revenue grew by 23%, ahead of the Russian online advertising market, even though we continued to invest in our new businesses and allocate part of our inventory to promote these new products, which had a limiting effect on inventory available for sale. The strong growth in our advertising revenues was driven by an ongoing shift of budgets online and to social within digital, as we boost engagement, improve AdTech and grow ROIs for our clients, an increasing number of which are SMEs. In line with this trend, promo posts across our social networks and our native in-feed video formats were our fastest-growing advertising revenues. The growth of our advertising revenue was additionally supported by ongoing adtech development and the launch of innovative ad products.

IVAS

We generate a significant portion of our revenue from IVAS. This includes MMO games and Community IVAS.

MMO games

About a third of our total revenue is generated by MMO games, including client, browser and mobile titles. Players have the opportunity to buy in-game enhancements for these free-to-play games; revenue is recognised net of any commissions from SMS operators, but gross of other revenue collection costs, including commissions paid to mobile app stores. In 2019, we generated revenues of RUB 28,435m from MMO games (2018: RUB 23,295m). The 22% increase in MMO revenues is primarily due to the strong growth of Hustle Castle, our most successful in-house developed game, as well as War Robots and Left to Survive. We have also launched a number of new successful projects, such as Tacticool, Love Sick, Zero City, American Dad and others.

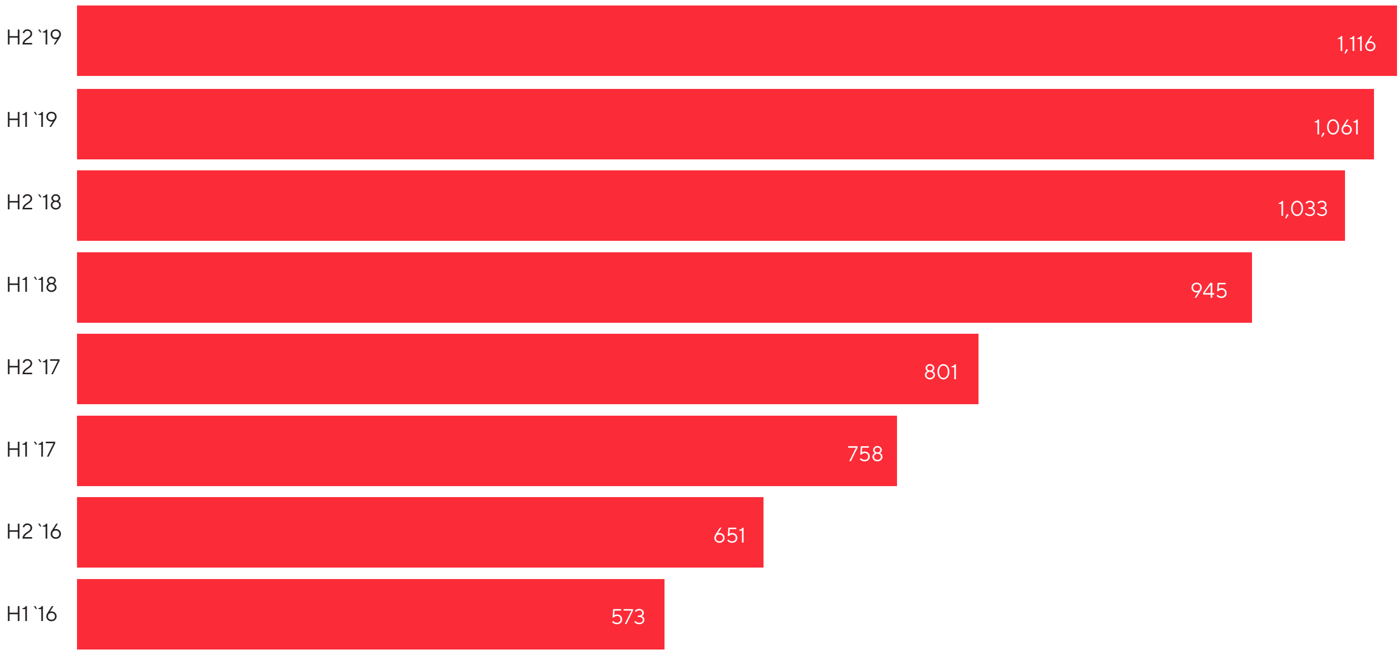
Community IVAS

Community IVAS revenue is driven by payments for features and virtual items sold primarily on our social networks. Such features and items include virtual gifts, stickers, premium music access and other paid features. Community IVAS revenue is also driven by revenues shared with application developers through our Application Programming Interface ("API"). A significant portion of these payments is paid via online payment systems.

The fees for such services are collected from customers using various payment channels, including bank cards, online payment systems and mobile operators, as well as from the application developers.

Aggregate segment Community IVAS revenue increased by 9% to RUB 16,371m (2018: RUB 15,005m), mostly driven by growth in music subscribers, the development of stickers as a product, and the growing popularity of these features among users.

MMO games, average monthly paying users, ths



Source: Company data
Footnote 1: The numbers combine the paying users of individual MMO and mobile games and may include overlap
Footnote 2: The calculation methodology was reviewed to account for paying users more accurately; the historical data were recalculated.

Costs and margins

Our principal cost items include personnel expenses, office rent and maintenance expenses, agent/partner fees, marketing expenses, server hosting expenses, professional services and other operating expenses, excluding depreciation, amortisation and impairment.

Personnel expenses increased by 35% to RUB 19,028m (2018: RUB 14,140m), mainly driven by an increase in headcount, principally within our B2B New Projects, VK and online games businesses.

We adopted the new IFRS 16 standard using a modified retrospective approach and utilising certain practical expedients provided. We recognised right-of-use assets and lease liabilities for those leases previously classified as operating leases, except for leases of low-value assets. In order to achieve comparability, the IFRS 16 adoption effect (Note 2.2) is included in segment reporting starting from 1 January, 2018. Expenses increased to RUB 278m (2018: RUB 199m), driven by the rental of additional office space as the headcount increased.

Agent/partner fees increased by 35% to RUB 21,378m (2018: RUB 15,787m). The increase in agent/partner fees was primarily driven by growth in revenue collection costs, advertising commissions and payments to music licence owners.

Revenue collection costs represent fees to payment systems for processing payments for our games and Community IVAS. These costs also include the share of our mobile product revenue that we pay to mobile app stores (mainly Google Play and Apple's App Store), as well as the share of our console gaming revenue paid to the respective console platforms (Sony's PlayStation and Microsoft's Xbox). The increase in revenue collection costs was mainly due to increased revenue from games, mostly mobile and console titles.

Advertising commissions represent arrangements where we share our advertising revenue with different external advertising agencies. The increase in commission is mainly due to the significant growth in related revenue in 2019.

Marketing expenses increased by 27% to RUB 12,957m (2018: RUB 10,212m), as we significantly stepped up marketing efforts to support the fast growth of our mobile games such as Hustle Castle, Left to Survive, Tacticool, Zero City and Love Sick.

Other operating expenses, excluding depreciation, amortisation and impairment, increased by 27% to RUB 3,180m (2018: RUB 2,497m) due to an expensed VAT increase, mostly driven by the growth of CAPEX and expenses, as well as a fine imposed by the tax authorities following a tax audit.

In total, our aggregate segment operating expenses (excluding depreciation, amortisation and impairment) increased by 32% to RUB 58,258m (2018: RUB 44,027m). As a result, our aggregate segment EBITDA increased by 8% to RUB 29,405m (2018: RUB 27,137m) and the EBITDA margin decreased to 33.5% in 2019 (2018: 38.1%).

Depreciation, amortisation and impairment, other non-operating income, income tax and net income

Depreciation, amortisation and impairment increased by 8% to RUB 10,014m (2018: RUB 9,302m) primarily as a result of growth in servers and network equipment, driven by the development of new businesses, as well as due to the rental of additional office space, driven by growth in headcount.

Other non-operating expenses increased to RUB 851m (income in 2018: RUB 233m) due to interest expenses accrued on interest-bearing loans received in 2020.

Profit before income tax expense increased by 3% to RUB 18,540m (2018: RUB 18,068m) as a result of the 23% increase of revenues partially offset by a 32% increase in expenses. Income tax expense increased by 9% to RUB 3,240m (2018: RUB 2,985m), and as a result, the Group's aggregate net profit increased by 1% to RUB 15,300m (2018: RUB 15,083m).

Consolidated results of operations in accordance with IFRS

The following table summarises the principal line items from our consolidated income statements under IFRS:

RUB millions	2019	2018
Total revenue	**96,231**	**66,105**
Net (loss)/gain on venture capital investments	(139)	26
Total operating expenses	**(68,036)**	**(62,581)**
EBITDA	**28,056**	**3,550**
Profit/(loss) before income tax expense	**22,279**	**(7,517)**
Income tax expense	(3,428)	(546)
Net profit/(loss)	18,851	(8,063)
Attributable to:		
Equity holders of the parent	18,686	(7,991)
Non-controlling interests	165	(72)

Our consolidated revenue increased by 45.6% to RUB 96,231m (2018: RUB 66,105m) in 2019, mostly for the following reasons:

- (1) Organic growth and online gaming revenue. The primary drivers of organic and gaming revenue growth are described under "Operating segment performance" above.
- (2) Changes to estimates in the calculation of MMO deferred revenue with respect to the lifespan of in-game virtual items purchased by game players. The changes in estimates were recorded prospectively and resulted in an increase in revenue of RUB 13,324m. For more details, see note 4.2.9 in our consolidated financial statements for the year ended 31 December, 2019.

EBITDA under IFRS increased to RUB 28,056m (2018: RUB 3,550m) and the EBITDA margin increased to 29.2% (2018: 5.4%) as a result of revenues growing at a faster pace than operating expenses (excluding depreciation, amortisation and impairment).

Operating expenses grew by 8.7% to RUB 68,036m, or 70.7% of revenue (2018: RUB 62,581m, or 94.6% of revenue).

The growth in operating expenses was primarily driven by a RUB 8,626m increase in agent/partner fees, partially offset by a RUB 2,282m decrease in office rental and maintenance expenses due to the adoption from 1 January, 2019 of new standard IFRS 16, according to which operating lease expenses (except for leases of low-value assets) are treated as finance leases and recorded as right-of-use assets and lease liabilities, which have an effect on expenses through amortisation and interest expense, and thus no longer affect EBITDA. The key drivers and components of the growth in agent/partner fees were mostly organic and are discussed in detail under "Operating segment performance" above.

Our profit before income tax expense under IFRS was RUB 22,279m (2018: RUB 7,517m loss) primarily due to an increase in depreciation and amortisation, and the increase in EBITDA as discussed above.

Our net profit under IFRS was RUB 18,851m (2018: RUB 8,063m loss), a combination of profit before tax and income tax expense.

The income tax expense under IFRS increased to RUB 3,428m (2018: RUB 546m) mostly due to an increase in taxable profit before income tax.

The majority of our taxable profits as well as income tax expenses in 2019 and 2018 are generated in Russia. Pre-tax gains and losses in other jurisdictions mostly relate to share-based payment expenses, fair value revaluation, foreign exchange gains and losses, and other similar items which are generally non-taxable (non-deductible) in those jurisdictions. These items affect pre-tax profit, but do not have an influence on income tax expense, which has an effect on the blended tax rate.

A detailed reconciliation of our management reporting to IFRS is presented in the tables below.

Reconciliation of aggregate segment financial information to IFRS

RUB millions	2019	2018
Group aggregate segment revenue, as presented to the CODM	**87,663**	**71,164**
Adjustments to reconcile revenue as presented to the CODM to consolidated revenue under IFRS:		
Effect of difference in dates of acquisition,loss of control in subsidiaries and assets held for sale	2,022	2,992
Differences in timing of revenue recognition	6,520	(8,154)
Barter revenue	8	74
Dividend revenue from venture capital investments	18	29
Consolidated revenue under IFRS	**96,231**	**66,105**

RUB millions	2019	2018
Group aggregate segment EBITDA, as presented to the CODM	**29,405**	**27,137**
Adjustments to reconcile EBITDA as presented to the CODM to consolidated profit/(loss) before income tax expenses under IFRS:		
Effect of difference in dates of acquisition, loss of control in subsidiaries and assets held for sale	(7,744)	(5,904)
IFRS 16 implementation	–	(3,540)
Differences in timing of revenue recognition	8,265	(7,464)
Net (loss)/gain on venture capital investments	(139)	26
Share-based payment transactions	(1,742)	(6,732)
Other	11	27
EBITDA	**28,056**	**3,550**
Depreciation and amortisation	(12,771)	(9,665)
Impairment of intangible assets	(659)	(1,711)
Share of loss of equity accounted associates	(1,691)	(497)
Finance income	585	545
Finance expenses	(1,459)	(17)
Other non-operating loss	(182)	(12)
Gain on joint venture formation	15,855	–
Loss on fair value remeasurement of assets held for sale	(4,519)	–
Net loss on derivative financial assets and liabilities at fair value through profit or loss	(758)	(516)
Gain on remeasurement of previously held interest in equity accounted associate	324	–
Reversal of impairment / (impairment) of equity accounted associates	60	(37)
Net gain on disposal of intangible assets	418	–
Net gain on disposal of subsidiary	–	47
Net foreign exchange (loss)/gain	(980)	796
Consolidated profit/(loss) before income tax expense under IFRS	**22,279**	**(7,517)**

RUB millions	2019	2018
Group aggregate net profit, as presented to the CODM	**15,300**	**15,083**
Adjustments to reconcile net profit as presented to the CODM to consolidated net profit/(loss) under IFRS:		
Share-based payment transactions	(1,742)	(6,732)
Differences in timing of revenue recognition	8,265	(7,464)
Effect of difference in dates of acquisition, loss of control in subsidiaries and assets held for sale	(6,610)	(6,006)
IFRS 16 implementation	–	435
Amortisation of fair value adjustments to intangible assets	(3,192)	(5,174)
Gain on joint venture formation	15,855	–
Loss on fair value remeasurement of assets held for sale	(4,519)	–
Net loss on financial instruments at fair value through profit or loss	(897)	(490)
Gain on remeasurement of previously held interest in equity accounted associates	324	–
Net gain on disposal of intangible assets	418	–
Net gain on disposal of subsidiary	–	47
Net foreign exchange (loss)/gain	(980)	796
Share of loss of equity accounted associates	(1,691)	(497)
Reversal of impairment/(impairment) of equity accounted associates	60	(37)
Other non-operating loss	(182)	(12)
Other	(11)	(16)
Tax effect of adjustments	(1,547)	2,004
Consolidated net profit/(loss) under IFRS	**18,851**	**(8,063)**

Semi-annual analysis

RUB millions	2019				2018			
	H1 2019	**% of revenue**	**H2 2019**	**% of revenue**	**H1 2018**	**% of revenue**	**H2 2018**	**% of revenue**
Group aggregate segment revenue								
Online advertising	16,244	41%	20,438	43%	13,359	41%	16,423	42%
MMO games	13,289	33%	15,146	32%	10,445	32%	12,850	33%
Community IVAS	8,099	20%	8,272	17%	7,520	23%	7,485	19%
Other revenue*	2,121	5%	4,054	9%	1,044	3%	2,038	5%
Total Group aggregate segment revenue	**39,753**		**47,910**		**32,368**		**38,796**	
Group aggregate segment EBITDA	**12,694**	**32%**	**16,711**	**35%**	**11,980**	**37%**	**15,157**	**39%**
Group aggregate net profit	6,022	15%	9,278	20%	5,349	17%	9,734	25%

The table above represents our segment semi-annual results with a percentage of revenue for the four consecutive half-years ended 31 December, 2019.

The majority of our revenues are affected by seasonality and as a result, revenues and operating profits are generally higher in the second half of the year than in the first six months:

- Advertising revenues are generally higher in the second half of each year since significant amounts of advertising budgets are typically spent in the last quarters of the year.
- MMO games revenues are generally higher during the second half of the year due to the end of the vacation period, because users tend to play our MMO games more when not on vacation.
- Community IVAS revenues are generally higher ahead of, during and immediately after holidays and festive periods.

In addition to seasonal fluctuations, our semi-annual H2 2019 results were driven by strong growth in revenue from targeted advertising and mobile games.

Most of the revenue growth in H2 2019 was concentrated in online advertising (24.4% vs. H2 2018) and MMO games (17.9% vs. H2 2018).

The growth in online advertising was primarily driven by myTarget on mobile and desktop applications and new projects such as NativeRoll and Relap. Moreover, VK increased the proportion of high-margin products. The growth in MMO games was mostly driven by the growth of War Robots and new projects such as Tacticool, Love Sick, Zero City, American Dad and others.

Aggregate segment EBITDA increased by 10.3% in H2 2019 vs. H2 2018 in line with revenue and expenses growth. Personnel expenses increased by 38% in H2 2019 due to an increase in headcount, principally within our B2B New Projects, VK and online games businesses. In line with the strong growth in revenue from mobile games, myTarget and music subscriptions, agent/partner fees increased by 37% in H2 2019, including respective growth in revenue collection costs, advertising commissions paid to external advertising agencies and commissions to music copyright holders.

* Other revenue includes Other IVAS

Financial position
Liquidity and capital resources

As of 31 December, 2019, the Group had RUB 9,782m in cash and an outstanding debt of RUB 23,518m. The cash-generating capacity of our business remained strong, though it has been affected by the need to fund Delivery Club, Citymobil and Pandao ahead of the JV deals closing. The free cash flow generation of our business is expected to normalise in 2020. As previously stated, with M&A-related investments we will utilise bank lines for near-term cash management. In 2019, net cash provided by operating activities before interest and income tax increased by 23.8% to RUB 18,438m (2018: RUB 14,887m). Net cash provided by operating activities before interest and income tax grew following an increase in IFRS EBITDA (excluding the effect of share-based payment expense, gain on joint venture formation, loss on fair value re-measurement of assets held for sale, and change in MMO revenue deferral estimate, which represents the most significant non-cash IFRS adjustments to EBITDA).

The ratio of net cash provided by operating activities to consolidated revenues decreased to 13.4% in 2019 (2018: 18.9%), mainly as a result of a significant decrease in non-cash revenue deferral in 2019 (change in estimate, see note 4.2.9 in the financial statements for the year ended 31 December, 2019) and an increased amount of venture capital investments.

Capital expenditure to acquire property and equipment and intangible assets increased by 26.1% to RUB 8,385m, driven by a 71.5% increase in payments for intangible assets, mostly consisting of music licence fees, as well as purchased and internally developed game software, and was otherwise in line with the organic growth of the business.

Net cash used in investment activities in 2019 also included a net RUB 11,181m paid for the 2019 acquisitions of Worki, UMA, Skillbox, Swag Masha, Relap, NativeRoll, Panzerdog and ESforce acquired in 2018 and cash contributions of RUB 15,687m to associates Citymobil (pre-O2O), AliExpress Russia Joint Venture, O2O and others.

In March 2019 we borrowed RUB 8,500m from Raiffeisenbank to finance our investment transactions, including deferred consideration for ESforce and the acquisition of UMA.

In October 2019 we borrowed RUB 6,500m from Sberbank to finance the AER partnership.

In December 2019 we borrowed RUB 8,500m from Sberbank to finance our cash contribution into the O2O partnership.

We may attract additional bank borrowing to finance our further investments and contingent consideration to be contributed into the O2O and AER JVs.

Terms for RSU Plan

On 23 November, 2017 the Remuneration Committee of the Board of Directors of the Company approved New Terms for the 2015 Restricted Stock Unit Plan (the “2017 RSU Plan”), establishing that RSU vesting shall generally be conditional on the meeting of certain performance KPIs. Please refer to Note 24 to our Consolidated Financial Statements for further details. In December 2018, an additional extension to the 2017 RSU Plan for 2,000,000 units and the acquisition of the required number of GDRs on the market were approved.

SHAREHOLDERS` ECONOMIC INTEREST

management

management

Board of Directors

Dmitry Grishin, 41
Co-Founder and Chairman of the Board
Dmitry Grishin was appointed Chairman of the Board in March 2012. He co-founded Mail.ru Group in 2005 and served as Chief Executive Officer (Russia) from November 2010 to October 2016. Dmitry joined Mail.ru in 2000 and was promoted to Technical Director in 2001. From 2003 to 2010, he led the business as CEO. Dmitry graduated from the Faculty of Robotics and Complex Automation at Moscow State Technical University and in 2012 he founded Grishin Robotics, a global investment company dedicated to supporting personal robotics around the world.

Charles St. Leger Searle, 56
Director
Charles Searle is currently Chief Executive Officer of Prosus Internet Listed Assets. He serves on the boards of a number of companies associated with Prosus Group, including Tencent Holdings Ltd. He joined Prosus Group in Hong Kong in 1998 to assist with the group's expansion into Asia, prior to which he held positions at Cable & Wireless plc and at Deloitte & Touche in London and Sydney. Charles is a graduate of the University of Cape Town and a member of the Institute of Chartered Accountants in Australia and New Zealand. He has more than 25 years of international corporate development experience in the telecommunications and internet industries.

Dmitry Sergeev, 44
Director
Dmitry Sergeev was appointed to the Board in October 2018. Dmitry is Co-CEO of AliExpress Russia JV. From 2014 to 2019 he served as Deputy CEO of Mail.ru Group. Before joining Mail.ru Group he held upper management positions in a number of TV and media companies. He is a graduate of the School of International Law at the Moscow State Institute of International Relations.

Vladimir Gabrielyan, 37
Director
Vladimir Gabrielyan began his career in IT as a system administrator at Russia Telecom. He later launched his own project, Web-Hosting.ru. He joined Mail.ru Group in 2001 as a system administrator, then moved on to take charge of the development and technical support of one of the Group's largest assets, the Mail.ru email service. Vladimir has been Mail.ru's Vice-President and CTO since 2005. For 14 years he has run a number of major projects and departments, supervising all major technological initiatives. Vladimir is an established expert in machine learning and big data.

Jaco van der Merwe, 45
Director
Jaco van der Merwe is currently the Head of Treasury at Naspers/Prosus Group. He joined Naspers as Group Financial Manager of MIH in 2006. He has served on a number of boards of Prosus Group companies and as a member of the audit committees of Abril Media (Latin America's leading magazine publisher) and NMS Insurance Services (a short-term insurance company in South Africa). Prior to joining Prosus Group he was an audit partner at KPMG in South Africa. He graduated with a Bachelor of Commerce degree from the University of Johannesburg, South Africa, where he also received a Bachelor's degree (Hons) in Accounting. He is a registered member of the South African Institute of Chartered Accountants.

Mark Remon Sorour, 58
Director
Mark Sorour was appointed to the Board in August 2010. A qualified chartered accountant, in 1994 he left investment banking to join the Naspers Group, where he went on to become its Chief Investment Officer from 2002 to his retirement in 2018. During this time he led and held worldwide responsibility for the Naspers Group's M&A and played a significant role in capital market fundraising activities. Mark's 25 years of experience in internet, technology and video entertainment businesses include business development and dealmaking in Africa, the Middle East, Thailand, India, China, Europe, the U.S., Latin America and South-East Asia. He currently serves as a non-executive director on the Naspers' and newly listed Prosus Boards.

Lev Khasis, 53
Director
Lev Khasis is a member of the Executive Board, and First Deputy Chairman of the Executive Board of Sberbank. He supervises and coordinates the work of the International Operations Unit, the Technologies Unit, the Services Unit, and several other areas of the Bank's activity. From 1993 to 1995 Lev served as Managing Director of the Samara branch of AvtoVazBank and Vice President of AvtoVazBank. In 1994-1999 he was Arbitration Manager and President of Aviakor OJSC. In 1997-1998 Lev was Vice President of Alfa Bank. In 1999-2002 he was a member of the Board of Directors, and from 2002 to 2006 he was Chairman of the Board of Directors at Perekrestok Trading House CJSC. In 2006-2011 Lev was Chief Executive Officer of X5 Retail Group N.V., and from 2011-2013 he served as Senior Vice President of Walmart Stores Inc.

Uliana Antonova, 46
Director
In April 2019 Uliana Antonova was appointed CEO of MF Technologies, JSC, to which she brought vast experience in legal matters gained in a range of business sectors across different jurisdictions. A graduate of the Faculty of Law at Lomonosov Moscow State University, Uliana previously served as Vice President for Legal Affairs and Leasing for the KARO cinema network (2014-2019) and Head of Legal at Rambler & Co (2009-2014); she has also worked for Amtel-Vredestein Group (2007-2009) and was a board member and Head of Legal for Tinkoff Group (2004-2007).

Jan Buné, 67
Independent Director
Jan Buné was appointed as Independent Director and Member of the Board in October 2013. In October 2014 he became Chairman of the Audit Committee. He has extensive experience in public accounting in the technology, media & telecommunications sector, fintech and the financial services sector. He was a senior audit partner at Deloitte Netherlands until May 2013. He currently holds a number of non-executive positions. He serves as Commissioner at the Media Supervisory Authority in the Netherlands. He is Chairman of the Audit Committee of the Supervisory Board at Citco Bank Netherlands. He is also Independent Chairman of the Risk Advisory Committee for Naspers' PayU internet payments. He has gained extensive knowledge on corporate governance, risk management and regulatory compliance, and has a qualification as Certified Board Member (CBM) in the Netherlands.

Sang Hun Kim, 56
Independent Director
Sang Hun Kim was appointed to the Board in February 2011. He was CEO of South Korea's largest internet company, NAVER Corp, from April 2009 until March 2017, when he stepped down as CEO to become a senior advisor to the company. He has served as an independent director of LG Corp. (the holding company of one of the largest business conglomerates in Korea) and a non-executive director on the board of Woowa Brothers Company (a Korean food delivery service operator) since 2018 and 2017, respectively. An active investor in and a mentor to a number of start-ups in Korea, he has served as President of the Korean Internet Companies Association for six years and has contributed to the development of the internet industry in Korea. Sang Hun graduated from Seoul National University and received an LL.M. degree from Harvard Law School. He is a member of both the Korean Bar Association and the New York Bar Association. Before joining NAVER Corp he served as a judge in the Seoul District Court and was General Counsel at LG Corp.

Senior management

Boris Dobrodeev, 36
Chief Executive Officer (Russia)
Boris Dobrodeev was appointed to the Board of Directors in February 2016 and became Chief Executive Officer (Russia) in October 2016. From 2014 to 2016 he held positions as Mail.ru Group's Director for Strategy & Development and VKontakte's CEO and from 2013 to 2014 he was Deputy CEO of VKontakte. Boris graduated from Moscow State University in 2007 with a degree in History, and holds a Master of International Business Degree, which he obtained from Moscow State University Business School in 2009. He worked for Metalloinvest as an analyst from 2006 to 2009, and occupied the position of a Business Development Director at the online video company Zoomby.ru from 2009-2011. From 2011 to 2012 Boris worked as an investment analyst for DST Advisors and from 2012 to 2014 as the head of the Internet Asset Management Department at USM Advisors.

Matthew Hammond, 45
Managing Director, Chief Financial Officer
Matthew Hammond was appointed to the Board in May 2010 and became Managing Director in April 2011. In June 2013 Matthew also became Chief Financial Officer. He graduated from the UK's Bristol University in 1996 with a degree in Economics and History. From 1997 to 2008, he was a technology analyst at Credit Suisse and was ranked No. 1 in the Extell and Institutional Investor Survey eight times. From 2008-2010 Matthew was Group Strategist at Metalloinvest Holdings, dealing with non-core investments. He is a non-executive director of Strike Resources.

Vladimir Gabrielyan, 37
First Deputy Chief Executive Officer (Russia)
Vladimir Gabrielyan began his career in IT as a system administrator at Russia Telecom. He later launched his own project, Web-Hosting.ru. He joined Mail.ru Group in 2001 as a system administrator, then moved on to head the development and technical support of one of the Group's largest assets, the Mail.ru email service. Vladimir has been Mail.ru's Vice-President and CTO since 2005. For 14 years he has run a number of major projects and departments, supervising all major technological initiatives. Vladimir is an established expert in machine learning and big data.

Vladimir Nikolsky, 47
Chief Operating Officer (Russia)
Vladimir Nikolsky joined Mail.ru Group as Vice President of the Online Games business in 2009 and became Chief Operating Officer (Russia) in 2013. He was previously CEO of the online games holding Astrum Online Entertainment (from 2007 to 2009) which subsequently became a part of Mail.ru Group, and co-founder and CEO of the online games company IT Territory (from 2004 to 2007). Vladimir graduated from the Ivanovo State Power Engineering University.

Mail.ru Group People Awards

2019

Email & Portal

leader of the year

Ivan Myzdrikov

Mail.ru Group
People Awards

2019

Youla & Advertising
Technologies

leader of the year

Boris Kaptelov

Mail.ru Group
People Awards

2019

MY.GAMES Fast Forward
Studio

leader of the year

Ivan Fedyanin

Mail.ru Group
People Awards
2019

Search

leader of the year

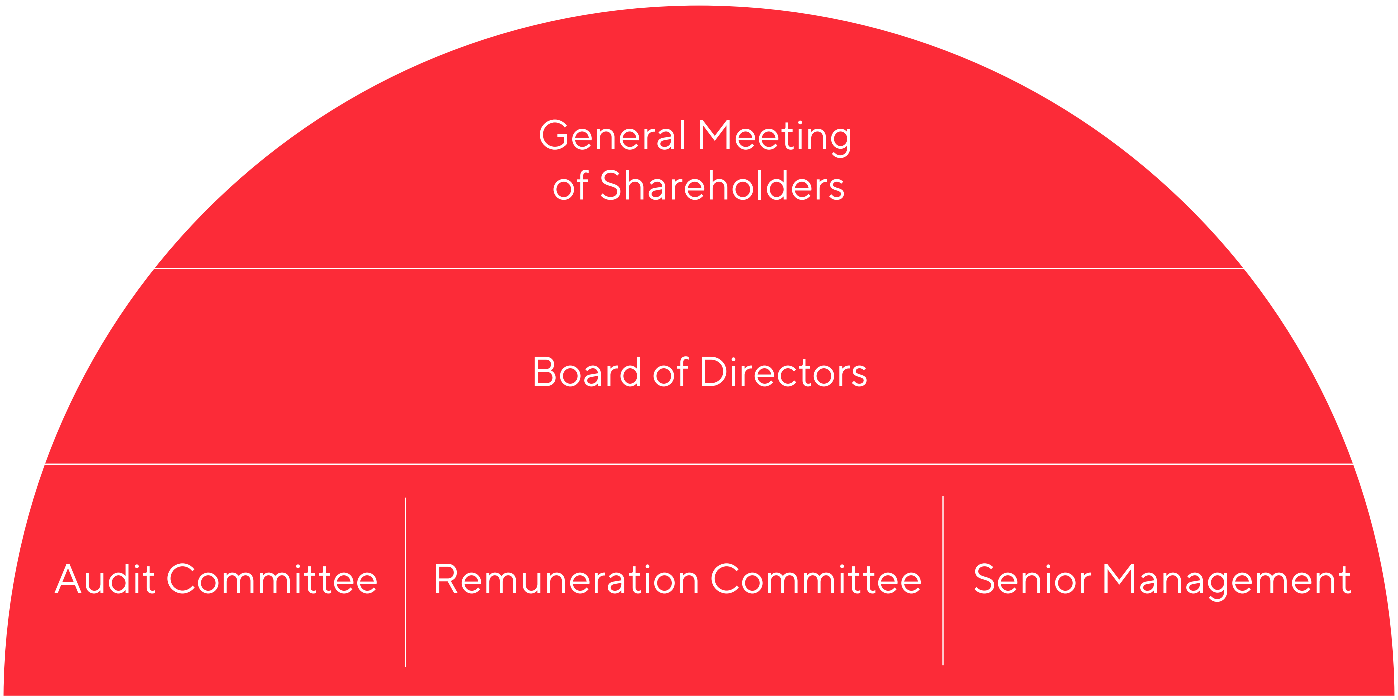
Dmitry Roslyakov

corporate governance

Mail.ru Group Limited is incorporated in the British Virgin Islands with its principal office in Limassol, the Republic of Cyprus.

Governance structure

In accordance with the Memorandum and Articles of Association of the Company and applicable BVI law, our ultimate decision-making body is the shareholders' meeting. Any action that can be taken by the members at a meeting may also be taken by a Resolution of Members. This is followed by the Board of Directors; they are responsible for the general management of the Group, including coordinating strategy and general supervision. We also have an Audit Committee and a Remuneration Committee. Senior managers are involved in the day-to-day running of the Group.



Share capital structure

The Company's authorised and issued share capital as of the date hereof:

Class of share	Authorised shares	Issued shares
Class A (USD 0.000005 par value each)	10,000,000,000	11,500,100
Ordinary (USD 0.000005 par value each)	10,000,000,000	208,582,082

Both classes of shares are in registered form. In respect of the 186,641,934 Ordinary Shares, Global Depositary Receipts ("GDRs") (which represent interests in such Ordinary Shares) have been issued by Citibank NA and are traded on the London Stock Exchange.

As of the date hereof, there are the following types of options over the Company's shares:

- Options for 6,423,842 Ordinary Shares granted to the Mail.ru Employee Benefit Trust on 11 November, 2010 with the initial exercise price of USD 27.70, which was then reduced by USD 3.80 on 17 August, 2012 and further reduced by USD 4.30 on 20 March, 2013 (due to dividend payments) resulting in the current exercise price of USD 19.60. As of the date hereof, 755,755 of these options remain allocated, all of which are vested. Out of 6,423,842 options, 5,554,180 options have been exercised;
- Options for 4,282,561 Ordinary Shares granted to the Mail.ru Employee Benefit Trust on 22 December, 2011 with the initial exercise price of USD 25.60, which was then reduced by USD 3.80 on 17 August, 2012 and further reduced by USD 4.30 on 20 March, 2013 (due to dividend payments) resulting in the current exercise price of USD 17.50. As of the date hereof, 788,917 of these options remain allocated, 493,917 of which are vested. The options generally have a four-year vesting schedule. Out of 4,282,561 options, 3,385,708 options have been exercised.

In March, 2015 the Shareholders of the Company approved the issue of up to 10,977,971 Ordinary Shares, all of which were issued to the Mail.ru Employee Benefit Trust to establish an incentive plan for employees, directors, officers and consultants of the Group, to be known as the 2015 Restricted Stock Unit Plan. On 23 November, 2017 the Remuneration Committee of the Board of Directors of the Company approved New Terms for the 2015 Restricted Stock Unit Plan (the "2017 RSU Plan"), setting out that RSU vesting shall generally be conditional on the meeting of certain performance KPIs. In December 2018, an additional extension to the 2017 RSU Plan for 2,000,000 RSUs and the acquisition of the required amount of GDRs on the market were approved. There was no further extension of the Plan in 2019. As of the date hereof, 3,845,420 RSUs remain allocated, 782,950 of which are vested. A total of 8,951,873 RSUs have been exercised. The RSUs generally have a four-year vesting schedule.

During the 2019 financial year, the Company itself did not acquire any of its own shares.

At the beginning of 2019 the Group announced that in order to meet its ongoing commitments the Mail.ru Employee Benefit Trust would acquire up to 1.8m GDRs on the market over the next 18 months. As of the date hereof, 572,437 GDRs have been acquired at an average price of USD 23.85 per GDR for the total amount of USD 13,651,922.76.

Annual General Meeting (AGM) of shareholders

The shareholders' meeting is the Company's supreme governing body. AGMs are convened by the Board of Directors or by a written request from shareholders who hold, in aggregate, 30% or more of the outstanding votes in the Company.

The share capital of the Company is divided into two classes of shares: Class A Shares and Ordinary Shares. Class A Shares each carry 25 votes at shareholders' meetings, while Ordinary Shares carry 1 vote per share.

The agenda for the shareholders' meetings is determined by the Board of Directors. However, a shareholder or shareholders who hold, in aggregate, 7.5% or more of the outstanding voting shares of the Company may add items to the agenda in compliance with the following requirements:

i) no later than a week before the meeting;

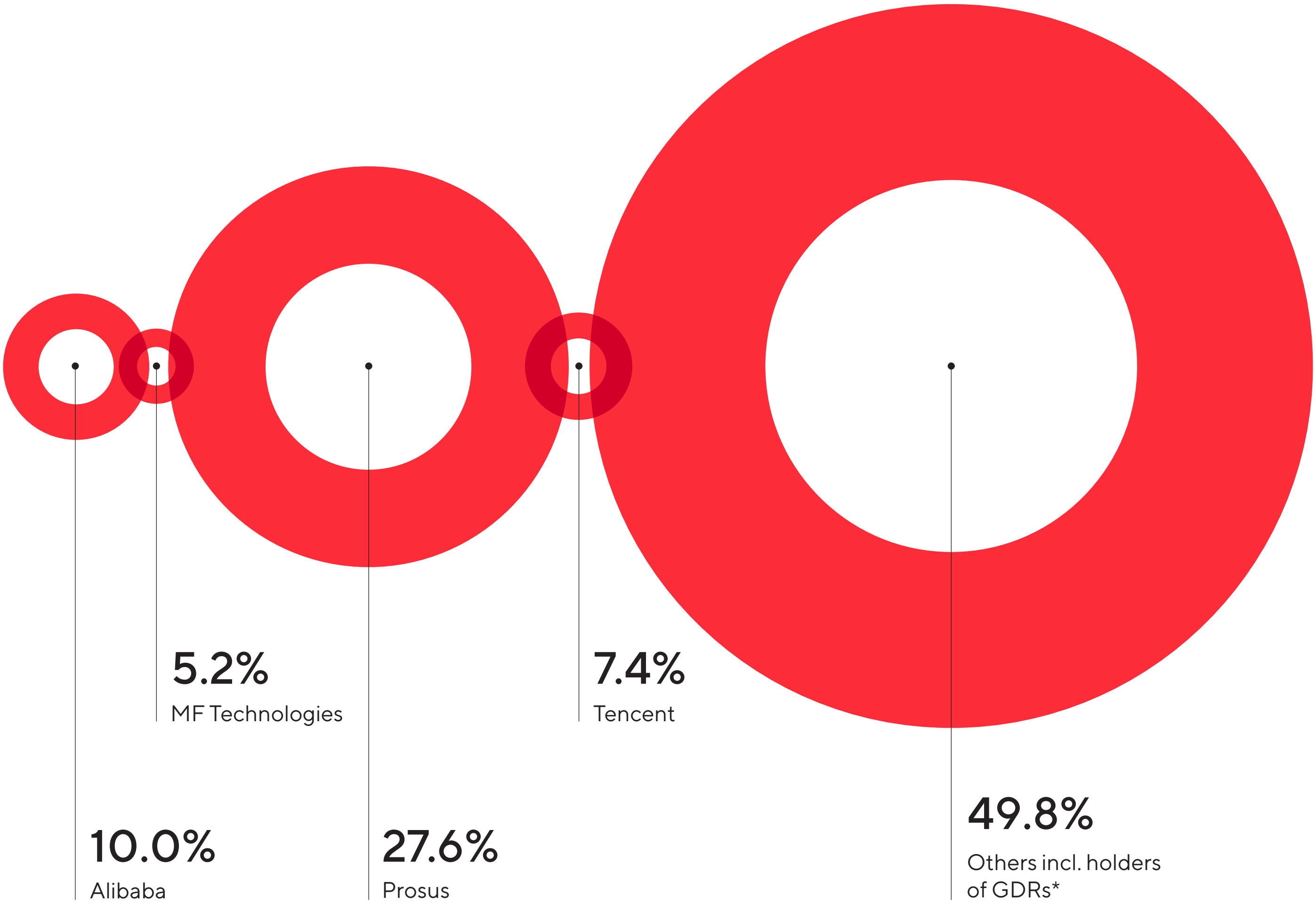
ii) at the meeting itself, with the consent of shareholders who hold, in aggregate, more than 50% of the outstanding voting shares of the Company.

Transfer and conversion of shares

Ordinary Shares are freely transferable. Class A Shares are freely transferable, save that a transfer of Class A Shares that would result in a proposed acquirer (other than a person who was already a member on 27 August, 2010) and persons acting in concert with the acquirer holding 75% or more of the voting rights of the Company is subject to meeting mandatory offer requirements set out in the Articles.

At the request of any member holding any Class A Shares, the Class A Shares which are the subject of the request are automatically converted into Ordinary Shares. This is on the basis that each Class A Share automatically converts into one Ordinary Share and ranks pari passu in all respects with the existing Ordinary Shares in issue.

Shareholders' economic interest, %



Voting rights

Each Class A Share has the right to 25 votes at a meeting of the shareholders of the Company or on any resolution of the shareholders of the Company.

Each Ordinary Share has the right to 1 vote at a meeting of the shareholders of the Company or on any resolution of the shareholders of the Company.

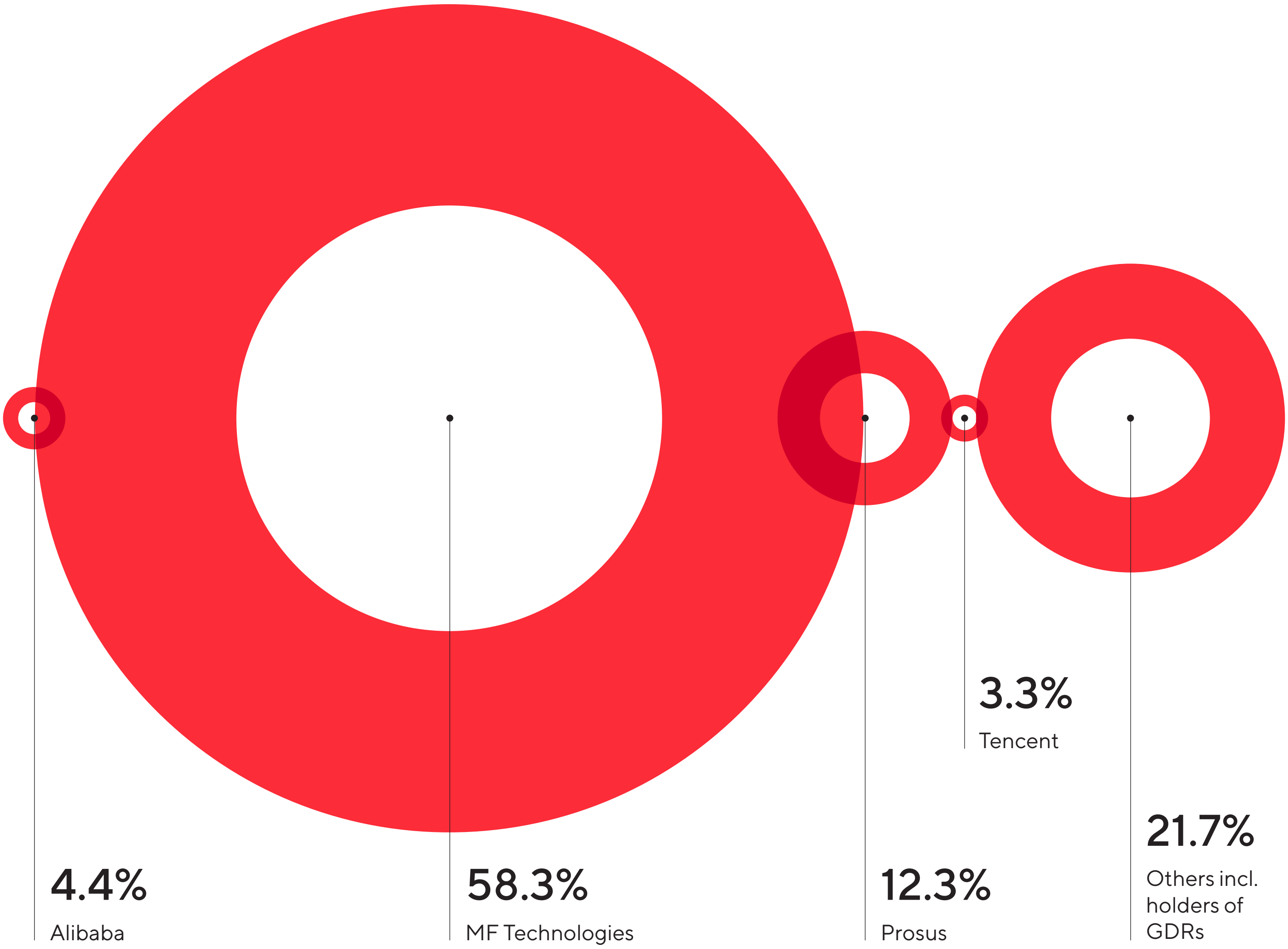
Board of Directors

The Board of Directors is responsible for the general management of the Group. This includes the co-ordination of strategy and general supervision.

The Memorandum and Articles of Association specify that there shall be 10 Directors – eight of whom shall be nominated and elected by shareholders (the "Elected Directors") and two of whom shall be independent directors (the "Independent Directors").

Shareholders' voting interest, %

as of the date hereof



The Elected Directors are appointed by a vote of the members, with each proposed candidate being put to the members for a vote, with voting on each candidate being treated as a separate vote and with each member being entitled to vote on each proposed candidate (to the effect that the eight candidates who attract the highest number of votes shall be elected as the eight Elected Directors) for a period from the date of their appointment until the second AGM after that date. On expiry of their term, Elected Directors must resign, but are eligible for re-election.

Any shareholder, or group of shareholders, who holds, in aggregate, not less than 5% of (a) the total number of votes attached to the issued shares; or (b) the total number of the issued shares, is entitled to nominate candidates for election by the shareholders as Elected Directors to the Board of Directors. Such nomination must be made not less than 21 days before any AGM at which any Elected Director is due to resign.

The two Independent Directors are nominated by the Board of Directors and appointed by a resolution of the Board of Directors. Independent Directors serve for the period fixed in their terms of appointment, as specified by the Board.

The Board of Directors elects one of its members to act as the Chairman of the Board.

* incl. 1% economic interest held by Dmitry Grishin

Powers of the Board of Directors

The Board of Directors is granted the authority to manage the business affairs of the Group. They have the authority to make decisions relating to, among other things, the following:

- The right to issue shares and other securities (except as otherwise required by the Company's Memorandum and Articles of Association).
- The approval of the annual budget and annual financial statements of the Company.
- The declaration of any dividend.
- The convening of any shareholders' meeting.
- The appointment of the Group's auditors.
- The appointment of any committee of the Board of Directors, including the Company's Audit Committee and Remuneration Committee (see below).
- The exercise of all rights of the Company in relation to ICQ LLC.
- The approval of any proposal under which the Company or any of its subsidiaries delegates any substantial management authority to any other entity.
- The approval of transactions which are not Substantial Transactions (as defined in the Memorandum and Articles of Association)
- The appointment and removal of any Officer of the Company, or any Officers or Directors of any direct subsidiary of the Company (including, but not limited to, the Managing Director (being the chief executive officer of the Group), Chief Financial Officer or Chief Operating Officer) and the determination of the scope of authority of such Officers of the Group.
- The Board of Directors, or any committees thereof, meet when and how the Directors determine to be necessary or desirable. Meetings are held in the Company's principal office or wherever the majority of the Directors agree.

A resolution at a duly constituted meeting of the Board of Directors or of a committee of Directors is approved by a simple majority vote of the Directors. A resolution consented to in writing is approved by an absolute majority of all the Directors. For the purposes of establishing a majority, the Chairman of the Board (or chairman of the meeting as the case may be) has a casting vote in the event of a tie.

Name	Position	Date of appointment	Expiry of term
Dmitry Grishin	Chairman	May 31, 2019	2021 AGM
Lev Khasis	Elected Director	Dec 23, 2019	2021 AGM
Uliana Antonova	Elected Director	May 31, 2019	2021 AGM
Dmitry Sergeev	Elected Director	May 31, 2019	2021 AGM
Charles Searle	Elected Director	May 31, 2019	2021 AGM
Mark Remon Sorour	Elected Director	May 31, 2019	2021 AGM
Vladimir Gabrielyan	Elected Director	May 31, 2019	2021 AGM
Jaco Van Der Merwe	Elected Director	May 31, 2019	2021 AGM
Jan Buné	Independent Director	May 31, 2019	2021 AGM
Sang Hun Kim	Independent Director	May 31, 2019	2021 AGM

Senior management

The senior management is involved in the day-to-day management of the Group.

Name	Position	Appointment
Matthew Hammond	Managing Director Chief Financial Officer	April 2011 June 2013
Boris Dobrodeev	Chief Executive Officer, Russia	October 2016
Vladimir Gabrielyan	First Deputy Chief Executive Officer, Russia	November 2019
Vladimir Nikolsky	Chief Operating Officer, Russia	June 2013

Committees of the Board of Directors

Mail.ru Group Limited has an Audit Committee and a Remuneration Committee.

Audit Committee

The Audit Committee is appointed by the Company's Board of Directors and meets on a regular basis, but not less than four times a year.

The purpose of the Audit Committee is to assist the Company's Board of Directors in fulfilling its responsibilities in respect of:
- the quality and integrity of the Group's integrated reporting, including its financial statements;
- the Group's compliance with key applicable legal and regulatory requirements as relating to financial reporting;
- the quality and independence of the Group's external auditors;
- the performance of the Group's internal audit function and external auditors;
- the adequacy and effectiveness of internal control measures, accounting practices, risk management, information systems and audit procedures;
- monitoring compliance with the Company's code of ethics.

The Audit Committee is responsible, among other things, for:
- reviewing annual financial statements and interim financial results;
- regular internal reports to management prepared by the internal audit department and management's response;
- consideration of external auditors' reports – including the receipt and review of reports, which furnish, in a timely fashion, information related to various accounting matters – and matters relating to internal controls if applicable, emphasising reported unadjusted audit differences and disagreements between the external auditors and management;
- annually reviewing and reporting on the quality and effectiveness of the audit process; assessing external auditors' independence, deducing whether they have performed the audit as planned and establishing the reasons for any changes; obtaining feedback about the conduct of the audit from key members of the Group's management, including the CFO;
- reviewing the performance of the external auditors and evaluating the lead partner and discharging and replacing, in consultation with the Board, the external auditor or lead audit partner when circumstances warrant;
- presenting the Committee's conclusions in respect of the external auditors to the Board;
- evaluating and providing commentary on the external auditors' audit plans and scope of findings, identifying issues and reports, and approving non-audit services performed by the external auditor.

Members of the Committee

- Jan Buné, Chairman
- Sang Hun Kim
- Jaco Van Der Merwe

Remuneration Committee

The Remuneration Committee is responsible for approving the terms of appointment and remuneration of the Group's senior managers as well as for the approval of options or RSUs to be granted under incentive plans.

The Remuneration Committee meets on an as-and-when-appropriate basis.

Members of the Committee

- Dmitry Grishin, Chairman
- Charles Searle
- Sang Hun Kim
- Lev Khasis


Mail.ru Group
People Awards
2019
Email & Portal
mentor
of the year
Vasily Romanov

Mail.ru Group
People Awards
2019

MY.GAMES

mentor of the year

Elena Grigorian

Internal control system in relation to the financial reporting process

Internal control is exercised by the Group's Board of Directors, executive bodies, officers and operational management. Their aim is to secure the achievement of goals set by the Company in the following areas:

- the efficiency and effectiveness of the Group's business activity;
- the reliability and credibility of the Group's reporting; and
- compliance with the requirements of regulatory acts and the Group's internal documents.

The following functions are performed by the Internal Audit Department:

- carrying out internal audits, reviews and other engagements with respect to the Company's subsidiaries;
- assessing the effectiveness of the Company's internal control system, including its subsidiaries, and proposing recommendations as a result of those assessments;
- assessing the effectiveness of the risk management process within the Group and proposing recommendations as a result of those assessments;
- providing necessary consultations to the management of the Company and its subsidiaries on appropriate corrective action plans flowing from internal audits.

Risk management system

Mail.ru Group is subject to certain risks that affect our ability to operate, serve our clients, and protect our assets. Controlling these risks through a formal programme is necessary for the well-being of Mail.ru Group. The Group is committed to identifying and managing risk, in line with international best corporate governance practice.

Effective and adequate risk management and internal control systems are crucial to the achievement of business strategies. To ensure the effectiveness and efficiency of both these systems the Group has adopted the "three lines of defence" model, which comprises day-to-day operations and management, risk management function and independent assurance. These lines are aimed at providing reasonable but not absolute insurance against material losses or failures to achieve strategic objectives.

The existing risk management system operates as follows:

- the Board of Directors has a responsibility to ensure that it has dealt with the governance of risk comprehensively;
- the Board is also responsible for overseeing the risk appetite, i.e. the level of risk the Group is willing and is ready to take;
- the CEO is accountable to the Board for the enterprise-wide management of risk;
- management is responsible for assessing and managing the risks in accordance with approved plans and policies;

- the Risk Management Committee assists the management in carrying out its responsibility for the governance of risk, reviews and approves risk management policy, risk map and register, risk assessments and mitigation activities;
- ensuring that an appropriate enterprise-wide risk management system and process is in place with adequate and effective risk management processes that include strategy, ethics, operations, reporting, compliance, IT and sustainability;
- the Audit Committee assists the Board in its responsibility for overseeing the risks, including financial reporting risks and internal financial controls, as well as fraud and IT risks as they relate to financial reporting; the overall adequacy and effectiveness of risk management;
- internal audit provides assurance on the adequacy and effectiveness of the risk management process across the Group.

The Risk Management Committee comprises the principal operating managers of the Group (the heads of principal business units) appointed by the CEO or his Deputy. The Risk Management Committee is chaired by the Deputy CEO. Members of the Risk committee, taken as a whole, must comprise individuals with risk management skills and experience.

Corporate governance code

Mail.ru Group Limited, as a BVI incorporated limited company with a listing of Global Depositary Receipts on the Official List maintained by the UK Listing Authority, which are admitted to trading on the London Stock Exchange, is not subject to any corporate governance code, nor has it voluntarily decided to apply any corporate governance code.

However, the Company does apply corporate governance standards, including: the appointment of two Independent Directors to its Board of Directors; the appointment of Remuneration and Audit committees; and the periodic re-election of Directors. This goes beyond the requirements of national law.

The Board of Directors has adopted various policies and charters relating to the Company's governing bodies. These include the Board Charter, Code of Ethics and Business Conduct, Directors' Right to Access Information/Documents Policy, Legal Compliance Policy, Charter of the Audit Committee, Internal Audit Charter, Remuneration Committee Charter, Risk Committee Charter, Risk Management Policy, and the Trading Policy for Directors, Senior Managers and Employees. These are all followed by the Group in all material respects.

Policies and other details of the Company's corporate governance practices can be found at http://corp.mail.ru/en/investors/management/.

Mail.ru Group People Awards

2019

myTracker

team of the year

Ilnar Borkhanov, Timur Voloshin, Yulia Guseynova, Alexander Bykov

Mail.ru Group People Awards

2019

Legal Department

team of the year

Ekaterina Iatsenko, Dmitry Fedorov, Dmitry Babichev

Mail.ru Group
People Awards

2019

Mail.ru Cloud Solutions

team of the year

Leonid Anikin, Ilya Letunov, Dmitrii Lazarenko

risk management

Summary

The Group has developed a risk management policy which covers the following major aspects: identification, mapping and analysis of the risks the Group faces, setting appropriate control frameworks, monitoring risks and ensuring that major risks are properly identified, assessed, reported, and adequately mitigated. Risk management procedures and systems are reviewed regularly. The Group, through its training and management standards and procedures, aims to maintain a disciplined and constructive control environment. The overall objective of risk management is to minimise risks to an acceptable level.

The Company's Audit Committee has been established to oversee, among other things, how management monitors compliance with the Group's risk management practices and procedures. Management regularly performs its assessment of the principal strategic, operational and compliance risks that the Group faces and has proper mitigation plans developed. Management defines the risk appetite – the acceptable levels of risk the Group is ready to tolerate in its operational activities, the maximum performance variability and loss exposures – with both qualitative and quantitative statements targeting parameters or acceptable boundaries when executing the business model for creating value to the Group's stakeholders.

Further information on the risk management system can be found in the Corporate governance section on page 91.

We present below the major aspects of our financial risk management policies and objectives (see Note 23 to the financial statements for further details), as well as the principal operating risks and uncertainties faced by the Group.

Financial risk management

The Group's operations include strategic operations and venture capital investments. Its financial risk management objectives and policies for these operations are based on the significant difference in the degree of risk tolerance between strategic and venture capital operations.

Financial risk arising from the Group's strategic operations is managed through regular in-depth reviews of all operational segments and the day-to-day management of their financial and operating activities by key management personnel. In contrast, management of the financial risk arising from the Group's venture capital activities is primarily based on regular reviews of the effect of the existing and prospective investees' operating performance on their fair values, which serve as the foundation for the Group's investment and divestment decisions as part of its venture capital operations.

The Group's principal financial liabilities mainly comprise a contingent consideration liability and trade accounts payable. The main purposes of these financial liabilities are to finance the Group's operations and, in the case of the contingent consideration, a business acquisition. The Group has short-term receivables, short-term time deposits, cash and cash equivalents and other current financial assets that arise directly from the Group's operations.

The Group also has a venture capital investment portfolio consisting of equity investments in internet start-ups and smaller internet companies and derivative contracts over the equity of the Group's venture capital investees.

Liquidity and financial resources

The Group monitors the risk of a shortage of funds by using a liquidity planning tool.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of operating cash flows and bank overdrafts. The Group's other financial liabilities are mostly represented by trade payables with maturity of less than one year.

Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss.

The financial assets which potentially subject the Company and its subsidiaries and associates to credit risk consist principally of cash and cash equivalents, short-term time deposits, short-term receivables and convertible loans. The total of these account balances represents the Group's maximum exposure to credit risk.

The Group places its cash and cash equivalents with highly rated financial institutions which are considered at the time of deposit to have minimal risk of default. The Group does not require collateral or other security to support the financial instruments subject to credit risk. Accounts receivable from the two largest customers collectively represented 12% of the Group's total trade receivables as of 31 December, 2019 and 12% as of 31 December, 2018. No customer accounted for more than 10% of revenue in 2019 or 2018. The Group provides credit payment terms to its customers in accordance with market practices and based on thorough review of the customer's profile and creditworthiness. Although collection of receivables could be influenced by economic factors, management believes that there is no significant risk of loss beyond the allowance already recorded.

Capital management policy

For the purpose of the Group's capital management, capital includes issued capital, share premium and all other equity reserves attributable to the equity holders of the parent. The primary objective of the Group's capital management is to maximise shareholder value. The Group manages its capital structure and makes adjustments in light of changes in economic conditions.

Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. The market risks the Group is exposed to comprise two types of risk: currency risk (Note 23.6) and equity risk. The Group's financial instruments affected by market risk include payables, cash and cash equivalents, short-term time deposits, financial investments in associates and derivative financial instruments. The Group's equity risk arises from uncertainties about the future values of investments in unlisted securities.

Foreign currency risk

The functional currency of the Company and majority of its subsidiaries and associates is the Russian ruble. The Group has, however, monetary assets and liabilities which are denominated in other currencies, and changes in exchange rates can result in gains or losses. In 2019, the Group recorded a loss of RUB 980m (2018: a gain of RUB 796m).

Credit lines and covenant risk

The Group does not believe it has a significant cash flow risk that will affect the assessment of its assets, liabilities, financial position and performance. The Group has opened loan facilities with major Russian banks which subject it to certain financial and non-financial covenants. A failure to comply with those covenants may give the non-breaching party the right to impose fines and perform other actions as agreed by the contracts.

Business risks

Technological changes and development

The internet industry is characterised by constant and rapid change in technology, consumer preferences, the nature of services offered and business models. A failure to innovate, to provide popular products and services or to react quickly to changes in the market could affect the popularity of the Group's sites and, in turn, could affect advertising revenue. If we are unable to respond effectively to change and to continue to offer attractive and innovative products to our users, the popularity of our websites and services may decline, which could adversely affect our business in a number of ways, including through lower revenues from advertising and IVAS.

Quality products for expansion to new markets

The Group aims to continue its expansion to foreign markets in Europe and the U.S. by offering innovative and competitive products to audiences. Should we fail to ensure a sufficient supply of high-quality game titles, mail services and social network features for our users, we may face a decline in respective audiences and, subsequently, revenues.

Mobile distribution

As we distribute our mobile products primarily via two app stores, we are dependent on the interoperability of our products with two major operating systems which we do not own or otherwise control – iOS and Android. If Google Play or Apple's App Store alter their search mechanisms or otherwise give preferential treatment to competing apps, we may face a decrease in ratings for our products and, subsequently, changes in mobile market shares.

Mobile technology development

The use of mobile devices to access internet services is growing every year. Mobile device monetisation may not catch up with desktop monetisation rates. Manufacturers may introduce their own standards and technical requirements for their devices, which may adversely affect the performance and usability of our services and products on these devices. If we fail to successfully develop or use new mobile technologies or adapt in a cost-effective and timely manner to changing industry standards or user preferences, whether due to legal, financial or technical reasons, our financial results could be adversely affected. An inability to develop products and services which are compatible with new mobile devices could result in a failure to capture a significant share of an increasingly important market.

Ad-blocking technologies

We earn a significant portion of our revenues from displaying advertisements on our websites. Some users install ad-blocking technologies provided by third-party developers on their browsers. Should this practice become more popular and effective, we may face a decrease in our advertising revenues

Advertising market

Advertisers' spending depends on the overall economic situation in Russia and could be negatively affected by a recession or other economic factors. Advertisers may also re-distribute their budgets to other channels, such as TV, should the latter offer favourable terms or additional inventory. Such a decrease in online advertising expenditure due to any of these factors may negatively affect our revenue.

Underlying markets

If penetration rates for the internet, spending on advertising and IVAS in Russia do not increase, our ability to increase revenue could be significantly and adversely affected.

Competition

The development by domestic and large international internet companies of products which compete with the services provided by the Group could decrease the Group's user base and make it less attractive to advertisers.

Increased competition could result in a reduction in the number of users who buy the Group's Community IVAS – including games – which, in turn, would result in lower revenue and net income. Similarly, the Group may be required to spend additional resources to promote or improve its services in order to compete effectively, which could require additional capital or adversely affect the Group's profitability.

Delays in launch of new game titles

We could face delays in the launch of new game titles due to insufficient staffing and/or failures from third party developers. Delays in launch time may disappoint users and lead to a loss of potential audience and revenue and/or result in higher-than-expected development spending.

Unsuccessful game titles

User expectations regarding the quality, performance and gameplay of MMOs are high, though even the most successful titles remain in high demand only for a limited period of time, unless refreshed or otherwise enhanced with additional content. In order to remain competitive and attractive to our users we must constantly develop new products or enhance existing ones. There is a risk that the major new MMO titles may fail to gain traction with users, which would lead to the underperformance of the online games business and lower-than-expected revenues. Mobile games could also be unsuccessful as they may fail to achieve the required profitability targets due to the high cost of marketing and revenue share payable to mobile platforms.

Investments and acquisitions

Investments in and acquisitions of other entities are an important part of our overall strategy. We have invested in a number of diverse businesses over the last few years. We expect to continue to consider various businesses, technologies, services and products as potential investment targets for our development strategy and use of capital. We may face difficulties in integrating these diverse corporate cultures, technologies, business models, employees, internal controls, financial reporting, and other policies and procedures into our existing business processes in an effective and efficient manner. We may also encounter difficulties with those investments in relation to their underperformance relative to our initial expectations or acquisition price, or we may incur unexpected expenses pertaining to these integrations.

Joint ventures

To pursue our strategic development goals we have entered into several joint venture agreements with third parties in the online-to-offline (O2O) segment. These transactions could have a significant impact on our financial position and results. We do not exercise sole control over such entities, as shareholders' agreements provide certain contractual and management rights to our partners.

Failure to successfully develop such new businesses and to operate them in a sustainable and efficient manner or a failure to reap the anticipated benefits of our investments could cause us to face unanticipated liabilities and harm our overall financial results.

Personnel

As competition in Russia's internet industry increases, our business and operations could be adversely affected by difficulties in hiring, motivating and retaining highly skilled people. Our performance and future success depend on the talents and efforts of a large number of highly skilled individuals within the Group. We will need to continue to identify, hire, develop, motivate and retain highly skilled personnel for all areas of our organisation, including those with programming skills in rare languages. Competition in the internet industry, and in particular in Russia, for suitably qualified employees is high. As this competition in Russia increases, and in particular if larger multinational internet companies focus their attention on the Russian-speaking market, it may be more difficult for us to motivate, retain and hire highly skilled personnel. If we do not succeed in retaining or motivating existing personnel or attracting additional highly skilled personnel, there may be a significant and adverse effect upon our business and operational results.

Our future success depends heavily upon the continuing services of our senior management team, and a failure to retain these personnel could have a significant adverse effect on our business.

In addition, even if sufficient numbers of highly skilled personnel can be retained, salaries may rise significantly due to competition within the internet industry in Russia, increasing our costs. This could have a significant adverse effect on our business, operational results and financial condition.

Infrastructure and capacity

If the infrastructure in Russia is not able to support increased demand, the Group's services could be interrupted or its systems damaged. A reduction in the availability of third-party providers of network and server capacity could limit the Group's ability to offer certain services or to expand. Recent coronavirus or other similar outbreaks or adverse public health developments, may lead to our operations, and those of our customers and suppliers, facing delays or disruptions, such as difficulty obtaining equipment and its components, and/or the temporary suspension of operations. Network or power failures could result in the loss of data and in a reduction in the number of users, which could have a significant effect on the Group's business, operational results and financial condition.

Cyber security

Hackers and groups of hackers may create malicious software (malware) to pursue their own criminal interests. These cyber criminals create Trojan programs and computer viruses, including adware and ransomware, which are becoming more and more sophisticated and numerous, aimed at stealing sensitive information or otherwise harming users and their data. Although we believe we have processes and systems in place to protect the data we possess, no measures can ensure absolute security and prevention of data loss, as our industry is especially prone to cyber threats.

Should hackers target the Group's customer databases or online gamers' personal data, and we fail to appropriately and rapidly defend our servers, we may face serious reputational losses and significant financial effects.

Private information

To become registered on the website operated by the Group, users have to input their personal data, which is then protected by the Group from access by third parties. We collect, store and process large amounts of data, which include personal information, payment details and content, on a daily basis. Should such data become available to third parties as a result of hacker attacks, the Group may become party to litigations from its users.

Intellectual property rights

The Group may be subject to infringement claims from third parties in the future resulting from the technology and intellectual property used in the provision and marketing of its services. If the Group is found liable for infringement, it may be required to pay significant damages, and if it is unable to license or develop non-infringing technology in good time, it may be unable to continue offering the affected services without risk of liability.

Similarly, third parties may obtain and use the Group's intellectual property without authorisation. The validity, application, enforceability and scope of protection of intellectual property rights for many internet-related activities are uncertain and still evolving, which may make it more difficult for the Group to protect its intellectual property. This could have a significant effect on its business, operational results and financial condition. The Group and its associates have been subject to such proceedings in the past. Although none of them was individually significant, similar potential claims may potentially subject the Group to significant losses in the future, which currently cannot be reliably estimated.

Political, economic and social risks

Political instability in Russia

Political instability or changes and inconsistencies in government or in economic policy could adversely affect our business and the value of investments in GDRs. The parliament may adopt and government officials may apply politically motivated or ambiguous legislative acts that would have an unpredictable adverse effect on our business.

Economic and military conflicts

The involvement of the Russian Federation in any economic and military conflicts could negatively affect the Group's operational results and business prospects.

Economic instability in Russia

Mail.ru Group Limited is registered in the BVI with the Company's principal office in the Republic of Cyprus, whereas the operating business of the Company's subsidiaries is mostly in Russia. As an emerging market, Russia is generally more vulnerable to economic instability, market downturns and economic slowdowns elsewhere in the world than more developed countries. Such risks, whether actual or perceived, may negatively affect investors' intentions and willingness to invest money in the Russian economy.

In 2018-2019 the continued economic sanctions imposed on certain Russian companies, sectors and government officials by the U.S., EU and certain other countries over the conflict in Ukraine also added significant uncertainty to the investment climate and overall economic situation. This may create difficulties for the Russian economy to properly develop, obtain sufficient liquidity, avoid volatility, and for foreign investors to pursue confidence and expect returns on investments.

First identified in December 2019, the coronavirus outbreak has affected countries, industries, businesses, families and individuals. In light of the rapid spread and unpredictable duration of the COVID-19 pandemic, its broader implications on our operating and financial performance remain uncertain. We believe the potential positive impact of COVID-19 on our services may be balanced out by the macroeconomic instability caused by the volatility in the oil market and the weakness of the Russian ruble.

Our operating and financial performance may be adversely affected, since we may be unable to run our business activities as usual for an indefinite period of time.

The global adverse impact caused by the rapid spread of COVID-19 in the form of disruption to financial markets and recession may materially affect our liquidity and the value of our shares.

Given the unpredictable nature of future events, which will define the extent of the impact of COVID-19, our business may be materially affected if we are not able to respond to the situation promptly.

Management believes it is taking appropriate measures to support the sustainability of the Group's business in the current circumstances of a global pandemic, however, its consequences are currently hard to predict.

Inflation

High inflation rates could increase our costs, and there can be no assurance that we will be able to maintain or increase our margins.

Legislative and legal risks

Regulation

The Group is subject to various specific Russian legislation, such as recent laws on piracy, extremism, internet blacklisting, news aggregation services, and the identification of users of messaging apps, as well as regulations on goods and services aggregators, etc.

Certain of the Group's assets are subject to the laws of non-Russian jurisdictions.

Our failure or the failure of our third party providers to accurately comply with applicable laws and regulations could create liability for us, result in adverse publicity, or otherwise have a significant adverse effect on our business, operational results and financial condition, including the blocking of our assets.

Legal proceedings

The Group has been and continues to be the subject of legal proceedings and adjudications from time to time, none of which has had, individually or in aggregate, a significant adverse impact on the Group. Management believes that the resolution of all current and potential legal matters will not have a significant impact on the Group's financial position or operational results.

Taxation

Russian tax, currency and customs legislation is subject to varying interpretations and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the Russian tax authorities. Current practice within the Russian Federation suggests that the tax authorities are taking a more assertive position in their interpretation of legislation and assessments and as a result, it is possible that transactions and activities that have not been challenged in the past may be challenged. As such, significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

The Group's management believes that its interpretation of the relevant legislation is appropriate and is in accordance with current industry practice and that the Group's tax, currency and customs positions will be sustained. However, the interpretations of the relevant authorities could differ and the effect of additional taxes, fines and penalties on these consolidated financial statements, if the authorities were successful in enforcing their different interpretations, could be significant.

The Russian Federation is actively considering measures that may be taken in order to prevent tax evasion, such as limiting the use of low tax jurisdictions and aggressive tax planning structures. Initiatives incorporated into Russian law and effective from 2015 include the concept of beneficial ownership, regulations relating to the tax residency of legal entities and the introduction of "controlled foreign companies" rules. The Russian tax authorities now pay more careful attention to any structure that contains a foreign element. They now have more instruments allowing them to identify risks, collect relevant tax information and impose taxes than ever before, including international information exchange under double tax treaty provisions and/or automatic international exchange (in effect from 2018 for Russia). In addition, in 2017 Russia enacted Article 54.1 of the Tax Code, on the basis of which the Russian tax authorities disallow both VAT and tax deductions on profits for payments made to bad faith suppliers.

No assurance can currently be given as to how the above legislative changes will be interpreted by the Russian tax authorities and the potential impact this could have upon the Group. The Group may be subject to additional tax liabilities as a result of such changes being applied to transactions carried out by the Group, which could have a significant adverse effect on the Group's business, financial condition and operational results.

Modifications of the Group's legal structure carried out from time to time may result in additional taxes, interest, and penalties in various jurisdictions. Any such taxes or penalties caused by the Group's structure or its modifications could have a significant adverse effect on the Group's business, operational results, financial condition or prospects.

Mail.ru Group
People Awards
2019

Email & Portal

intern of the year

Evgenia Barsukova

Mail.ru Group People Awards

2019

Operation Department
Predictive analytics team

intern of the year

Ivan Mazharov

board and management remuneration

The Remuneration Committee is responsible for approving the remuneration of the Directors and senior managers of the Group. It is also charged with reviewing and approving general policy relating to the Group's strategic compensation and the approval of grants under the incentive schemes.

Further information on the Remuneration Committee can be found in the Corporate Governance section on page 96.

Interests of members of our Board of Directors and our employees

Certain members of our Board of Directors have beneficial ownership interests in our Global Depositary Receipts. The table below includes information on their ownership. It also highlights options and RSUs over Ordinary Shares of the Company held, directly or indirectly, by each Director as of the date hereof.

The aggregate beneficial interest in the Company (excluding options granted over Ordinary Shares) held by senior managers and employees of the Group (including Matthew Hammond) as of the publication date is about 1.5%.

Incentive scheme

In November 2010, the Board of Directors of the Company adopted an equity-based long-term incentive scheme. Under the scheme, the Board, or its Remuneration Committee, is authorised to grant options to acquire Ordinary Shares to a broad base of employees, consultants and Directors. This can be direct or through an employee benefit trust or vehicles controlled by such persons.

The 2010 Option Plan comprised options over an aggregate of 10,706,403 Ordinary Shares. On the IPO date, the Company assigned options for 6,423,842 Ordinary Shares to the Mail.ru Employee Benefit Trust with an exercise price equal to the IPO price of USD 27.70, which was reduced by USD 3.80 on 17 August, 2012 and then by USD 4.30 on 20 March, 2013, resulting in an exercise price of USD 19.60. As of the date hereof, 755,755 of these options remain allocated, all of which are vested. Except for the options allocated for the benefit of the Directors, the options have generally a four-year vesting schedule. Options allocated for the benefit of the Directors have a two-year vesting schedule and are fully vested.

Subsequently, in December 2011 the Company assigned options for 4,282,561 Ordinary Shares to the Mail.ru Employee Benefit Trust with an exercise price equal to the then-current market price of USD 25.60, which was reduced by USD 3.80 on 17 August, 2012 and then by USD 4.30 on 20 March, 2013, resulting in the exercise price of USD 17.50. As of the date hereof, 788,917 of these options remain allocated, 493,917 of which are vested. The options have generally a four-year vesting schedule.

In March 2015, the Company's shareholders approved the issue of up to 10,977,971 Ordinary Shares to the Mail.ru Employee Benefit Trust to establish an incentive plan for employees, directors, offices and consultants of the Group, to be known as the 2015 Restricted Stock Unit Plan. As of the date hereof, 3,845,420 RSUs remain allocated, 782,950 of which are vested. The RSUs generally have a four-year vesting schedule. On 23 November, 2017 the Remuneration Committee of the Board of Directors of the Company approved New Terms for the 2015 Restricted Stock Unit Plan (the "2017 RSU Plan"), setting out that RSU vesting shall generally be conditional on the meeting of certain performance KPIs. In December 2018, an additional extension of the 2017 RSU Plan for 2,000,000 RSUs and the acquisition of the required quantity of GDRs on the market were approved. There was no further extension of the Plan in 2019.

At the beginning of 2019, the Group announced that in order to meet its ongoing commitments, the Mail.ru Employee Benefit Trust would acquire up to 1.8m GDRs on the market over the next 18 months. As of the date hereof, 572,437 GDRs have been acquired at an average price of USD 23.85 per GDR, making a total amount of USD 13,651,922.76.

A new KPI and bonus payment structure was approved by the Remuneration Committee in February 2020. In the 2020 financial year, the Group is adopting a new KPI system with a number of weighted KPI parameters based around financial performance, key engagement metrics and the wider Group strategy. The aim is to align the operating performance of all the key employees with the 2020-2023 strategy of the Group as well as minority interests through a focus on meeting set financial targets, while growing the Group's audience reach and broadening synergies within the Group as part of its ongoing ecosystem development.

Compensation

Directors of the Company

The total cash remuneration of the members of the Board of Directors (each a "Director" and collectively, "Directors") of the Company amounted to RUB 107 m for the year ended 31 December, 2019. In 2019, no RSUs from the 2017 RSU Plan were granted to Directors in their capacity as Directors. During the year ended 31 December, 2019, Directors did not forfeit any options or RSUs and exercised a combined 2,500 options and RSUs granted to them in their capacity as Directors. The corresponding share-based payment expense was a negative RUB 31m for the year ended 31 December, 2019.

Key Management of the Group

The total cash remuneration of the key management of the Group (excluding Directors) amounted to RUB 843 m for the year ended 31 December, 2019. In addition to the cash remuneration for the year ended 31 December, 2019, key executive employees of the Group were granted 1,280,000 RSUs from the 2017 RSU Plan in 2019. During the year ended 31 December, 2019, the Group's key management (excluding Directors) did not forfeit any options or RSUs and exercised a combined 1,268,750 RSUs and options over the Company's shares. The corresponding share-based payment expense amounted to RUB 583m for the year ended 31 December, 2019.

	Class A shares (direct and indirect)	Ordinary shares/GDRs (direct and indirect)	Total % of the Company's issued share capital represented by outstanding shares	Outstanding options and RSUs over Ordinary Shares **
Dmitry Grishin	-	2,300,792	1.04%	-
Lev Khasis	-	-	-	-
Uliana Antonova	-	-	-	-
Dmitry Sergeev	-	-	-	-
Sang Hun Kim	-	-	-	10,000
Charles Searle*	-	-	-	-
Jaco Van Der Merwe	-	-	-	-
Mark Remon Sorour*	-	-	-	-
Vladimir Gabrielyan	-	-	-	-
Jan Buné	-	1,600	0.0007%	5,000

* 107,064 options granted to the Directors nominated by Prosus were assigned to the shareholder that nominated these Directors.

** Granted to Directors in their capacity as Directors

responsibility statement

We confirm that, to the best of our knowledge:

- The consolidated financial statements, prepared in accordance with IFRS, give a true and fair view of the assets, liabilities, financial position and profit and loss of the Company and the undertakings included in the consolidation taken as a whole.
- This annual report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation, taken as a whole, together with a description of the principal risks and uncertainties that they face.

By order of the Board

Matthew Hammond
Managing Director, Chief Financial Officer
Mail.ru Group Limited
22 April 2020

financial statements

Mail.ru Group Limited

Consolidated Financial Statements

For the year ended December 31, 2019

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Independent auditor's report

To the Shareholders and Board of Directors of
Mail.ru Group Limited

Opinion

We have audited the consolidated financial statements of Mail.ru Group Limited and its subsidiaries (hereinafter, the "Group"), which comprise the consolidated statement of financial position as at December 31, 2019, and the consolidated statement of comprehensive income, consolidated statement of cash flows and consolidated statement of changes in equity for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2019 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Annual goodwill impairment analysis	
Under IFRSs, the Group is required to annually test the amount of goodwill for impairment by assessing the recoverable amounts of each cash-generating unit (CGU) or a group of CGU comprising operating segments of the Group, and comparing it with the carrying amount of relevant CGU or groups of CGU. This annual impairment test was a key audit matter because the balance of goodwill of RUB 140,665 million as of December 31, 2019 is material to the financial statements. In addition, the management's process to assess the recoverable amounts is complex and highly judgmental and is based on assumptions, specifically cash flow projections from financial budgets approved by management. These assumptions are affected by expectations about future market or economic conditions, particularly those expectations related to Russian internet market. Information about goodwill impairment is disclosed in Note 11 to the consolidated financial statements.	Our audit procedures included, among others, examining the amounts of goodwill allocated to each operating segment, involving our specialists in the evaluation of the significant assumptions and methodologies used by the Group, in particular those relating to the forecasted revenue growth and earnings before interest, taxes, depreciation and amortization (EBITDA) and profit margins for operating segments. We also focused on the disclosures in the Group consolidated financial statements about those assumptions to which the outcome of the impairment test is most sensitive, that is, those that have the most significant effect on the determination of the recoverable amount of goodwill.
Revenue recognition	
The Group's online advertising revenues as well as revenues from other services is a complex automated process. It involves volume discounts and third party commissions that require judgment in recognizing them as expenses or a reduction in revenue. On-line games and Community IVAS (Internet value-added services) revenues involve complex and judgmental calculations of material amounts of deferred revenues related to in-game items purchased by the users inside on-line games or social networks. Selecting and applying revenue recognition policies requires management judgment, therefore, this matter was a key audit matter. Information about revenue is disclosed in Notes 5 and 17 to the consolidated financial statements.	We tested application and IT-dependent manual controls over revenue recognition process. We examined and tested, on a sample basis, standard significant and non-standard revenue arrangements. We considered revenue recognition policy in respect of specific revenue streams (including various incentives and volume rebates) and relevant disclosures. We tested the Group's reconciliation of the amount of revenues recognized in the accounting systems to the relevant automated IT systems. We analyzed the calculation of deferred revenue, including the assessment of the estimated life span of in-game items in online games and in social networks. We involved our IT specialist to assist us with the above-mentioned audit procedures.

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Key audit matter	How our audit addressed the key audit matter
Investments in joint ventures	
In October 2019 the Group acquired 18% of voting rights in share capital of AliExpress Russia PTE. LTD (AER). The Group accounted for this investment as an investment in joint venture. Consideration paid by the Group comprised of e-commerce assets that were contributed to the joint venture and cash. The key management judgment in respect of the accounting for investment in AER is whether the Group exercises joint control over AER and thus whether equity method of accounting should be applied under IAS 28 *Investments in Associates and Joint Ventures* (IAS 28) as well as the determination of the values of identifiable assets and liabilities of this investee for the purposes of disclosures required by IAS 28 and IFRS 12 *Disclosure of Interests in Other Entities*. In December 2019 the Group acquired 50% of voting rights in share capital of Managing Company EKH LLC (O2O). O2O is a joint venture with Sberbank. Consideration paid by the Group comprised of food-tech, ride-hailing businesses contributed to the joint venture and cash. Consideration also includes a portion that is contingent upon KPIs set for the performance of the businesses contributed to O2O. The key management judgment in respect of the accounting for investment in O2O relates to the assessment of the amount of contingent consideration and the determination of the values of identifiable assets and liabilities of this investee for the purposes of disclosures required by IAS 28 and IFRS 12 *Disclosure of Interests in Other Entities*. Considering the significance of the carrying values of investments in O2O and AER to the consolidated financial statements and judgements involved, we have determined the accounting for the acquisition of investments in the joint ventures as a key audit matter. Information about these transactions is disclosed in Notes 6 and 10 to the consolidated financial statements.	We obtained share purchase agreements and analysed the terms. We assessed management analysis of the existence of joint control over AER. We analyzed the Group's approach to valuation and estimation of consideration transferred. We compared formula-driven calculations in the valuation model with underlying terms of the share purchase agreement for O2O. We assessed the allocation of consideration to the share of identifiable assets and liabilities of the joint ventures. We assessed the valuation of such assets identified as trade names, customer relationships and contingent assets. We assessed competence and expertise of the experts involved by management in the valuation of investments acquired and allocation of consideration to identifiable assets and liabilities of the investees. We involved our valuation specialists to analyze methodology and assumptions used by management. We analyzed the disclosures in the consolidated financial statements in respect of the acquisition of joint ventures as well as their financial information.

Other information included in the Group's 2019 Annual Report

Other information consists of the information included in the Group's 2019 Annual Report, other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Annual report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of management and the Audit committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is A.A. Chizhikov.

A.A. Chizhikov
Partner
Ernst & Young LLC

February 26, 2020

Details of the audited entity

Name: Mail.ru Group Limited
Registered: May 4, 2005
Address: 28 Oktovriou, 365, VASHIOTIS SEAFRONT, office 402, Neapoli, 3107 Limassol, Cyprus.

Details of the auditor

Name: Ernst & Young LLC
Record made in the State Register of Legal Entities on December 5, 2002, State Registration Number 1027739707203.
Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1.
Ernst & Young LLC is a member of Self-regulatory organization of auditors Association "Sodruzhestvo". Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 12006020327.

Consolidated Statement of Financial Position

As of December 31, 2019
(in millions of Russian Roubles)

	Notes	As at December 31, 2019	As at December 31, 2018
ASSETS			
Non-current assets			
Investments in equity accounted associates and joint ventures	10	49,834	2,816
Goodwill	11, 7	140,665	140,446
Right-of-use assets	2.2	4,942	–
Other intangible assets	7	19,526	20,759
Property and equipment	8	8,330	7,050
Financial assets at fair value through profit or loss	22	1,749	2,015
Deferred income tax assets	18	1,774	4,793
Long-term loans receivable	22	286	110
Other non-current assets	15	115	1,574
Total non-current assets		227,221	179,563
Current assets			
Trade accounts receivable	12	12,288	9,916
Prepaid expenses and advances to suppliers		978	1,123
Financial assets at fair value through profit or loss	22	90	1,072
Loans receivable	22	655	35
Other current assets		1,367	1,318
Cash and cash equivalents	13	9,782	11,723
Assets held for sale	6.2	2,334	32
Total current assets		27,494	25,219
Total assets		254,715	204,782
EQUITY AND LIABILITIES			
Equity attributable to equity holders of the parent			
Issued capital			–
Share premium		60,286	58,482
Treasury shares	14	(1,152)	(286)
Retained earnings		125,351	106,685
Accumulated other comprehensive income/(loss)		170	(165)
Total equity attributable to equity holders of the parent		184,655	164,716
Non-controlling interests		809	259
Total equity		185,464	164,975
Non-current liabilities			
Deferred income tax liabilities	18	2,181	2,405
Deferred revenue	4.2, 17	1,737	12,397
Non-current lease liabilities	2.2, 23.2	1,568	–
Long-term interest-bearing loans and borrowings	22.3, 23.2	19,474	–
Total non-current liabilities		24,960	14,802
Current liabilities			
Trade accounts payable	23.2	7,863	8,263
Income tax payable		481	893
VAT and other taxes payable		1,939	1,430
Deferred revenue and customer advances	4.2, 17	10,920	8,809
Short-term portion of long-term interest-bearing loans	22.3, 23.3	4,044	–
Current lease liabilities	2.2, 23.2	3,153	–
Other payables, accrued expenses and contingent consideration liabilities	16, 23.2	15,348	5,610
Liabilities directly associated with assets held for sale	6.2	543	–
Total current liabilities		44,291	25,005
Total liabilities		69,251	39,807
Total equity and liabilities		254,715	204,782

Consolidated Statement of Comprehensive Income

For the year ended December 31, 2019
(in millions of Russian Roubles)

	Notes	2019	2018
Online advertising		36,571	31,970
MMO games		36,417	15,728
Community IVAS		15,763	13,890
Other revenue		7,480	4,517
Total revenue		96,231	66,105
Net (loss)/gain on venture capital investments	22	(139)	26
Personnel expenses		(21,507)	(22,698)
Office rent and maintenance		(246)	(2,528)
Agent/partner fees		(25,030)	(16,404)
Marketing expenses		(16,422)	(15,583)
Server hosting expenses		(675)	(1,966)
Professional services		(785)	(587)
Other operating expenses		(3,371)	(2,815)
Total operating expenses		(68,036)	(62,581)
EBITDA		28,056	3,550
Depreciation and amortisation	2.2, 7, 8	(12,771)	(9,665)
Impairment of intangible assets	7	(659)	(1,711)
Share of loss of equity accounted associates and joint ventures	10	(1,691)	(497)
Finance income		585	545
Finance expenses		(1,459)	(17)
Other non-operating loss		(182)	(12)
Gain on joint ventures formation	6.9, 6.10	15,855	–
Loss on fair value remeasurement of assets held for sale	6.2	(4,519)	–
Net loss on derivative financial assets and liabilities at fair value through profit or loss	22	(758)	(516)
Reversal of impairment/(impairment) of equity accounted associates	10	60	(37)
Net gain on disposal of intangible assets	15	418	–
Net gain on disposal of shares in subsidiaries		–	47
Gain on remeasurement of previously held interest in equity accounted associates		324	–
Net foreign exchange (loss)/gain		(980)	796
Profit/(loss) before income tax expense		22,279	(7,517)
Income tax expense	18	(3,428)	(546)
Net profit/(loss)		18,851	(8,063)
Attributable to:			
Equity holders of the parent		18,686	(7,991)
Non-controlling interests		165	(72)
Other comprehensive income/(loss) that may be reclassified to profit or loss in subsequent periods			
Exchange differences on translation of foreign operations:			
Differences arising during the year		335	(293)
Total other comprehensive income/(loss) net of tax effect of 0		335	(293)
Total comprehensive income/(loss), net of tax		19,186	(8,356)
Attributable to:			
Equity holders of the parent		19,021	(8,284)
Non-controlling interests		165	(72)
Earnings/(loss) per share, in RUR:			
Basic earnings/(loss) per share attributable to ordinary equity holders of the parent	19	86	(37)
Diluted earnings/(loss) per share attributable to ordinary equity holders of the parent		85	n/a

Consolidated Statement of Cash Flows

For the year ended December 31, 2019
(in millions of Russian Roubles)

	Notes	2019	2018
Cash flows from operating activities			
Profit/(loss) before income tax		22,279	(7,517)
Adjustments to reconcile profit/(loss) before income tax to cash flows:			
Depreciation and amortisation		12,771	9,665
Impairment losses on financial assets at amortized cost		301	164
Net loss/(gain) on venture capital investments	22	139	(26)
Net loss on financial assets and liabilities at fair value through profit or loss	22	758	516
Gain on joint ventures formation	6.9, 6.10	(15,855)	–
Loss on fair value remeasurement of assets held for sale	6.2	4,519	–
Net gain on disposal of subsidiaries		–	(47)
Net gain on disposal of intangible assets	7	(418)	–
Loss on disposal of property and equipment and intangible assets		–	15
Gain on remeasurement of previously held interest in equity accounted associate		(324)	–
Finance income		(585)	(545)
Finance expenses		1,459	17
Dividend revenue from venture capital investments		(18)	(29)
Share of loss of equity accounted associates	10	1,691	497
(Reversal of impairment) / impairment of equity accounted associates	10	(60)	37
Impairment of intangible assets	7	659	1,711
Net foreign exchange loss/(gain)		980	(796)
Share-based payment expense		1,742	6,732
Other non-cash items		16	30
Change in operating assets and liabilities:			
Increase in accounts receivable		(3,566)	(2,934)
(Increase)/decrease in prepaid expenses and advances to suppliers		(406)	604
Decrease/(increase) in inventories and other assets		1,340	(314)
(Decrease)/increase in accounts payable and accrued expenses		(2,818)	1,592
Decrease/(increase) in non-current prepaid expenses and advances		67	(217)
(Decrease)/increase in deferred revenue and customer advances		(8,065)	7,588
Increase in financial assets at fair value through profit or loss	22	(1,820)	(3,081)
Increase in financial liabilities at fair value through profit or loss	22	3,652	1,225
Operating cash flows before interest, income taxes and contingent consideration settlement		18,438	14,887
Dividends received from venture capital investments		7	28
Settlement of contingent consideration of business combination	6.2, 16, 22	(688)	–
Interest received		493	561
Interest paid		(1,459)	(13)
Income tax paid		(3,871)	(2,981)
Net cash provided by operating activities		12,920	12,482
Cash flows from investing activities			
Cash paid for property and equipment		(4,688)	(4,492)
Cash paid for intangible assets		(3,697)	(2,156)
Dividends received from equity accounted associates		71	40
Loans issued		(790)	(83)
Loans collected		1,903	–
Cash paid for acquisitions of subsidiaries, net of cash acquired	6	(9,361)	(8,031)
Settlement of initial fair value of the contingent consideration at acquisition date	6.2, 16, 22	(1,132)	–
Proceeds from disposal of subsidiaries, net of cash disposed		–	(20)
Cash paid for investments in equity accounted associates and joint ventures	6	(15,687)	(1,960)
Net cash provided by investing activities		(33,381)	(16,702)
Cash flows from financing activities			
Payment of lease liabilities	2.2	(3,493)	–
Loans received, net of bank commission	22.4	23,383	–
Cash paid for treasury shares	14	(896)	–
Net cash used in financing activities		18,994	–
Net decrease in cash and cash equivalents		(1,467)	(4,220)
Effect of exchange differences on cash balances		(431)	572
Cash and cash equivalents at the beginning of the period		11,723	15,371
Change in cash related to asset held for sale		(43)	–
Cash and cash equivalents at the end of the period		9,782	11,723

Consolidated Statement of Changes in Equity

For the year ended December 31, 2018
(in millions of Russian Roubles)

	Share capital: Number of shares issued and outstanding	Share capital: Amount	Share premium	Treasury shares	Retained earnings	Foreign currency translation reserve	Total equity attributable to equity holders of the parent	Non-controlling interests	Total equity
Balance at January 1, 2018	212,424,794	–	51,722	(444)	114,676	128	166,082	84	166,166
Loss for the year	–	–	–	–	(7,991)	–	(7,991)	(72)	(8,063)
Other comprehensive loss:							–		–
Foreign currency translation	–	–	–	–	–	(293)	(293)	–	(293)
Total other comprehensive loss	–	–	–	–	–	(293)	(293)	–	(293)
Total comprehensive loss	–	–	–	–	(7,991)	(293)	(8,284)	(72)	(8,356)
Share-based payment transactions	–	–	6,918	–	–	–	6,918	–	6,918
Exercise of RSUs and options over the shares of the Company	3,545,128	–	(158)	158	–	–	–	–	–
Acquisition of treasury shares (Note 14)	–	–	–	–	–	–	–	269	269
Effect of disposal of subsidiary	–	–	–	–	–	–	–	(22)	(22)
Balance at December 31, 2018	215,969,922	–	58,482	(286)	106,685	(165)	164,716	259	164,975

Consolidated Statement of Changes in Equity

For the year ended December 31, 2019
(in millions of Russian Roubles)

	Share capital								
	Number of shares issued and outstanding	Amount	Share premium	Treasury shares	Retained earnings	Foreign currency translation reserve	Total equity attributable to equity holders of the parent	Non-controlling interests	Total equity
Balance at January 1, 2019	215,969,922	–	58,482	(286)	106,685	(165)	164,716	259	164,975
Impact of IFRS 16 adoption (Note 2.2)	–	–	–	–	(20)	–	(20)	–	(20)
Adjusted balance at January 1, 2019	215,969,922	–	58,482	(286)	106,665	(165)	164,696	259	164,955
Profit for the year	–	–	–	–	18,686	–	18,686	165	18,851
Other comprehensive income:							–		
Foreign currency translation	–	–	–	–	–	335	335	–	335
Total other comprehensive income	–	–	–	–	–	335	335	–	335
Total comprehensive income	–	–	–	–	18,686	335	19,021	165	19,186
Share-based payment transactions	–	–	1,826	–	–	–	1,826	–	1,826
Exercise of RSUs and options over the shares of the Company	1,786,831	–	(30)	30	–	–	–	–	–
Acquisitions of treasury shares (Note 14)	(572,437)	–	–	(896)	–	–	(896)	–	(896)
Acquisitions of non-controlling interests in business combinations (Note 6)	–	–	–	–	–	–	–	385	385
Effect of disposal of subsidiary	–	–	8	–	–	–	8	–	8
Balance at December 31, 2019	217,184,316	–	60,286	(1,152)	125,351	170	184,655	809	185,464

Notes to Consolidated Financial Statements

For the year ended December 31, 2019
(in millions of Russian Roubles)

1 Corporate information and description of business

These consolidated financial statements of Mail.ru Group Limited (hereinafter "the Company") and its subsidiaries (collectively – "the Group") for the year ended December 31, 2019 were authorised for issue by the directors of the Company on February 26, 2020.

The Company was registered on May 4, 2005 in the Territory of the British Virgin Islands ("BVI"), pursuant to the International Business Companies Act (the "Act"), Cap. 291. The principal office of the Company is at 28 Oktovriou, 365, VASHIOTIS SEAFRONT, office 402, Neapoli, 3107 Limassol, Cyprus.

The Company consolidates or participates in businesses that operate in the Internet segment, including portals, social networking and communications, online marketplaces, online-to-offline services, massively multiplayer online games ("MMO games"), social and mobile games. The Group has leading positions in Russia and other CIS states where its properties are present.

Information on the Company's main subsidiaries is disclosed in Note 9.

2 Basis of preparation

These consolidated financial statements have been prepared on a historical cost basis, except for financial assets and liabilities designated as at fair value through profit or loss and derivative financial instruments that have been measured at fair value.

2.1 Statement of compliance

These consolidated financial statements have been prepared in accordance with and comply with International Financial Reporting Standards ("IFRS").

The Group maintains its accounting records and prepares its statutory accounting reports in accordance with domestic accounting legislation and instructions for each of its subsidiaries. These consolidated financial statements are based on the underlying accounting records, appropriately adjusted and reclassified for fair presentation in accordance with the standards and interpretations issued by the International Accounting Standards Board ("IASB"). IFRS adjustments include and affect such major areas as consolidation, revenue recognition, accruals, deferred taxation, fair value adjustments, business combinations, impairment, share-based payments etc.

2.2 Application of new and amended IFRS and IFRIC

The accounting policies adopted are consistent with those followed in the preparation of the Group's annual financial statements for the year ended December 31, 2018, except for the following new and amended IFRS and International Financial Reporting Interpretations Committee ("IFRIC") interpretations effective as of January 1, 2019:

IFRS 16 Leases

IFRS 16 supersedes IAS 17 *Leases*, IFRIC 4 *Determining whether an Arrangement Contains a Lease*, SIC-15 *Operating Leases – Incentives* and SIC-27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for most leases under a single on-balance sheet model.

Lessor accounting under IFRS 16 is substantially unchanged under IAS 17. Lessors will continue to classify leases as either operating or finance leases using similar principles as in IAS 17. Therefore, IFRS 16 did not have an impact for leases where the Group is the lessor.

The Group adopted the new standard using a modified retrospective approach and utilizing certain practical expedients provided. In IFRS consolidated financial statements assets and liabilities under IFRS 16 were recognized as at January 1, 2019. The Group elected to use the recognition exemptions for lease contracts for which the underlying asset is of low value ('low-value assets').

The effect of adoption IFRS 16 as at January 1, 2019 (increase/(decrease)) is as follows:

Assets	
Right-of-use assets	6,295
Other non-current assets	(323)
Prepaid expenses and advances to suppliers	(525)
Deferred income tax assets	(7)
Total assets	5,440
Liabilities	
Current lease liabilities	2,902
Non-current lease liabilities	2,558
Total liabilities	5,460
Retained earnings	(20)

2 Basis of preparation (continued)

2.2 Application of new and amended IFRS and IFRIC (continued)

a) Nature of the effect of adoption of IFRS 16

The Group recognised right-of-use assets and lease liabilities for those leases previously classified as operating leases, except for leases of low-value assets. The right-of-use assets were recognised based on the amount of the lease liabilities, adjusted for any related prepaid and accrued lease payments previously recognised. Lease liabilities were recognised based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at the date of initial application.

The Group also applied the available practical expedients wherein it:

- Used a single discount rate to a portfolio of leases with reasonably similar characteristics;
- Relied on its assessment of whether leases are onerous immediately before the date of initial application;
- Excluded the initial direct costs from the measurement of the right-of-use asset at the date of initial application.

Based on the foregoing, as at January 1, 2019:

- Right-of-use assets of RUR 6,295 were recognised and presented separately in the statement of financial position;
- Lease liabilities are presented within Non-current lease liabilities and Current lease liabilities;
- Prepayments of RUR 801 related to previous operating leases were derecognized and added to the carrying amounts of the relevant right-of-use assets;
- Accrued provision for straight-line adjustment under IAS 17 in Current lease liabilities and respective deferred tax assets had been adjusted to retained earnings.

The lease liabilities as at January 1, 2019 can be reconciled to the operating lease commitments as at December 31, 2018 as follows:

Operating lease commitments as at December 31, 2018	2,249
Weighted average incremental borrowing rate as at January 1, 2019	9.6%
Discounted operating lease commitments as at January 1, 2019	2,100
Add	
Payments in optional extension periods not recognised as at December 31, 2018	3,394
Lease liabilities as at January 1, 2019	5,494

Amounts recognised in the statement of financial position and profit or loss

Set out below, are the carrying amounts of the Group's right-of-use assets and lease liabilities and the movements during the period:

	Right-of-use assets				
	Premises	Racks in data centers	Other	Total	Lease liabilities
As at January 1, 2019	5,704	566	25	6,295	5,494
Additions	1,170	1,360	43	2,573	2,787
Amortisation expense	(2,627)	(1,179)	(53)	(3,859)	–
Interest expense	–	–	–	–	579
Payments	–	–	–	–	(4,072)
Assets held for sale	(67)	–	–	(67)	(67)
As at December 31, 2019	4,180	747	15	4,942	4,721

Lease liabilities payments in the amount of RUR 4,072 include payment of lease liability principal amount of RUR 3,493 and interest of RUR 579.

Amendments to IAS 28 Long-term Interests in Associates and Joint Ventures

The amendments clarify that an entity applies IFRS 9 to long-term interests in an associate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in IFRS 9 applies to such long-term interests.

The amendments also clarified that, in applying IFRS 9, an entity does not take account of any losses of the associate or joint venture, or any impairment losses on the net investment, recognised as adjustments to the net investment in the associate or joint venture that arise from applying IAS 28 *Investments in Associates and Joint Ventures*.

These amendments have no impact on the consolidated financial statements of the Group.

2 Basis of preparation (continued)

2.2 Application of new and amended IFRS and IFRIC (continued)

IFRIC Interpretation 23 Uncertainty over Income Tax Treatments

In June 2017, the IASB issued IFRIC 23 *Interpretation entitled Uncertainty over Income Tax Treatments*. The IFRIC clarifies that for the purposes of calculating current and deferred tax, companies should use a tax treatment of uncertainties, which will probably be accepted by the tax authorities. IFRIC 23 is effective for annual periods beginning on or after January 1, 2019.

The Interpretation has no impact on the consolidated financial statements of the Group.

Annual Improvements 2015-2017 Cycle

- *IFRS 3 Business Combinations*

The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation.

An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. Since the Group's current practice is in line with these amendments, the Group does not expect impact on its consolidated financial statements.

- *IFRS 11 Joint Arrangements*

An entity that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business as defined in IFRS 3. The amendments clarify that the previously held interests in that joint operation are not remeasured. An entity applies those amendments to transactions in which it obtains joint control on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. These amendments have no impact on the consolidated financial statements of the Group.

- *IAS 12 Income Taxes*

The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognises the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognised those past transactions or events.

An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application is permitted. When an entity first applies those amendments, it applies them to the income tax consequences of dividends recognised on or after the beginning of the earliest comparative period. Since the Group's current practice is in line with these amendments, the Group does not expect impact on its consolidated financial statements.

2.3 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Amendments to IFRS 3: Definition of a Business

In October 2018, the IASB issued amendments to IFRS 3 *Business Combinations*. The amendments enhance definition of a business set out by the standard. The amendments are effective for acquisitions to occur on or after January 1, 2020; earlier application is permitted. Possible impact of the amendments on the consolidated financial statements as well as the necessity of early adoption will be assessed in course of accounting support for future significant transactions.

Amendments to IAS 1 and IAS 8: Definition of Material

In October 2018, the IASB issued amendments to IAS 1 *Presentation of Financial Statements* and IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* to align the definition of 'material' across the standards and to clarify certain aspects of the definition. The new definition states that, 'Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.' The amendments to the definition of material are not expected to have a significant impact on the Group's consolidated financial statements.

Amendments to IAS 1 and IAS 8: Classification of Liabilities as Current or Non-current

On January 23, 2020, the International Accounting Standards Board (IASB or the Board) issued amendments to paragraphs 69 to 76 of IAS 1 *Presentation of Financial Statements* (the amendments) to specify the requirements for classifying liabilities as current or non-current. The new guidance will be effective for annual periods starting on or after January 1, 2022. The amendments must be applied retrospectively in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*. Earlier application is permitted. Possible impact of the amendments on the consolidated financial statements as well as the necessity of early adoption will be assessed in course of accounting support for future significant transactions.

Notes to Consolidated Financial Statements (continued)

2 Basis of preparation (continued)

2.3 Standards issued but not yet effective (continued)

Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform

In September 2019, the IASB issued amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement* and IFRS 7 *Financial Instruments: Disclosures*, which concludes phase one of its work to respond to the effects of Interbank Offered Rates (IBOR) reform on financial reporting. The amendments provide temporary reliefs which enable hedge accounting to continue during the period of uncertainty before the replacement of an existing interest rate benchmark with an alternative nearly risk-free interest rate (an RFR). These amendments should be applied for annual periods beginning on or after January 1, 2020. Earlier application is permitted. Possible impact of the amendments on the consolidated financial statements will be assessed in course of accounting support for future significant transactions.

Amendments to classification of liabilities as current or non-current

On January 23, 2020, the International Accounting Standards Board (IASB or the Board) issued amendments to paragraphs 69 to 76 of IAS 1 *Presentation of Financial Statements* (the amendments) to specify the requirements for classifying liabilities as current or non-current.

The IASB's amendments clarify the criteria for determining whether to classify a liability as current or non-current. The amendments specify that the conditions which exist at the end of the reporting period are those which will be used to determine if a right to defer settlement of a liability exists The amendments clarify the situations that are considered settlement of a liability.

The new guidance will be effective for annual periods starting on or after January 1, 2022. These amendments will have no impact on the consolidated financial statements of the Group.

The Conceptual Framework for Financial Reporting

The IASB issued the Conceptual Framework for Financial Reporting (the Conceptual Framework) in March 2018. It sets out a comprehensive set of concepts for financial reporting, standard setting, guidance for preparers in developing consistent accounting policies and assistance to others in their efforts to understand and interpret the standards.

The Conceptual Framework is effective for annual periods beginning on or after January 1, 2020. The changes to the Conceptual Framework may affect the application of IFRS in situations where no standard applies to a particular transaction or event.

3 Summary of significant accounting policies

Set out below are the principal accounting policies used to prepare these consolidated financial statements.

3.1 Principles of consolidation

These consolidated financial statements comprise the financial statements of the Company and its subsidiaries as at December 31, 2018 and for the year then ended.

Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

Specifically, the Group controls an investee if and only if the Group has:

- power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- exposure, or rights, to variable returns from its involvement with the investee; and
- the ability to use its power over the investee to affect its returns.

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- the contractual arrangement with the other vote holders of the investee;
- rights arising from other contractual arrangements; and
- the Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies.

All intra-group balances, income and expenses and unrealised gains and losses resulting from intra-group transactions are eliminated.

3 Summary of significant accounting policies (continued)

3.1 Principles of consolidation (continued)

If the Group loses control over a subsidiary, it:

- derecognises the assets (including goodwill) and liabilities of the subsidiary;
- derecognises the carrying amount of any non-controlling interests;
- derecognises the cumulative translation differences recorded in equity;
- recognises the fair value of the consideration received;
- recognises the fair value of any investment retained;
- recognises any surplus or deficit in profit or loss; and
- reclassifies the parent's share of components previously recognised in other comprehensive income to profit or loss or retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities.

3.2 Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value, and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred, such as finder's fees, legal fees, due diligence fees, and other professional and consulting fees, are expensed and included in operating expenses.

The Group measures goodwill as the fair value of the consideration transferred including the recognised amount of any non-controlling interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date.

Consideration transferred includes the fair values of the assets transferred, liabilities incurred by the Group to the previous owners of the acquiree, and equity interests issued by the Group. Consideration transferred also includes the fair value of any contingent consideration and vested share-based payment awards of the acquiree that are replaced in the business combination.

If control is achieved in stages, the acquirer's previously held equity interest in the acquiree is remeasured to fair value as at the acquisition date through profit or loss.

A contingent liability of the acquiree is recognised in a business combination only if such a liability represents a present obligation and arises from a past event, and its fair value can be measured reliably.

Only components of non-controlling interest constituting a present ownership interest that entitles their holder to a proportionate share of the entity's net assets in the event of liquidation are measured at either fair value or at the present ownership instruments' proportionate share of the acquiree's identifiable net assets. All other components are measured at their acquisition date fair value.

The Group accounts for a change in the ownership interest of a subsidiary (without loss of control) as a transaction with owners in their capacity as owners. Therefore, such transactions do not give rise to goodwill, nor do they give rise to a gain or loss and are accounted for as an equity transaction.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash generating units that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit (CGU) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

If the Group reorganises its reporting structure in a way that changes the composition of one or more cash-generating units to which goodwill has been allocated, the goodwill is reallocated to the units affected. The reallocation is performed using a relative value approach similar to that used in connection with the disposal of an operation within a cash-generating unit, unless some other method better reflects the goodwill associated with the reorganised units.

3.3 Investments in associates and joint ventures

Associates are entities in which the Group generally has between 20% and 50% of the voting rights, or is otherwise able to exercise significant influence, but which it does not control or jointly control.

The Group participates in the operating management of its equity accounted associates and intends to stay involved in their operations from a long-term perspective. Under the equity method, the investments in associates are carried in the statement of financial position at cost plus post acquisition changes in the Group's share of net assets of the associate. Distributions received from an investee reduce the carrying amount of the investment. Goodwill relating to the associate is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment.

3 Summary of significant accounting policies (continued)

3.3 Investments in associates and joint ventures (continued)

The consolidated statement of comprehensive income reflects the Group's share of the results of operations of associates. Where there has been a change recognised directly in the equity of the associates, the Group recognises its share of any changes in the investment balance and discloses this, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate are eliminated to the extent of the interest in the associate.

Dividends received from equity accounted associates are shown in investing activities in the statement of cash flows.

The share of profit and other comprehensive income of equity accounted associates is shown on the face of the statement of comprehensive income. This is the profit attributable to equity holders of the associates and therefore is profit after tax of the associates and after non-controlling interests in the subsidiaries of the associates. The Group's share of movements in reserves is recognised in equity. However, when the Group's share of accumulated losses in a equity accounted associate equals or exceeds its interest in the associate, the Group does not recognise further losses, unless the Group is obliged to make further payments to, or on behalf of, the associate.

The financial statements of equity accounted associates are prepared for the same reporting period as the parent company. Where necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on the Group's investment in its associates. The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. Determining whether the investment is impaired is based on the guidance of IFRS 9 discussed under 3.13.6.

If there is objective evidence that an associate is impaired, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value in accordance with IAS 36 (as discussed under 3.15) and recognises the amount of impairment in earnings under '*Impairment losses related to equity accounted associates*'. If the recoverable amount of the impaired investment subsequently increases, the related impairment is reversed to the extent of such increase.

Step acquisitions of significant influence in equity accounted associates previously classified as available-for-sale financial assets are accounted for using a cost-based approach whereby the investment in associate is recognised at the aggregate of (a) the historical cost of the available-for-sale investment and (b) the consideration transferred by the Group upon acquisition of significant influence. Any changes in the fair value of the available-for-sale investment are reversed through other comprehensive income upon acquisition of significant influence. Goodwill is calculated as a difference between (c) the cost of the investment so determined and (d) the Group's share in the fair value of the investee's net assets at the date significant influence is attained.

Upon acquisition of an additional stake in an existing associate where control is not obtained, the fair value of the consideration transferred for the additional stake is allocated to the acquired share of the fair value of associate's assets and liabilities, and the excess is recognised as goodwill as part of the investment in equity accounted associates.

Upon loss of significant influence over a equity accounted associate, the Group measures and recognises any remaining investment at its fair value. Any difference between (a) the carrying amount of the associate upon loss of significant influence and (b) the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

3.4 Group as a lessee

- Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognised right-of-use assets are amortised on a straight-line basis over the shorter of its estimated useful life and the lease term as follows:

Premises	1 to 6 years
Racks in data centers and optic fibre channels	1 to 3 years

Right-of-use assets are subject to impairment.

- Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognised as expense in the period on which the event or condition that triggers the payment occurs.

3 Summary of significant accounting policies (continued)

3.4 Group as a lessee (continued)

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

- Leases of low-value assets

The Group applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value. Lease payments on leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

- Accounting for short-term leases

The Group elects not to apply simplifications for short-term leases and account for them using right-of-use asset model.

- Operating leases before January 1, 2019

Leases of assets under which substantially all the risks and benefits of ownership were effectively retained by the lessor were before January 1, 2019 classified as operating leases. Payments made under operating leases were charged to the consolidated statement of comprehensive income on a straight-line basis.

3.5 Property and equipment

3.5.1 Recognition and measurement

Property and equipment are recorded at purchase or construction cost less accumulated depreciation and accumulated impairment. Interest costs on borrowings to finance the construction of property and equipment are capitalised, during the period of time that is required to complete and prepare the asset for its intended use. Expenditures for continuing repairs and maintenance are charged to earnings as incurred.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for its intended use, and the costs of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment.

Gains and losses on disposal of an item of property and equipment are recognised net under '*Other non-operating income/(expense)*' in the statement of comprehensive income.

The cost of replacing part of an item of property and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised.

3.5.2 Depreciation and useful life

Depreciation is calculated on property and equipment on a straight-line basis from the time the assets are available for use, over their estimated useful lives as follows:

	Estimated useful life (in years)
Servers and computers	2-5
Furniture	7
Office IT equipment	2-3
Leasehold improvements	Lesser of useful life or life of lease

The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted as appropriate, at each financial year-end. The Group classifies advances paid to equipment suppliers as assets under construction in property and equipment in the consolidated statement of financial position.

3 Summary of significant accounting policies (continued)

3.6 Intangible assets other than goodwill

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and assessed for impairment whenever there is an indication that the intangible asset may be impaired.

3.6.1 Software development costs

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the statement of comprehensive income when incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The expenditure capitalised includes the cost of materials, direct labour and overhead costs that are directly attributable to preparing the asset for its intended use. Other development expenditure is recognised in profit or loss as incurred.

Research and development costs recognised as an expense in the statement of comprehensive income during 2019 amounted to RUR 888 (2018: RUR 258).

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in profit or loss as incurred.

3.6.2 Useful life and amortisation of intangible assets

The Group assesses whether the useful life of an intangible asset is finite or indefinite and, if finite, the length of, or number of production or similar units constituting, that useful life. An intangible asset is regarded by the entity as having an indefinite useful life when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity. The Group did not have any intangible assets with an indefinite useful life in the years ended December 31, 2019 and 2018.

Intangible assets with finite lives are amortised over the useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired.

Amortisation periods and methods for intangible assets with finite useful lives are reviewed at least at each financial year-end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, and treated as changes in accounting estimates.

The estimated useful lives of the Group’s intangible assets are as follows:

	Estimated useful life (in years)
Patents and trademarks	7-20
Capitalised software development costs	3
Domain names	10
Games	3-9
Customer base	3-15
Licenses	3-5
Purchased software	1-4

3.7 Cash and cash equivalents

Cash and cash equivalents comprise cash at banks and on hand, short-term deposits with an original maturity of three months or less and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. All these items are included as a component of cash and cash equivalents for the purpose of the statement of financial position and statement of cash flows.

3.8 Employee benefits

Wages and salaries paid to employees are recognised as expenses in the current period or are capitalised as part of software development costs. The Group also accrues expenses for future vacation payments.

Under provisions of Russian legislation, social contributions are made through social insurance payments calculated by the Group by the application of a 30% rate to the portion of the annual gross remuneration of each employee not exceeding RUR 1,150 and a rate of 15% to the portion exceeding this threshold.

3 Summary of significant accounting policies (continued)

3.9 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

If the effect of discounting is material, provisions are determined by discounting the expected value of future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised as an interest expense.

3.10 Revenue recognition

Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. Revenues from services are recognised in the period when services are rendered.

3.10.1 Online advertising

3.10.1.1 Display advertising

Promo posts in social networks, video and banner advertising space for display advertising is sold on a dynamic basis (i.e., a function of time that an advertisement lasts) or a static basis (i.e., according to the number of page views on an advertisement). The Group has standard rates for online advertisements that depend on several factors, including the specific web page on which the banner appears, the length of the contract, the season, and the format, size and position of the advertisement. Display advertising revenue is recognised as the services are provided (i.e., as per page view for dynamic banners and over the contractual term for static banners). For display advertising sold through some third party advertising agencies, revenue generally is recognised net of any portion attributable to the third parties. For arrangements related to display advertising where the Group does not control advertising services before these services are transferred to end customers, and hence, the Group is an agent rather than a principal in these contracts.

3.10.1.2 Context advertising

The Group earns revenues for search context advertising through partnerships with third parties. Once a user carries out a search on certain of the Group’s websites, search results and advertisement links are displayed on the webpage based on relevancy to the search topic and other known user parameters. When clicked on by the user, the advertisement links lead to sites owned by the third parties’ advertising customers, for which the third party receives a fee, a portion of which it shares with the Group. Context advertising revenue is recognised as the services are provided (i.e., upon “click-through”, which is when a user clicks on an advertiser’s listing) on a net basis. This type of context advertising revenues is based on reports provided by third parties.

Context advertising also includes revenue from the Group’s myTarget self-serve advertising technology (“target advertising”). Target advertisements are priced on either pay-per-click or pay-per-view basis. Revenue from pay-per-click advertisements is recognised upon click-through, while revenue from pay-per-view advertisements is recognised as the advertisements are viewed.

Context advertising also includes revenue related to the placement of target advertising, display advertising and advertising through integration in applications, advertising thought offers on the Group’s websites and in applications, advertising via networks comprising advertising banners placement on third party websites and advertising on the Group's site communities pages. The revenue from advertising in applications, on the web pages of communities and via networks is recognised on a gross basis with costs and commissions paid to third party owners and administrators of websites, applications, platforms and communities recognised in “Agent/partner fees”.

3.10.2 Internet value-added services (“IVAS”)

Revenue from IVAS is derived from a variety of Internet-based services, including communication products and online games.

3.10.2.1 Revenue from MMO games

The Group operates its games mainly under the free-to-play game model. The Group derives its online game revenue from in-game virtual items representing additional functionality and features for the game players’ characters purchased by game players to play the Group’s MMO games and casual games. The amounts of cash or receivables from payment systems for cash from the users, net of short messaging service operators, are not recognised as revenues and are credited to deferred revenue. They are then converted by the players into in-game points. In-game points are used to purchase in-game items. Under the item-based revenue model, revenues are recognised over the life of the in-game virtual items that game players purchase or as the in-game virtual items are consumed. Deferred revenue is reduced as revenues are recognised. The estimated life span of in-game items is determined based on historical player usage patterns and playing behaviour.

3 Summary of significant accounting policies (continued)

3.10 Revenue recognition (continued)

The Group enters into licensing arrangements with overseas licensees to operate the Group's games in other countries and regions. These licensing agreements provide two separate elements, each having commercial substance: the initial non-refundable fees and the usage-based royalty fees. The initial non-refundable payment represents the license of the game and is recognised as license revenue immediately once the games are launched into commercial use by the licensees. Ongoing usage-based royalties determined based on the amount of money charged to the players' accounts or services payable by players in a given country or region to the licensees are recognised when they are earned, provided that the collection is probable.

3.10.2.2 Community IVAS

The Group derives Community IVAS revenues through certain communication products, where users pay a fee for the paid content and online services, mainly through social networking web sites and through the commission from third party developers of the various applications placed on social networking web sites, including games, based on the respective applications' revenue. The fees for such services are collected from customers using various payment channels, including bank cards, online payment systems and mobile operators and from the applications developers. The mobile network operators collect fees for such services from their customers, usually through mobile short message services ("SMS"), and pass such fees to the Group. Revenues from third party applications and developers on the Group's platforms are recognised net of commission to mobile operators and any portion attributable to the developer of the application, at the time when customer payment is due. Revenues from services including games developed by the Group and operated on third party platforms are reported gross as the services are provided net of commission to mobile operators. If the amount of revenue is measured based on third party data, such amounts of revenue are recorded based on the best available data at the date of issuance of the financial statements.

3.10.3 Other revenue

Other revenues primarily consist of classifieds revenue, e-learning, non-advertising b2b big data services,database software implementation and support services, listing fees and dividends from venture investments.

3.11 Income taxes

The Company as a Cypriot tax resident is not subject to tax on capital gains and withholding taxes. However, in some jurisdictions where the Company's subsidiaries and associates are incorporated (particularly in Russia), investment income is subject to withholding tax deducted at the source of the income. The Group presents the withholding tax separately from the gross dividend income in the statement of comprehensive income and the statement of cash flows.

The Group is also subject to taxation in Russia, the Netherlands and some other jurisdictions its subsidiaries operate in (see also Note 18).

Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the reporting date. Current income tax relating to items recognised directly in other comprehensive income is recognised in other comprehensive income and not in profit or loss.

Deferred income tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss, and differences relating to investments in subsidiaries and jointly controlled entities to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred tax is not recognised for taxable temporary differences arising on the initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

3.12 Share-based payment transactions

Employees (including senior executives) of the Group and its associates (each of which a "share-based payment recipient"), may receive remuneration in the form of share-based payment transactions, whereby share-based payment recipients render services as consideration for equity instruments ("equity-settled transactions") or a cash equivalent thereof ("cash-settled share-based payments").

3 Summary of significant accounting policies (continued)

3.12 Share-based payment transactions (continued)

Where the terms of an equity-settled award are modified, the minimum expense recognised is the expense as if the terms had not been modified. An additional expense is recognised for any modification, which increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the share-based payment recipient as measured at the date of modification.

If the Group has a choice to settle share-based payments in cash or in equity, the entire transaction is treated either as cash-settled or as equity-settled, depending on whether or not the Group has a present obligation to settle in cash.

3.12.1 Equity-settled transactions

The cost of equity-settled transactions with share-based payment recipients for awards granted is measured by reference to the fair value of the awards at the date on which they are granted. The fair value is determined using an appropriate pricing model (Black-Scholes-Merton, binomial, Monte-Carlo or other).

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant share based payment recipients become fully entitled to the award ("the vesting date"). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The expense or credit for a period recognised in profit or loss represents the movement in cumulative expense recognised as at the beginning and end of that period.

No expense is recognised for awards that do not ultimately vest based on estimated forfeiture rates or as actual forfeitures occur for groups of employee where we cannot make reliable estimates.

Where the terms of an equity-settled award are modified, the minimum expense recognised is the expense as if the terms had not been modified. An additional expense is recognised for any modification, which increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the share-based payment recipient as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the entity or the counterparty are not met. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the preceding paragraph.

The dilutive effect, if any, of outstanding options is reflected as additional share dilution in the computation of diluted earnings per share (Note 19).

3.12.2 Cash-settled transactions

The cost of cash-settled transactions is measured initially at fair value at the grant date using a binomial model, further details of which are provided in Note 24. This fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The liability is remeasured to fair value at each reporting date up to, and including the settlement date, with changes in fair value recognised in *'Personnel expense'*.

3.12.3 Accounting for the change in form of settlement of share-based payments

As a result of modification of share-based payment awards from equity-settled to cash-settled the Group recognises a share-based payment expense which comprises as a minimum the following elements:

- the grant date fair value of the original equity-settled award; plus
- any incremental fair value arising from the modification of that award; plus
- any remeasurement of the liability between its fair value at modification date and the amount finally settled.

At the date of modification a liability is recognised based on the fair value of the cash-settled award as at that date and the extent to which the vesting period has expired, with a corresponding increase in equity. The total fair value of the cash-settled award is remeasured through profit or loss on an ongoing basis between the date of modification and the date of settlement.

3 Summary of significant accounting policies (continued)

3.13 Financial instruments

3.13.1 Initial recognition and measurement

Financial assets within the scope of IFRS 9 are classified as financial assets at fair value through profit or loss, financial assets through other comprehensive income or financial assets at amortised cost, as appropriate.

Financial liabilities within the scope of IFRS 9 are classified as financial liabilities at fair value through profit or loss and financial liabilities at amortised cost as appropriate.

The Group determines the classification of its financial assets and liabilities at initial recognition. All financial assets are recognised initially at fair value plus, in the case of investments not at fair value through profit or loss, directly attributable transaction costs. At initial recognition, the Group measures trade receivables at their transaction price (as defined in IFRS 15) if the trade receivables do not contain a significant financing component in accordance with IFRS 15. Financial liabilities are recognised initially at fair value and, in the case of loans and borrowings, directly attributable transaction costs.

In order for a financial asset to be classified and measured at amortised cost, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level. The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

The Group's financial assets include cash and cash equivalents, short-term time deposits, trade and other receivables, financial investments in venture capital investees (as defined under 3.18), and derivative financial assets, mainly over equity instruments of the Group's investees. The Group's financial liabilities include trade and other payables, loans and borrowings, and derivative financial liabilities, mainly over equity instruments of the Group's associates and subsidiaries. None of the derivative financial instruments held by the Group were designated as effective hedging instruments.

3.13.2 Subsequent measurement

The subsequent measurement of financial instruments depends on their classification. The Group classifies its financial assets and liabilities into the categories below in accordance with IFRS 9, as follows:

3.13.2.1 Financial assets and liabilities at fair value through profit or loss

Financial assets and liabilities at fair value through profit and loss are carried in the statement of financial position at fair value. The changes in their fair value are recognised in the statement of comprehensive income as follows:

- The changes in the fair value of financial investments in associates and those derivative financial assets and liabilities where the underlying asset is represented by equity instruments of a financial investee, are recorded under *'Net gain/(loss) on venture capital investments and associated derivative financial assets and liabilities'* and are included in the Group's operating income; and
- The changes in the fair value of derivative financial assets where the underlying asset is represented by equity instruments of a subsidiary, as well as other derivative financial assets, are recorded under *'Net gain/(loss) on financial assets and liabilities at fair value through profit or loss over the equity of subsidiaries and other agreements'*.

3.13.2.2 Financial assets and liabilities at amortised cost

This category is the most relevant to the Group. The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Group's financial assets at amortised cost includes trade receivables, and loan to an associate and loan to a director included under other non-current financial assets.

After initial recognition, interest bearing loans and borrowings and other financial liabilities are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the statement of comprehensive income when the liabilities are derecognised as well as through the amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in 'Finance expenses in the statement of comprehensive income.

3 Summary of significant accounting policies (continued)

3.13 Financial instruments (continued)

3.13.2.3 Contingent consideration

Contingent consideration recognised by the Group in a business combination to which IFRS 3 applies is subsequently measured at fair value with changes recognised in profit or loss under 'Net gain/(loss) on derivative financial assets and liabilities at fair value through profit or loss'.

Contingent consideration includes the liabilities shown in the statement of financial position under 'Other payables, accrued expenses and contingent consideration liabilities'.

3.13.3 Derecognition

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is de-recognised where:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and
- Either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

The Group de-recognises a financial liability when the obligation under the liability is discharged, cancelled or expires.

3.13.4 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

3.13.5 Fair value of financial instruments

The fair value of financial instruments that are actively traded in organised financial markets is determined by reference to quoted market bid prices at the close of business on the reporting date. For financial instruments where there is no active market, fair value is determined using valuation techniques. Such techniques may include: using recent arm's length market transactions; reference to the current fair value of another instrument that is substantially the same; discounted cash flow analysis or other valuation models.

An analysis of fair values of financial instruments and further details as to how they are measured are provided in Note 22.

3.13.6 Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

For trade receivables the Group applies a simplified approach in calculating ECLs. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

3.13.6.1 Financial assets carried at amortised cost

For financial assets carried at amortised cost (loans and receivables), evidence of impairment may include indications that the debtor or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

If there is objective evidence that an impairment loss has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future expected credit losses that have not yet been incurred) discounted using the asset's original EIR. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognised in profit or loss as a *'Bad debt expense'* in *'Other operating expenses'*. The allowance is estimated based on a combination of specific accounts and general ageing analysis.

Trade accounts receivable are recorded at the invoiced amount and are non-interest bearing. Credit is only granted to customers after a review of credit history.

3 Summary of significant accounting policies (continued)

3.14 Foreign currency translation

The consolidated financial statements are presented in RUR, which is the Group's presentation currency, and all values are rounded to the nearest million (RUR '000000) except per share information and unless otherwise indicated. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. The functional currency of the Group's Russian subsidiaries and associates as well as the Company itself is RUR.

Transactions in foreign currencies are initially recorded in the functional currency at the rate ruling at the date of transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the measurement currency rate of exchange ruling at the reporting date. All resulting differences are taken to the consolidated statement of comprehensive income and included in the determination of net profit as '*Net foreign exchange (losses)/gains*'. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate as at the date of initial transaction.

As at the reporting date, the assets and liabilities of the Company and its subsidiaries with functional currencies other than the RUR are translated into the presentation currency of the Group (RUR) at the rate of exchange ruling at the reporting date and their operations are translated at exchange rates prevailing at the date of the transactions. The exchange differences arising on the translation are recognised in other comprehensive income.

3.15 Impairment of non-financial assets and investments in equity accounted associates

The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's ("CGU") fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators.

Impairment losses of continuing operations are recognised in earnings in those expense categories consistent with the function of the impaired asset.

For assets excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the Group estimates the asset's or cash-generating unit's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation or amortisation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in earnings.

Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each CGU (or group of CGUs) to which the goodwill relates. Where the recoverable amount of the CGU is less than its carrying amount an impairment loss is recognised. Impairment losses relating to goodwill cannot be reversed in future periods.

3.16 Earnings per share

The Group presents basic and diluted earnings per share ("EPS") data for its ordinary and Class A shares. Basic EPS is calculated by dividing the profit or loss attributable to shareholders of the Company by the weighted average number of shares outstanding during the period, adjusted for own shares held.

Diluted EPS is determined by adjusting the profit or loss attributable to shareholders and the weighted average number of shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares, which may comprise share options granted to employees of the Group.

3.17 Segment reporting

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. An operating segment's operating results are reviewed regularly by the Group's chief operating decision maker ("CODM") to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

Segment results that are reported to the CODM include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

3 Summary of significant accounting policies (continued)

3.18 Financial investments in venture capital investees

Financial investments in venture capital investees, are the Group's investments in start-up Internet ventures and smaller Internet companies in Russia, Ukraine and Israel with ownership ranging from 1.5% to 50% and which gives the Group significant influence in some of these investments. They form the Group's venture capital portfolio and are monitored and managed exclusively on the basis of their fair values. The Group's involvement in the operating management of the investees is limited, and the possibility of the Group maintaining a specific financial investment in its investment portfolio in the long run is remote. Financial investments in such associates are carried in the statement of financial position at fair value even though the Group may exert significant influence over those companies. This treatment is permitted by IAS 28 *Investments in Associates and Joint Ventures*, which allows investments held by venture capital organisations to be excluded from its scope where those investments are designated, upon initial recognition, as at fair value through profit or loss and accounted for in accordance with IFRS 9, with changes in fair value recognised in profit or loss in the period of the change. Accounting policies of the Group with respect to financial investments in associates are discussed in more detail under Note 3.13 above as part of the Group's accounting policies with respect to financial assets.

4 Significant accounting judgments, estimates and assumptions

The preparation of consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the reporting dates and the reported amounts of revenues and expenses during the reporting periods. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

4.1 Judgments

In the process of applying the Group's accounting policies, management has made the following judgments which have the most significant effect on the amounts recognised in the consolidated financial statements:

4.1.1 Consolidation and accounting for associates

The Company directly or indirectly owned up to 50% in certain of its investments. Based on its voting rights and restrictions in the respective governing documents, the Group made judgments about whether it has control or significant influence over these investments. Subsequently, these entities are either accounted for as subsidiaries (consolidated) or associates (accounted for under the equity method or as financial assets at fair value through profit or loss).

Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The statement of profit or loss reflects the Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the statement of profit or loss outside operating profit and represents profit or loss after tax and noncontrolling interests in the subsidiaries of the associate or joint venture.

The financial statements of the associate or joint venture are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognises the loss within 'Share of profit of an associate and a joint venture' in the statement of profit or loss.

Upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

4.1.2 Consolidation of a structured entity

In November 2010, the Company established, as settlor, an employee benefit trust (the "Trust") under a Trust Deed dated November 11, 2010 ("Trust Deed"), the trustee of which is Mail.ru Employee Benefit Trustees Limited (the "Trustee"). The purpose of the Trust consists in holding trust funds for present and former employees and consultants and related persons. The Trustee manages employee stock options under the 2010 Option Plan (as defined in Note 24). Starting from October 2011, the Trustee was also instructed by the Company to acquire GDRs representing shares of the Company on the stock market and transfer those GDRs to employees in settlement of the 2010 Option Plan options as the options are exercised by the employees. The Group does not hold any equity interest in the Trust; however, under the Trust Deed, the Group has the power to appoint and remove the Trustee at its sole discretion. The operations of the Trust are restricted per the Trust Deed to the activities described above and are solely used by the Group. Based on these facts and circumstances, management concluded that the Group controls the Trustee and, therefore, consolidates the Trustee in its financial statements.

4 Significant accounting judgments, estimates and assumptions (continued)

4.1 Judgments (continued)

4.1.3 Accounting treatment of share-based payments where the Group has a choice to settle in cash or equity

The Group has wide discretion over the manner of settlement of options issued and determines the accounting treatment of the options based on whether the Group has a present obligation to settle in cash. Specifically, any option holder granted an aggregate of 20,000 or more options was only allowed to exercise the respective portion options in the form of GDRs, while exercises by the optionees granted a smaller cumulative number of options can continue to be in GDRs or cash at the Group's discretion. The terms of the option plan and past exercise history make it reasonable to expect cash settlement of most of the smaller option exercises, even though the Group continues to have discretion over the way of option exercise settlement. Larger than cumulative 20,000 options per person continue to be accounted for as equity awards.

4.2 Estimates and assumptions

Significant estimates and assumptions reflected in the Group's financial statements include, but are not limited to the following:

- revenue recognition;
- fair value of financial instruments;
- useful lives of intangible assets;
- software development costs;
- impairment of goodwill and other intangible assets;
- fair value of assets and liabilities in business combinations; and
- recoverability of deferred tax assets.

Actual results could materially differ from those estimates.

The key assumptions concerning the future events and other key sources of estimation uncertainty at the reporting date that have a significant risk of a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

4.2.1 Revenue recognition – in-game items life span

Deferred revenue is recognised as revenue over the estimated life span of the in-game items purchased or as the in-game items purchased with the game points are consumed. The estimated life span of in-game items is determined based on historical player usage patterns and playing behaviour. Future usage patterns may differ from the historical usage patterns on which the Group's revenue recognition policy is based. The Group monitors the operational statistics and usage patterns of its online games and modifies the expected life span when materially different.

Another significant judgements that significantly affect the determination of the amount and timing of revenue from contracts with customers in accordance with IFRS 15 include (i) the timing of satisfaction of performance obligations and (ii) the transaction price and the amounts allocated to performance obligations.

4.2.2 Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the statement of financial position cannot be derived from active markets, they are determined using valuation techniques including the discounted cash flows model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, estimates and assumptions have to be made, and a degree of judgment has to be applied in establishing fair values. The judgments, estimates and assumptions include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

The expected volatility in the pricing models used to measure the fair value of the derivative financial assets and liabilities is determined by reference to peer companies' historical volatility, as the issuers of the underlying equity instruments are not public. When determining risk-free rates to be used in the pricing models, regard is given to US Treasury bonds or Russian government bonds with maturities equal to the expected terms of the respective derivative financial instruments.

Detailed information on the fair values of the Group's financial instruments is available in Note 22.

4.2.3 Useful life of intangible assets

The Group estimates remaining useful lives of its intangible assets at least once a year at the reporting date. If the estimation differs from the previous estimations, the changes are accounted for in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*. These estimates may have a significant impact on the carrying value of intangible assets and amortisation, charged to earnings. The carrying value of intangible assets is disclosed in Note 7.

4 Significant accounting judgments, estimates and assumptions (continued)

4.1 Judgments (continued)

4.2.4 Software development costs

Software development costs are capitalised in accordance with the accounting policy described in Note 3.6.1. Initial capitalisation of costs is based on management's judgment that technological and economical feasibility is confirmed, usually when a product development project has reached a defined milestone according to an established project management model. In determining the amounts to be capitalised management makes assumptions regarding the expected future cash generation of the assets, discount rates to be applied and the expected period of benefits.

4.2.5 Impairment of goodwill and other intangible assets

Impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation is based on available data from binding sales transactions, conducted at arm's length, for similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow ("DCF") model. The cash flows are derived from management forecast. The recoverable amount is sensitive to the discount rate used for the DCF model as well as the growth rate used for extrapolation purposes. The key assumptions used to determine the recoverable amount for the different CGUs are disclosed and further explained in Notes 7 and 11.

4.2.6 Fair value of assets and liabilities in business combinations

At the acquisition date the Group recognises separately the identifiable assets, liabilities and contingent liabilities acquired or assumed in a business combination at their fair values, which involves estimates. Such estimates are based on valuation methods that require considerable judgment in forecasting future cash flows and developing other assumptions.

4.2.7 Share-based payments

Management estimates the fair value of equity-settled stock options at the date of grant and the fair value of cash-settled options at each reporting date using the Black-Scholes-Merton, binominal, Monte-Carlo or other option pricing models, as applicable. The option pricing models were originally developed for use in estimating the fair value of traded options, which have different characteristics than the Group's stock options granted by the Company. The models are also sensitive to changes in the subjective assumptions, which can materially affect the fair value estimate. These subjective assumptions include expected volatility, dividend yield, risk-free interest and forfeiture rates.

4.2.8 Deferred taxes on undistributed earnings

Deferred tax is recognised based on estimated dividends distributions of Company's subsidiaries taking into account limitation of cash and cash equivalents available at the reporting date.

4.2.9 Changes in estimates

In Q3 2019, the Group changed its estimates with respect to the life span of the in-game virtual items purchased by game players. The changes resulted from the fact that the Group accumulated sufficient data related to the patterns of how the in-game items are consumed by paying game players. As a result the Company refined its estimate of the period of satisfaction of the performance obligation in relation to virtual in-game items. The changes in estimates were recorded prospectively starting from Q3 2019 and resulted in an increase in revenue and a decrease in deferred MMO Games revenue estimated at RUR 13,324 as at December 31, 2019 (RUR 13,037 as at September 30, 2019).

4.2.10 Significant judgement in determining the lease term of contracts with renewal options

The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised.

The Group applies judgement in evaluating whether it is reasonably certain to exercise the option to renew. That is, it considers all relevant factors that create an economic incentive for it to exercise the renewal. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option to renew (e.g., a change in business strategy).

4.2.11. Significant judgement in determining incremental borrowing rate

At for the interest rate the Group obtained estimation from banks and compared it to the rate of interest rate swap applicable for currency of the lease contract and for similar tenor, corrected by the average credit spread of entities with rating similar to the Group's rating. The rate is close to 9.6% for weighted average lease duration. Duration for discount rate is based on weighted average lease period (2.4 years for January 1, 2019). The discount rate is applied to all lease contracts.

Notes to Consolidated Financial Statements (continued)

5 Operating segments

In reviewing the operational performance of the Group and allocating resources, the Chief Executive Officer of the Group, who is the Group's Chief Operating Decision Maker (CODM), reviews selected items of each segment's income statement, assuming 100% ownership in all of the Group's key operating subsidiaries, based on management reporting.

Management reporting is different from IFRS, because it does not include certain IFRS adjustments which are not analysed by the CODM in assessing the core operating performance of the business. Such adjustments affect such major areas as revenue recognition, deferred tax on unremitted earnings of subsidiaries, share-based payments, disposal or impairment of investments , business combinations, fair value adjustments, amortisation and impairment thereof, net foreign exchange gains and losses, share in financial results of associates, as well as irregular non-recurring items that occur from time to time and are evaluated for adjustment as and when they occur. The tax effect of these adjustments is also excluded from management reporting.

The financial information of the key subsidiaries acquired during the reporting period or after the reporting period but prior to the date of these consolidated financial statements is included into the segment disclosure starting from the beginning of the earliest comparative period included in the financial statements.

The financial information of subsidiaries disposed of and assets classified as held for sale prior to the date of these consolidated financial statements is excluded from the segment presentation starting from the beginning of the earliest period presented.

Accordingly, segment reporting for the year ended December 31, 2019 and the respective comparative segment financial information has been retrospectively adjusted, as applicable, to include the financial information of new acquisitions which took place during the period (Note 6) and to exclude the information related to assets held for sale reclassified during the reporting period.

Additionally, in order to achieve comparability, IFRS 16 adoption effect (Note 2.2) is included in segment reporting starting from January 1, 2018.

In 2019 the Group has changed the composition of the reporting segments in order to better reflect Group's strategy, the way the business is managed and units' interconnection within its eco-system. From the first quarter of 2019 the Group has identified the following reportable segments on this basis:

- Communications and Social;
- Games; and
- New initiatives.

The Communications and Social segment includes email, instant messaging and portal (main page and media projects). It earns substantially all revenues from display and context advertising. This segment also aggregates the Group's social network Vkontakte (VK) and two other social networks (OK and My World) and earns revenues from (i) commission from application developers based on the respective applications' revenue, (ii) user payments for virtual gifts, stickers and music subscriptions and (iii) online advertising, including display and context advertising. It also includes Search and music services (UMA). These businesses have similar nature and economic characteristics as they are represented by social networks and online communications, common type of customers for their products and services and are regulated under similar regulatory environment.

The Games segment includes online gaming services, including MMO, social and mobile games operated by the Group. It earns substantially all revenues from (i) sale of virtual in-game items to users, (ii) royalties for games licensed to third-party online game operators and (iii) in-game advertising.

The New initiatives reportable segment represents separate operating segments aggregated in one reportable segment for its similar nature of newly acquired and dynamically developing businesses. This segment primarily consists of Youla classifieds earning substantially all revenues from advertising and listing fees, Maps.me, Geek Brains, B2B new projects including cloud as well as MRG Tech Lab initiatives along with other services, which are considered insignificant by the CODM for the purposes of performance review and resource allocation.

The Group measures the performance of its operating segments through a measure of earnings before interest, tax, depreciation and amortisation (EBITDA). Segment EBITDA is calculated as the respective segment's revenue less operating expenses (excluding depreciation and amortisation and impairment of intangible assets), including Group corporate expenses allocated to the respective segment.

EBITDA is not a measure of financial performance under IFRS. The calculation of EBITDA by the Group may be different from the calculations of similarly labeled measures used by other companies and it should therefore not be used to compare one company against another or as a substitute for analysis of the Group's operating results as reported under IFRS. EBITDA is not a direct measure of the Group's liquidity, nor is it an alternative to cash flows from operating activities as a measure of liquidity, and it needs to be considered in the context of the Group's financial commitments. EBITDA may not be indicative of the Group's historical operating results, nor is it meant to be predictive of the Group's potential future results. The Group believes that EBITDA provides useful information to the users of the consolidated financial statements because it is an indicator of the strength and performance of the Group's ongoing business operations, including the Group's ability to fund discretionary spending such as capital expenditure, acquisitions and other investments and the Group's ability to incur and service debt.

5 Operating segments (continued)

The information about the breakdown of revenue from external customers by the customers' country of domicile and non-current assets by country is not available to the management of the Group, and it considers that the cost to develop such information would be excessive.

The Group has changed presentation of its reporting segments retrospectively to provide corresponding basis for comparison.

The income statement items for each segment for the year ended December 31, 2019, as presented to the CODM, are presented below:

	Communications and Social	Games	New initiatives	Eliminations	Group
Revenue					
External revenue	50,313	30,551	6,206	–	87,070
Intersegment revenue	208	118	27	(353)	–
Total revenue	50,521	30,669	6,233	(353)	87,070
Total operating expenses	23,186	25,425	9,060	(353)	57,318
EBITDA	27,335	5,244	(2,827)	–	29,752
Net profit					15,649

The income statement items for each segment for the year ended December 31, 2018, as presented to the CODM, are presented below:

	Communications and Social	Games	New initiatives	Eliminations	Group
Revenue					
External revenue	43,575	24,841	2,748	–	71,164
Intersegment revenue	191	4	1	(196)	–
Total revenue	43,766	24,845	2,749	(196)	71,164
Total operating expenses	18,122	19,839	6,262	(196)	44,027
EBITDA	25,644	5,006	(3,513)	–	27,137
Net profit					15,083

A reconciliation of group aggregate segment revenue, as presented to the CODM, to IFRS consolidated revenue of the Group for the years ended December 31, 2019 and 2018 is presented below:

	2019	2018
Group aggregate segment revenue, as presented to the CODM	87,070	71,164
Adjustments to reconcile revenue as presented to the CODM to consolidated revenue under IFRS:		
Effect of difference in dates of acquisition,loss of control in subsidiaries and assets held for sale	2,615	2,992
Differences in timing of revenue recognition	6,520	(8,154)
Barter revenue	8	74
Dividend revenue from venture capital investments	18	29
Consolidated revenue under IFRS	96,231	66,105

5 Operating segments (continued)

A reconciliation of group aggregate segment EBITDA, as presented to the CODM, to IFRS consolidated profit/(loss) before income tax expense of the Group for the years ended December 31, 2019 and 2018 is presented below:

	2019	2018
Group aggregate segment EBITDA, as presented to the CODM	29,752	27,137
Adjustments to reconcile EBITDA as presented to the CODM to consolidated profit/(loss) before income tax expenses under IFRS:		
Effect of difference in dates of acquisition, loss of control in subsidiaries and assets held for sale	(8,091)	(5,904)
IFRS 16 implementation	–	(3,540)
Differences in timing of revenue recognition	8,265	(7,464)
Net (loss)/gain on venture capital investments	(139)	26
Share-based payment transactions	(1,742)	(6,732)
Other	11	27
EBITDA	28,056	3,550
Depreciation and amortisation	(12,771)	(9,665)
Impairment of intangible assets	(659)	(1,711)
Share of loss of equity accounted associates	(1,691)	(497)
Finance income	585	545
Finance expenses	(1,459)	(17)
Other non-operating loss	(182)	(12)
Gain on joint ventures formation	15,855	–
Loss on fair value remeasurement of assets held for sale	(4,519)	–
Net loss on derivative financial assets and liabilities at fair value through profit or loss	(758)	(516)
Gain on remeasurement of previously held interest in equity accounted associate	324	–
Reversal of impairment / (impairment) of equity accounted associates	60	(37)
Net gain on disposal of intangible assets	418	–
Net gain on disposal of subsidiary	–	47
Net foreign exchange (loss)/gain	(980)	796
Consolidated profit/(loss) before income tax expense under IFRS	22,279	(7,517)

A reconciliation of group aggregate net profit, as presented to the CODM, to IFRS consolidated net profit/(loss) of the Group for the years ended December 31, 2019 and 2018 is presented below:

	2019	2018
Group aggregate segment net profit, as presented to the CODM	15,649	15,083
Adjustments to reconcile net profit as presented to the CODM to consolidated net profit/(loss) under IFRS:		
Share-based payment transactions	(1,742)	(6,732)
Differences in timing of revenue recognition	8,265	(7,464)
Effect of difference in dates of acquisition, loss of control in subsidiaries and assets held for sale	(6,959)	(6,006)
IFRS 16 implementation	–	435
Amortisation of fair value adjustments to intangible assets	(3,192)	(5,174)
Gain on joint ventures formation	15,855	–
Loss on fair value remeasurement of assets held for sale	(4,519)	–
Net loss on financial instruments at fair value through profit or loss	(897)	(490)
Gain on remeasurement of previously held interest in equity accounted associate	324	–
Net gain on disposal of intangible assets	418	–
Net gain on disposal of subsidiary	–	47
Net foreign exchange (loss)/gain	(980)	796
Share of loss of equity accounted associates	(1,691)	(497)
Reversal of impairment/(impairment) of equity accounted associates	60	(37)
Other non-operating loss	(182)	(12)
Other	(11)	(16)
Tax effect of the adjustments	(1,547)	2,004
Consolidated net profit/(loss) under IFRS	18,851	(8,063)

Notes to Consolidated Financial Statements (continued)

6 Business combinations in 2018 and 2019

6.1 UMA

In February 2019, the Group completed the acquisition of 100% of Salerton Investments Limited ("UMA"), an Internet and mobile music service provider in Russia, for a total cash consideration of RUR 6,391. As of September 30, 2019, as a result of the control acquisition the Group derecognized equity accounted investment in UMA. The main purpose of the acquisition is to expand the Group's presence in the market of music services.

In February 2020 the Group finalised purchase price allocation for UMA acquisition, which resulted in no change from provisional values. The fair values of the identifiable assets and liabilities of UMA at the date of acquisition were as follows:

	Fair value
Intangible assets	693
Property and equipment	3
Deferred income tax assets	111
Trade accounts receivable	356
Prepaid expenses and advances to suppliers	169
Other current assets	26
Cash and cash equivalents	1,079
Total assets	2,437
Trade accounts payable	858
Deferred income tax liabilities	31
Income tax payable	13
Other taxes payable	100
Other payables, provisions and accrued expenses	47
Total liabilities	1,049
Total net assets	1,388

Goodwill on the transaction was calculated as the excess of:	
(a) The consideration transferred by the Group measured at fair values:	
[1] Cash paid	6,391
[2] The acquisition date fair value of the Group's previously held equity interest	1,601
Consideration transferred by the Group	7,992
(b) The amount of non-controlling interest in UMA measured at the proportionate share of the identifiable net assets	14
Over	
(c) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at final fair values	1,388
Goodwill	6,618

Goodwill is mainly attributable to development of music services, cost saving and potential synergy with the Group's business. Goodwill is allocated to Vkontante and Social Networks CGUs.

Goodwill is not expected to be deductible for income tax purposes.

Intangible assets mainly include software and customer base, and are amortised over the period of 2 to 5 years.

The cash flows on acquisition were as follows:

Cash paid (included in cash flows from investing activities)	6,391
Cash acquired (included in cash flows from investing activities)	(1,079)
Net cash flow on acquisition	5,312

6 Business combinations in 2018 and 2019 (continued)

6.2 ESforce

In January 2018 the Group acquired a leading eSport group of companies operating under the ESforce brand (together "ESforce") for a cash consideration of RUR 5,659 and contingent consideration, measured at fair value, of RUR 1,132 based on ongoing financial KPIs in a period of 1 year. Contingent liability was denominated in USD and remeasured in December 2018 to RUR 1,948 (Note 16) and paid in full amount in March 2019. The primary purpose of the acquisition of ESforce was to enhance the Group's position on the eSports market.

In January 2019 the Group finalised purchase price allocation for ESforce acquisition, which resulted in no change from provisional values. The fair values of the identifiable assets and liabilities of ESforce at the date of acquisition were as follows:

	Fair value
Property and equipment	648
Other intangible assets	674
Deferred income tax assets	227
Trade accounts receivable	191
Prepaid income tax	12
Prepaid expenses and advances to suppliers	23
Other current assets	167
Other non-current assets	9
Cash and cash equivalents	207
Total assets	2,158
Deferred income tax liabilities	144
Trade accounts payable	235
VAT and other taxes payable	12
Deferred revenue and customer advances	68
Provisions for tax contingencies	128
Other payables and accrued expenses	130
Total liabilities	717
Total net assets	1,441

Goodwill on the transaction was calculated as the excess of:	
(a) The consideration transferred by the Group measured at fair values:	
[1] Cash consideration	5,659
[2] Contingent consideration liability (Note 16)	1,132
Consideration transferred by the Group	6,791
(b) The amount of non-controlling interest in ESforce measured at the proportionate share of the identifiable net assets	22
Over	
(c) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at final fair values	1,441
Goodwill	5,372

Goodwill is mainly attributable to the potential of ESforce to further enhance its leadership position in the eSports market, as well as the prospects of potential synergies with the Group's other operations. Goodwill is not expected to be deductible for income tax purposes.

Intangible assets mainly include trademark and customer base, and are amortised over the period of 2 to 5 years.

The cash flows on acquisition were as follows:

Cash paid (included in cash flows from investing activities)	5,730
Cash acquired (included in cash flows from investing activities)	(207)
Net cash flow on acquisition	5,523

In June 2019 the Group decided to create a partnership around ESforce eSports business. As of June 30, 2019 the Group reclassified related to ESforce assets in amount RUR 6,920 as assets held for sale and liabilities directly associated with assets held for sale in the amount RUR 0.6 billion.

In December 2019, the Group remeasured fair value of ESforce, classified as assets held for sale, from RUR 6.3 billion to RUR 1.8 billion and, therefore recognized, remeasurement loss in the amount of RUR 4.5 billion for 2019 primarily related to goodwill.

6 Business combinations in 2018 and 2019 (continued)

6.2 ESforce (continued)

As at December 31, 2019, the Group classified related to ESforce assests in the amount RUR 2,334 as assets held for sale and liabilities directly associated with assets held for sale in the amount RUR 543 as the Group plans to recover its carrying value through a sale transaction or contribution to a joint venture.

The Group decided to use the right to reverse Modern Pick partnership transaction around ESforce due to non-completion of the key asset consolidation condition by the majority shareholder as of December 31, 2019.

6.3 BitGames, 33 Slona and InShopper

In April 2018 the Group acquired control in mobile games developer PBL Bitdotgames Publishing Limited ("BitGames") by increasing its share to 51% (49% in addition to 2% stake as of March 31, 2018). The primary purpose of the acquisition of BitGames was to enhance the Group's position on mobile games market.

Also in April 2018 the Group completed the acquisition of 100% in LLC "33 Slona" and LLC "Tekhnologii nedvizhimosti" (collectively, "33 Slona"), a digital real estate agency. The primary purpose of the acquisition of 33 Slona was to leverage the Group's expertise and resources by achieving substantial synergies with Youla, the Group's general online classifieds product.

In June 2018 the Group completed the acquisition of the 100% in Consult Universal Corp ("InShopper"), a cash-back technology provider. The primary purpose of the acquisition of InShopper was to leverage the Group's expertise and resources by achieving substantial synergies with Group's payment technologies and solutions.

Total cash consideration for the transactions above was RUR 2.5 bln and contingent consideration, measured at fair value, of RUR 93 (based on ongoing financial KPIs in a period of 1 year. Contingent liability was remeasured in March 2019 to RUR 9.

In April 2019 the Group finalised purchase price allocation for BitGames, 33 Slona and InShopper acquisitions, which resulted in no change from provisional values. The fair values of the identifiable assets and liabilities of BitGames, 33 Slona and InShopper at the date of acquisition were as follows:

	Fair value
Other intangible assets	1,140
Loans receivable	5
Deferred income tax assets	59
Prepaid expenses and advances to suppliers	14
Trade accounts receivable	36
Other current assets	36
Cash and cash equivalents	26
Total assets	1,316
Deferred income tax liabilities	143
Trade accounts payable	83
Deferred revenue and customer advances	473
Loans payable	33
VAT and other taxes payable	5
Other payables and accrued expenses	10
Total liabilities	747
Total net assets	569

Goodwill on the transaction was calculated as the excess of:	
(a) The consideration transferred by the Group measured at fair values:	
[1] Cash paid	2,515
[2] Financial assets at fair value through profit or loss – derivative over the equity of investee	11
[3] The acquisition date fair value of the Group's previously held equity interest	114
[4] Contingent consideration liability (Note 16)	93
Consideration transferred by the Group	2,733
(b) The amount of non-controlling interest measured at the proportionate share of the identifiable net assets	247
Over	
(c) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at final fair values	569
Goodwill	2,411

Goodwill is not expected to be deductible for income tax purposes. Goodwill is mainly attributable to development of new games, cost saving and potential synergy with the Group's classified business, payment solutions and other operations.

6 Business combinations in 2018 and 2019 (continued)

6.3 BitGames, 33 Slona and InShopper (continued)

Goodwill related to BitGames and 33 Slona acquisition is allocated to Games and Youla CGUs correspondingly. Goodwill related to InShopper acquisitions is allocated to Vkontakte, Social Networks and Email and Portal CGUs.

Intangible assets mainly include social and mobile games and are amortised over the period of 2 to 5 years.

The cash flows on acquisition were as follows:

Cash paid (included in cash flows from investing activities)	2,534
Cash acquired (included in cash flows from investing activities)	(26)
Net cash flow on acquisition	2,508

6.4 Citymobil

In April 2018 as a result of a number of transactions the Group acquired a 25.38% stake in taxi aggregator City-Mobil LLC ("Citymobil") for a total cash consideration of RUR 530, including RUR 120 conversion of loan. In 2019 the Group participated in new funding rounds and contributed additionally RUR 679. As a result of RUR 2.2 bln loan conversion the Group's share in Citymobil increased to 29.669%.

The Group concluded that it has significant influence over Citymobil as the Group has the power to participate in the financial and operating policy decisions through its representation on Citymobil's Board of Directors. The Group's ownership interest in Citymobil represents an investment in an associate and is accounted for under the equity method. As of April 2019, the Group finalized purchase price allocation of Citymobil, which resulted in no change from provisional values.

In July 2019 the Board of Directors of the Company approved the signing of a term sheet assuming investment into a new O2O-focused company.

In December 2019 the O2O deal was finalized and Citymobil was transferred to new O2O JV as a part of the Group investment. For details please refer to Note 6.10.

6.5 Panzerdog

In May 2019 the Group acquired control in mobile games developer Panzerdog OY ("Panzerdog") by increasing its share to 59.45% (39.45% in addition to 20% stake as of March 31, 2019) for total cash consideration of RUR 626. As of September 30, 2019, as a result of the control acquisition the Group derecognized equity accounted investment in Panzerdog with the gain from remeasurement of previously held interest in equity accounted associates of RUR 285. The primary purpose of the acquisition of Panzerdog was to enhance the Group's position on mobile games market.

Provisional fair values of the identifiable assets and liabilities as at the date of acquisition were as follows:

	Provisional fair value
Intangible assets	654
Property and equipment	2
Trade accounts receivable	87
Other current assets	31
Cash and cash equivalents	89
Total assets	863
Deferred revenue	168
Deferred income tax liabilities	131
Trade accounts payable	215
Total liabilities	514
Total net assets	349

Goodwill on the transaction was calculated as the excess of:

(a) The consideration transferred by the Group measured at fair values:	
[1] Cash paid	626
[2] The acquisition date fair value of the Group's previously held equity interest	317
Consideration transferred by the Group	943
(b) The amount of non-controlling interest in Panzerdog measured at the proportionate share of the identifiable net assets	141
Over	
(c) Financial assets at fair value through profit or loss – derivative over the equity of investee (Note 22)	110
(d) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at fair provisional values	349
Goodwill	625

6 Business combinations in 2018 and 2019 (continued)

6.5 Panzerdog (continued)

Goodwill is mainly attributable to development of new games and potential synergy with the Group's business. Goodwill is not expected to be deductible for income tax purposes.

Intangible assets mainly include mobile games and are amortised over the period of 2 to 5 years.

The cash flows on acquisition were as follows:

Cash paid (included in cash flows from investing activities)	630
Cash acquired (included in cash flows from investing activities)	(89)
Net cash flow on acquisition	541

6.6 Native Roll, Worki and Relap

In April 2019 the Group acquired 50.83% in Native Media LLC ("Native Roll") – a video ad platform. The primary purpose of the acquisition of Native Roll was to enhance the Group's position on advertising solutions market. As of December 31, 2019 the Group acquired control over the remaining share of 49.17%.

In May 2019 the Group acquired 51% in LLC "Iconjob" ("Worki"), a job search platform. The primary purpose of the acquisition of Worki was to leverage the Group's expertise and resources by achieving substantial synergies with Youla, the Group's general online classifieds product. As of December 31, 2019 the Group acquired control over the remaining share of 49%.

Also, in May 2019 the Group acquired 100% in Surfingbird LLC ("Relap"), a recommendatory platform. The primary purpose of the acquisition of Relap was to leverage the Group's expertise and resources by achieving substantial synergies with Pulse, the Group's recommendation technologies and solutions.
Total cash consideration for the transactions above was RUR 2.1 bln.

In accounting for the business combinations, the Group has provisionally determined the amounts of the acquired companies' identifiable assets and liabilities at their fair value. The acquisition accounting will be finalised upon completion of the tax planning and valuation of Native Roll, Worki and Relap's assets and liabilities.

Provisional fair values of the identifiable assets and liabilities of Native Roll, Worki and Relap as at the date of acquisition were as follows:

	Provisional fair value
Intangible assets	335
Property and equipment	4
Trade accounts receivable	200
Other current assets	22
Cash and cash equivalents	86
Total assets	647
Trade accounts payable	139
Loans payable	67
Deferred income tax liabilities	55
VAT and other taxes payable	13
Other payables	28
Total liabilities	302
Total net assets	345

Goodwill on the transaction was calculated as the excess of:	
(a) The consideration transferred by the Group measured at fair values:	
[1] Cash paid	2,064
[2] Contingent consideration liability	71
Consideration transferred by the Group	2,135
(b) Financial liability at fair value through profit or loss – derivative over the equity of investee (Note 22)	461
Over	
(c) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at fair provisional values	345
Goodwill	2,251

6 Business combinations in 2018 and 2019 (continued)

6.6 Native Roll, Worki and Relap (continued)

Goodwill is not expected to be deductible for income tax purposes. Goodwill is mainly attributable to enhancement the Group's position on advertising and online recruitment markets and potential synergies with the Group's businesses.

Intangible assets mainly include software, trademark and customer base and are amortised over the period of 2 to 10 years.

The cash flows on acquisition were as follows:

Cash paid (included in cash flows from investing activities)	2,064
Cash acquired (included in cash flows from investing activities)	(86)
Net cash flow on acquisition	1,978

6.7 Swag Masha

On July 8, 2019 the Group acquired control over mobile games developer LLC "Swag Masha" ("Swag Masha") by increasing its share to 51% (16% in addition to 35% stake as of March 31, 2019) for a total cash consideration of RUR 79. The primary purpose of the acquisition of Swag Masha was to enhance the Group's position on mobile games market.

Provisional fair values of the identifiable assets and liabilities as at the date of acquisition were as follows:

	Provisional fair value
Intangible assets	273
Property and equipment	1
Trade accounts receivable	68
Other current assets	1
Cash and cash equivalents	33
Total assets	376
Trade accounts payable	140
Other payables, provisions and accrued expenses	1
Total liabilities	141
Total net assets	235

Goodwill on the transaction was calculated as the excess of:	
(a) The consideration transferred by the Group measured at fair values:	
[1] Cash paid	79
[2] The acquisition date fair value of the Group's previously held equity interest	170
Consideration transferred by the Group	249
(b) The amount of non-controlling interest in Swag Masha measured at the proportionate share of the identifiable net assets	115
Over	
(c) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at fair provisional values	235
Goodwill	129

Goodwill is mainly attributable to development of new games and potential synergy with the Group's business. Goodwill is not expected to be deductible for income tax purposes.

Intangible assets mainly include mobile games and are amortised over the period of 2 to 5 years.

The cash flows on acquisition were as follows:

Cash paid (included in cash flows from investing activities)	79
Cash acquired (included in cash flows from investing activities)	(33)
Net cash flow on acquisition	46

Notes to Consolidated Financial Statements (continued)

6 Business combinations in 2018 and 2019 (continued)

6.8 Skillbox

In December 2019 the Group acquired control in educational online platform LLC "Skillbox" ("Skillbox") by increasing its share to 60.3% (50% in addition to 10.3% stake as of February 14, 2019 that was accounted as financial asset at fair value through profit and loss) for a total cash consideration of RUR 1.6 bln. The primary purpose of the acquisition of Skillbox was to expand the Group's presence on the online education market by achieving substantial synergies with Geekbrains, the Group's online educational platform.

Provisional fair values of the identifiable assets and liabilities as at the date of acquisition were as follows:

	Provisional fair value
Property and equipment	26
Intangible assets	741
Trade accounts receivable	7
Prepaid expenses and advances to suppliers	46
Other current assets	1
Cash and cash equivalents	118
Total assets	939
Trade accounts payable	21
Deferred revenue and customer advances	603
Other payables, provisions and accrued expenses	53
Total liabilities	677
Total net assets	262

Goodwill on the transaction was calculated as the excess of:

(a) The consideration transferred by the Group measured at fair values:	
[1] Cash paid	1,602
[2] the acquisition date fair value of the Group's previously held equity interest measured at fair values	331
Consideration transferred by the Group	1,933
(b) The amount of non-controlling interest in Skillbox measured at the proportionate share of the identifiable net assets	104
Over	
(c) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at fair provisional values	262
Goodwill	1,775

Goodwill is mainly attributable to educational services and potential synergy with the Group's business. Goodwill is not expected to be deductible for income tax purposes.

Intangible assets mainly include software, trademark and customer base and are amortised over the period of 2 to 10 years.

The cash flows on acquisition were as follows:

Cash paid (included in cash flows from investing activities)	1,602
Cash acquired (included in cash flows from investing activities)	(118)
Net cash flow on acquisition	1,484

6.9 Aliexpress Russia Joint Venture

On October 8, 2019, the Group with Alibaba Group, MegaFon and RDIF completed formation of Aliexpress Russia Joint Venture (AER or AER JV).

The Group invested its Pandao e-commerce assets with fair value of RUR 1 bln and cash consideration in the amount of RUR 11.8 bln in exchange for a 15.01% stake in the AER JV (voting – 18%).

Cash consideration in the amount of RUR 11.8 bln is comprised of RUR 6.5 bln paid on October 8, 2019 and the rest of the amount to be contributed by October 2020.

Alibaba Group invested cash in the amount of RUR 6.5 bln and contributed its AliExpress Russia business in exchange for a 55.7% stake (voting – 49.9%), RDIF invested cash in the amount of RUR 6.5 bln in exchange for a 5% stake (voting – 1.2%) and MegaFon sold 9.97% economic stake in Mail.ru Group to Alibaba Group in exchange for a 24.3% stake (voting – 30.2%) in the AER JV.

6 Business combinations in 2018 and 2019 (continued)

6.9 Aliexpress Russia Joint Venture (continued)

All parties contractually agreed sharing of control over AER based on the unanimous consent of the parties over decisions related to AER JV's relevant activities.

The Group recognizes this investment as a joint venture and has accounted for it under the equity method.

The calculation of the gain on joint venture formation at the date of formation (October 8, 2019) is presented in the table below:

Fair value of 15.01% retained interest in joint venture adjusted for gain related to the Group's interest	12,692
Carrying value of net assets disposed	(32)
Cash consideration	(11,799)
Gain on joint venture formation (related to disposal of Pandao)	861

Provisional fair values of the identifiable assets and liabilities as at the date of acquisition were as follows:

	Provisional fair value as of October 8, 2019
Intangible assets	44,237
Property and equipment	825
Other non-current assets	346
Inventories	1,075
Trade accounts receivable	12,196
Other current assets	41
Cash and cash equivalents	13,170
Total assets	71,890
Deferred tax liabilities	8,787
Trade accounts payable	969
Other payables, provisions and accrued expenses	96
Total liabilities	9,852
Total net assets	62,038
Group's effective share in equity – 15.01%	9,314
Goodwill on the transaction was calculated as the excess of:	
(a) Fair value of 15.01% retained interest in joint venture adjusted for gain related to the Group's interest	12,692
Over	
(b) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at fair provisional values	9,314
Goodwill	3,378

Goodwill in the amount in RUR 3.3 bln is included in the carrying amount of the AER JV investment.

Intangible assets mainly include trademark and customer base and are amortised over the period of 3 to 8 years.

6.10 O2O Joint Venture

In July 2019, the Group and Sberbank entered into an agreement for the investment into a new O2O group (O2O or O2O JV) focused on digital technologies for food and transportation markets. As of December 18, 2019 all the necessary corporate governance and regulatory approvals, including the approval from Federal Antimonopoly Service, had been received so the formation of a partnership was completed.

The Group contributed its stakes in Delivery Club (100%) and Citymobil (29.67%) as well as cash consideration of RUR 8.5 bln and contingent consideration in the amount of RUB 4.6 bln depending on the achievement of a number of KPIs by contributed businesses by November 2020 and other contingent consideration in amount of RUR 0.8 bln.

Sberbank contributed cash in the amount of RUR 39.7 bln (used by O2O JV to acquire additional 5.8% stake in Citymobil and 100% stake in Foodplex) and contingent consideration in the amount of RUB 13 bln depending on the achievement of a number of KPIs by contributed businesses by November 2020.

The parties have equal 50% stakes in the O2O JV, with up to 10% of shares to be potentially allocated for the long-term motivation program to incentivize O2O platform's employees.

6 Business combinations in 2018 and 2019 (continued)

6.10 O2O Joint Venture (continued)

The Group recognizes this investment as a joint venture and has accounted for it under the equity method.

The calculation of the gain on joint venture formation at the date of formation (December 18, 2019) is presented in the table below:

Fair value of 50% retained interest in joint venture adjusted for gain related to the Group's interest	37,019
Cash consideration	(8,447)
Carrying value of net assets disposed	(8,177)
Contingent consideration payable at fair value	(5,401)
Gain on joint venture formation (related to disposal of Delivery Club and carrying amount of Citymobil)	14,994

Provisional fair values of the identifiable assets and liabilities as at the date of acquisition were as follows:

	Provisional fair value as of December 18, 2019
Investments in associates	559
Right-of-use assets	1,698
Intangible assets	18,084
Property and equipment	153
Deferred income tax assets	447
Other non-current assets	454
Trade accounts receivable	963
Other current assets, *including consideration receivable of RUR 17.6 bln*	19,000
Cash and cash equivalents	44,456
Total assets	85,814
Other non-current liabilities	235
Trade accounts payable	3,149
Lease liabilities	1,440
Other payables, provisions and accrued expenses	21,011
Total liabilities	25,835
Total net assets	59,979
Group's effective share in equity – 50% (effective share in equity adjusted by NCI – 48.6%)	29,148
Goodwill on the transaction was calculated as the excess of:	
(a) Fair value of 50% retained interest in joint venture adjusted for gain related to the Group's interest	37,019
Over	
(b) The net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured at fair provisional values	29,148
Goodwill	7,871

Goodwill in the amount in RUR 7.8 bln is included in the carrying amount of O2O JV investment.

Intangible assets mainly include trademark and customer base and are amortised over the period of 3 to 10 years.

7 Intangible assets

	Goodwill	Trademark	Customer base	Game software and software development costs	Other software, licenses and other	Total
Cost						
At January 1, 2018	133,038	14,844	22,063	13,299	5,292	188,536
Additions	–	13	–	1,407	950	2,370
Disposals	–	–	–	(93)	(1)	(94)
Additions due to acquisition of subsidiaries (Note 6)	7,780	265	253	1,041	255	9,594
Disposal due to disposal of subsidiaries	(372)	(18)	(17)	–	(54)	(461)
Translation adjustment	–	1	–	739	86	826
At December 31, 2018	140,446	15,105	22,299	16,393	6,528	200,771
Additions	–	817	–	620	3,316	4,753
Disposals	–	(1)	–	(4,955)	(36)	(4,992)
Additions due to acquisition of subsidiaries (Note 6)	11,398	692	147	922	935	14,094
Impairment	–	–	–	(59)	–	(59)
Assets held for sale	(11,179)	(1,116)	(585)	–	(538)	(13,418)
Translation adjustment	–	(81)	–	(534)	(83)	(698)
At December 31, 2019	140,665	15,416	21,861	12,387	10,122	200,451
Accumulated amortisation and impairment						
At January 1, 2018	–	(7,064)	(11,846)	(8,282)	(3,264)	(30,456)
Charge for the year	–	(1,476)	(3,022)	(945)	(1,524)	(6,967)
Disposals	–	–	–	3	(1)	2
Disposal due to disposal of subsidiaries (Note 6)	–	–	–	–	33	33
Impairment	–	–	–	(1,711)	–	(1,711)
Translation adjustment	–	–	–	(442)	(25)	(467)
At December 31, 2018	–	(8,540)	(14,868)	(11,377)	(4,781)	(39,566)
Charge for the year	–	(1,153)	(1,479)	(967)	(2,245)	(5,844)
Disposals	–	221	124	4,573	115	5,033
Impairment	–	–	–	(630)	(29)	(659)
Assets held for sale	–	78	74	–	165	317
Translation adjustment	–	4	–	399	56	459
At December 31, 2019	–	(9,390)	(16,149)	(8,002)	(6,719)	(40,260)
Net book value						
At January 1, 2018	133,038	7,780	10,217	5,017	2,028	158,080
At December 31, 2018	140,446	6,565	7,431	5,016	1,747	161,205
At December 31, 2019	140,665	6,026	5,712	4,385	3,403	160,191

Because of the significant downward revision of the forecasted cash inflows of the game Skyforge in Q2 2019, the Group fully impaired the game, recording an impairment charge of RUR 630. The impairment entirely belongs to the Games operating segment.

Game software and development costs consist of internally and externally developed and acquired software for online games in use and in process of development.

Games represent separable CGUs and the analysis of impairment was performed at the level of each game, where either impairment was previously recognised or current operating performance was below the original forecasts. The analysis included the comparison of the value in use determined based on discounted future cash flows to the carrying amount. The value in use calculation uses cash flow projections from financial budgets approved by senior management covering a period limited to the useful life of the respective game, ranging from 6 to 8 years.

Determining value in use requires the exercise of significant judgment, including judgment about appropriate discount rates, remaining useful life, the amount and timing of expected future cash flows. The cash flows employed in the DCF analysis are based on the Group's most recent budget and, for years beyond the budget, the Group's estimates, which are based on assumed growth rates. The discount rates used in the DCF analysis are intended to reflect the risks inherent in the future cash flows of the respective cash generating units. The pre-tax discount rates used in the DCF models as of December 31, 2019 was 21.4% (2018: 20.6%).

The calculation of value in use is most sensitive to the following assumptions:

- Russian online entertainment market growth rates;
- The Group's market share;
- Games operating performance and net profit margins;
- Discount rates.

8 Property and equipment

	Servers and computers	Leasehold improvements	Furniture, office equipment and motor vehicles	Assets under construction	Other property and equipment	Total
Cost						
At January 1, 2018	10,224	516	263	582	798	12,383
Additions	–	–	–	4,657	(1)	4,656
Transfers	3,228	135	76	(3,747)	308	0
Disposals	(364)	–	(6)	–	(6)	(376)
Assets held for sale	(32)	–	–	–	–	(32)
Additions due to acquisition of subsidiaries (Note 6)	32	434	68	41	73	648
Disposal due to disposal of subsidiaries	(1)	–	(1)	–	–	(2)
Translation adjustment	59	–	2	–	2	63
At December 31, 2018	13,146	1,085	402	1,533	1,174	17,340
Additions	111	–	–	4,653	–	4,764
Transfers	3,520	1	91	(3,751)	139	–
Disposals	(247)	–	(1)	(35)	(7)	(290)
Assets held for sale	(35)	(484)	(74)	(14)	(111)	(718)
Additions due to acquisition of subsidiaries (Note 6)	20	–	–	4	12	36
Translation adjustment	(53)	–	(10)	(9)	(1)	(73)
At December 31, 2019	16,462	602	408	2,381	1,206	21,059
Accumulated depreciation and impairment						
At January 1, 2018	(6,980)	(274)	(164)	–	(474)	(7,892)
Charge for the year	(2,278)	(253)	(38)	–	(129)	(2,698)
Disposals	358	–	2	–	–	360
Translation adjustment	(51)	(1)	(7)	–	(1)	(60)
At December 31, 2018	(8,951)	(528)	(207)	–	(604)	(10,290)
Charge for the year	(2,763)	(117)	(53)	–	(135)	(3,068)
Disposals	270	–	1	–	–	271
Assets held for sale	15	268	1	–	14	298
Translation adjustment	51	1	8	–	–	60
At December 31, 2019	(11,378)	(376)	(250)	–	(725)	(12,729)
Net book value						
At January 1, 2018	3,244	242	99	582	324	4,491
At December 31, 2018	4,195	557	195	1,533	570	7,050
At December 31, 2019	5,084	226	158	2,381	481	8,330

Notes to Consolidated Financial Statements (continued)

9 Consolidated subsidiaries

These consolidated financial statements include the assets, liabilities and financial results of the Company and its subsidiaries, whose main activity is providing Russian-language Internet services. The significant subsidiaries as at December 31, 2019 and 2018 are listed below:

Subsidiary	Main activity	Ownership,%* December 31, 2019	Ownership,%* December 31, 2018
Mail Coöperatief UA (Netherlands)	Holding entity	100.0%	100.0%
MRGroup Investments Limited (Cyprus)	Holding entity	100.0%	100.0%
Mail.Ru, LLC (Russia)	Online portal services, development and support of online games, social network	100.0%	100.0%
NBSCI Money.Mail.Ru, LLC (Russia)	Internet payment system	100.0%	100.0%
Mail.Ru Development LLC	Reserch and development of online products	100.0%	100.0%
MGL MY.COM (CYPRUS) LIMITED (renamed from Benstar limited)	Support of online games	100.0%	100.0%
Mail.Ru Group LLC (renamed from Internet company Mail.Ru LLC)	Holding company	100.0%	100.0%
Data Centre M100 LLC (Russia)	Hosting services	100.0%	100.0%
My.com B.V. (Netherlands)	Support of online games and portal services	100.0%	100.0%
Mail.ru Internet Holdings B.V. (Netherlands)	Holding company	100.0%	100.0%
Mail.ru Aggregates B.V. (Netherlands)	Holding company	100.0%	100.0%
Mail.ru Holdings B.V. (Netherlands)	Holding company	100.0%	100.0%
V kontakte LLC (Russia)	Social network	100.0%	100.0%
Pixonic LLC (Russia)	Reserch and development of online products	100.0%	100.0%
Pixonic Games Limited (Cyprus)	Online games operation	100.0%	100.0%
Delivery Club LLC (Russia)**	Food delivery	–	100.0%

* The ownership percentages above represent the Company's effective indirect ownership in each subsidiary. There are no differences between economic and voting rigths which the Group holds in subsidiaries.

** the Group lost control over the subsidiary due to the formation of JV. For details please refer to Note 6.10

10 Investments in equity accounted associates and joint ventures

The Group has investments in associates operating popular Internet websites and providing various services over the Internet. Also since 2019 the Group entered into new joint ventures. For details please refer to Note 6.

Investments in equity accounted associates and joint ventures at December 31, 2019 and 2018 comprised the following:

	Main activity	Voting shares December 31, 2019	Voting shares December 31, 2018	Carrying value December 31, 2019	Carrying value December 31, 2018
Joint ventures					
Aliexpress Russia Holding Pte. Ltd.	Cross-border marketplace	18%	0%	12,021	–
O2O Holding LLC	Russia's leading platform in mobility and food-tech	50%	0%	36,517	–
Associates					
Inplat Holdings Limited (Cyprus)	Operation of electronic online payment systems	17.76%	17.76%	581	573
Haslop Company Limited (Cyprus) and Russian subsidiaries (collectively, "Mamba")	Provides content for www.love.mail.ru, a vertical of the www.mail.ru portal operated by a subsidiary of Mail.Ru Internet NV	31.19%	31.19%	493	393
Salerton Investment Limited (Cyprus) (Note 6.1)	The company holds music library rights	100%*	20%	–	1,730
Others				222	120
Total				49,834	2,816

* the Group obtained control over Salerton Investment Limited (UMA) (see Note 6.1)

The above entities have the same reporting date as the Company. None of the entities were listed on a public exchange as of December 31, 2019.

The tables below illustrate the summarized financial information of the Group's significant equity accounted investments and joint ventures in:

10 Investments in equity accounted associates and joint ventures (continued)

10.1 Investments in associates

a) Inplat Holdings Limited

	December 31, 2019	December 31, 2018
Current assets	287	237
Non-current assets	86	72
Current liabilities	(99)	(84)
Equity	274	225
Group's share in equity – 17.76% (2018: 17.76%)	48	40
Goodwill	533	533
Group's carrying amount of the investment	581	573

	2019	2018
Revenue	938	1,050
Cost of sales	(801	(843
Administrative expenses	(75)	(54)
Finance and other costs	(1)	(8)
Profit before tax	61	145
Income tax expense	(17)	(19)
Profit for the year	44	126
Group's share of profit for the year	8	22

b) Haslop Company Limited

	December 31, 2019	December 31, 2018
Current assets	174	294
Non-current assets	32	17
Current liabilities	(116)	(205)
Equity	90	106
Group's share in equity – 31.19% (2018: 31.19%)	28	33
Goodwill	360	360
Reversal of impairment	105	–
Group's carrying amount of the investment	493	393

	2019	2018
Revenue	954	865
Cost of sales	(474)	(470)
Administrative expenses	(192)	(84)
Finance and other costs	(10)	–
Profit before tax	278	311
Income tax expense	(66)	(56)
Profit for the year	212	255
Group's share of profit for the year	66	80

10 Investments in equity accounted associates and joint ventures (continued)

10.2 Interest in joint ventures

c) O2O Holding LLC

	Provisional values as of December 31, 2019
Current assets, *including cash and cash equivalents of RUR 30 bln and consideration receivable of RUR 17.6 bln*	49,872
Non-current assets, *including intangible assets of RUR 18 bln, right-of-use assets of RUR 1.6 bln and deferred tax assets of RUR 635*	21,473
Current liabilities, *including trade accounts payable and advances received of RUR 3 bln, deferred consideration of RUR 5 bln and lease liability of RUR 1.4 bln*	(12,193)
Non-current liabilities	(210)
Equity	58,942
Group's share in equity – 50% (effective share in equity adjusted by NCI – 48.6%)	28,646
Net profit on acquisition	7,871
Group's carrying amount of the investment	36,517

	December 2019
Revenue	459
Cost of sales	(296)
Administrative expenses, *including depreciation and amortization of RUR 115*	(1,289)
Finance and other income/expenses, *including net interest expense of RUR 13*	(29)
Loss before tax	(1,155)
Income tax benefit	96
Loss for the period	(1,059)
Non-controlling interest share	(56)
Group's share of loss for the period	(501)

d) Aliexpress Russia Holding Pte Limited

	December 31, 2019
Current assets, *including cash and cash equivalents of RUR 18 bln and trade accounts receivable of RUR 8 bln*	28,417
Non-current assets, *including intangible assets of RUR 43 bln*	45,717
Current liabilities, *including trade accounts payable of RUR 7 bln*	(8,421)
Non-current liabilities, *including deferred tax liability of RUR 8 bln*	(8,140)
Equity	57,573
Group's share in equity – 15.01%	8,643
Goodwill	3,378
Group's carrying amount of the investment	12,021

	October-December 2019
Revenue	6,428
Cost of sales	(5,780)
Marketing expenses	(2,158)
Administrative expenses, *including depreciation and amortization of RUR 1 bln*	(1,712)
Finance and other costs	(1,243)
Loss before tax	(4,465)
Income tax expense	–
Loss for the period	(4,465)
Group's share of loss for the period	(670)

10 Investments in equity accounted associates and joint ventures (continued)

10.2 Interest in joint ventures (continued)

Movement in investments in equity accounted associates and joint ventures for the years ended December 31, 2019 and 2018 is presented below:

	2019	2018
Investments in equity accounted associates and joint ventures at January 1	2,816	1,013
Acquisition of shares in equity accounted associates	3,749	2,377
Acquisition of shares in equity accounted joint ventures (Note 6.9, 6.10)	49,711	–
Disposal of associate due to formation of joint ventures	(2,998)	–
Reversal of impairment/(impairment) of equity accounted associates and joint ventures	60	(37)
Acquisition of control over strategic associates	(1,742)	–
Share in net profits of equity accounted associates and joint ventures	(1,691)	(497)
Dividends from equity accounted associates and joint ventures	(71)	(40)
Investments in equity accounted associates and joint ventures at December 31	49,834	2,816

11 Impairment testing of goodwill

The table below shows movements in goodwill per groups of CGUs, corresponding to the Group`s operating segments for each of the years ended December 31, 2019 and 2018:

	Email, Portal and IM	Social Networks	Online Games	Search	E-commerce	Vkontakte	Pixonic	DeliveryClub	ESforce	Skillbox	Others	Total
Cost at January 1, 2018	8,192	18,474	1,952	2,496	462	93,691	1,592	6,179	–	–	–	133,038
Additions	–	–	210	–	1,720	–	–	–	5,372	–	478	7,780
Disposal	–	–	–	–	–	–	–	–	(372)	–	–	(372)
Cost at December 31, 2018	8,192	18,474	2,162	2,496	2,182	93,691	1,592	6,179	5,000	–	478	140,446
Additions	–	2,515	754	–	1,565	4,103	–	–	–	1,775	686	11,398
Assets held for sale	–	–	–	–	–	–	–	(6,179)	(5,000)	–	–	(11,179)
Cost at December 31, 2019	8,192	20,989	2,916	2,496	3,747	97,794	1,592	–	–	1,775	1,164	140,665

The recoverable amount of goodwill has been determined based on value in use calculations as of December 31, 2019 and 2018.

Goodwill related to Delivery Club in the amount of RUR 6,179 was reclassified into assets held for sale as of June 30, 2019 and subsequently disposed of as a result of O2O JV formation. For details please refer to Note 6.10.

Goodwill related to ESforce in the amount of RUR 5,000 was reclassified into assets held for sale as of June 30, 2019 and subsesuently remeasured. For details please refer to Note 6.2.

Value in use

At December 31, 2019, value in use was determined using cash flow projections from financial budgets and forecasts approved by senior management covering a seven to nine-year periods. The nine-year period was taken as the basis because the Group expects that the growth rates of the Russian Internet market will exceed the terminal growth rates in the four-year period following the first five years of forecast. The Group used the cash flow projections based on financial forecasts over a period longer than five years as it is confident that these projections are reliable and accurate.

The major assumptions used in the DCF models at December 31, 2018 are presented below:

	Email, Portal and IM	Social Networks	Online Games	Search	E-commerce	Vkontakte	Pixonic	DeliveryClub	ESforce
Terminal growth rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%	5.0%
Pre-tax discount rate	17.1%	17.2%	17.5%	17.0%	4.5%	16.9%	16.1%	15.4%	22.3%

The major assumptions used in the DCF models at December 31, 2019 are presented below:

	Email, Portal and IM	Social Networks	Online Games	Search	E-commerce and EdTech	Vkontakte	Pixonic	Skillbox
Terminal growth rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Pre-tax discount rate	16.8%	17.6%	16.8%	16.1%	18.7%	17.0%	16.1%	20.4%

11 Impairment testing of goodwill (continued)

Determining value in use requires the exercise of significant judgment, including judgment about appropriate discount rates, terminal growth rates, the amount and timing of expected future cash flows. The cash flows employed in the DCF analysis are based on the Group's most recent budget and, for years beyond the budget, the Group's estimates, which are based on assumed growth rates. The discount rates used in the DCF analysis are intended to reflect the risks inherent in the future cash flows of the respective cash generating units.

The calculation of value in use is most sensitive to the following assumptions:

- Revenue Compound annual growth rates ("CAGR");
- EBITDA margins;
- Growth rates used to extrapolate cash flows beyond the budget period including terminal growth rate in last year of projections; and
- Discount rates.

Reasonably possible changes in any key assumptions would not result in impairment of goodwill of any CGU. No impairment of goodwill was recognised in 2019 and 2018.

12 Trade accounts receivable

As of December 31, 2019 and 2018 trade receivables comprised the following:

	December 31, 2019	December 31, 2018
Trade accounts receivable, gross	12,728	10,273
Allowance for expected credit losses	(440)	(357)
Total trade receivables, net	12,288	9,916

The accounts receivable increased primarily due to growth of online advertising and MMO games revenue.

The movements in the allowance for expected credit losses of trade receivables were as follows:

Balance as of January 1, 2018	(300)
Charge for the year	(84)
Accounts receivable written off	27
Balance as of December 31, 2018	(357)
Charge for the year	(201)
Accounts receivable written off	118
Balance as of December 31, 2019	(440)

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar loss patterns and the likelihood of default over a given time horizon. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Set out below is the information about the credit risk exposure on the Group's trade and other receivables as of December 31, 2019 and 2018 using a provision matrix:

	Trade accounts receivable				
	Days past due				
	<90 days	90-180	180-360	>360	Total
As of December 31, 2019					
Expected credit loss rate	1.10%	11.50%	20.55%	75.51%	
Estimated total gross carrying amount at default	11,754	348	375	251	12,728
Expected credit loss	(129)	(40)	(77)	(194)	(440)

	Trade accounts receivable				
	Days past due				
	<90 days	90-180	180-360	>360	Total
As of December 31, 2018					
Expected credit loss rate	1.56%	12%	21%	75%	
Estimated total gross carrying amount at default	9,550	404	146	173	10,273
Expected credit loss	(149)	(49)	(30)	(129)	(357)

Notes to Consolidated Financial Statements (continued)

12 Trade accounts receivable (continued)

Trade receivables not impaired as of December 31, 2019 and 2018 are presented below:

		Ageing of receivables (days)	
	Total	<90	>90
As of December 31, 2019			
Trade accounts receivable	12,288	11,625	663
As of December 31, 2018			
Trade accounts receivable	9,916	9,401	515

The accounts receivable balances as of December 31, 2019 and 2018 mainly represented amounts due from online electronic payment systems and advertising customers.

The trade receivables are non-interest bearing and are generally settled in RUR on a 40-90 days basis. There is no requirement for collateral to receive credit.

Management considers that the carrying amount of the receivable balances approximated their fair value as of December 31, 2019 and 2018.

13 Cash and cash equivalents and short-term deposits

As of December 31, 2019 and 2018 cash and cash equivalents consisted of the following:

	Currency	December 31, 2019	December 31, 2018
Current accounts and cash on hand:	USD	917	1,468
	RUR	1,692	1,436
	EUR	1,501	977
	Other	3	3
Cash attributable to assets held for sale		(43)	–
Total current accounts and cash on hand		4,070	3,884
Deposit accounts with an original maturity of three months or less:	USD	680	834
	RUR	5,032	7,005
Total deposit accounts with an original maturity of three months or less		5,712	7,839
Total cash and cash equivalents and short-term deposits		9,782	11,723

14 Share capital

14.1 Charter capital and share issues

The charter capital of the Company consisted of 208,582,082 ordinary shares and 11,500,100 Class A shares with USD 0.000005 par value each as of December 31, 2019, while the number of authorised shares of the Company as of the same date consisted of 10,000,000,000 ordinary shares and 10,000,000,000 Class A shares. GDRs representing 126,979 shares of the Company were held in treasury by the Group as of December 31, 2019.

The charter capital of the Company consisted of 208,582,082 ordinary shares and 11,500,100 Class A shares with USD 0.000005 par value each as of December 31, 2018, while the number of authorised shares of the Company as of the same date consisted of 10,000,000,000 ordinary shares and 10,000,000,000 Class A shares. GDRs representing 157,371 shares of the Company were held in treasury by the Group as of December 31, 2018.

As of December 31, 2019 and 2018 all issued shares were fully paid.

Rights attached to the share classes as of December 31, 2019 and 2018

The Class A shares and the ordinary shares rank pari passu in all respects, but constitute separate classes of shares, i.e. each and every ordinary share and Class A share has the following rights:

(i) the right to an equal share in any dividend or other distribution paid by the Company to the holders of the shares, pari passu with all other Class A shares and ordinary shares; and, for the avoidance of doubt, any dividend or other distribution may only be declared and paid by the Company to the holders of the Class A shares and the ordinary shares together, and not to the holders of one of those classes of shares only;

(ii) the right to an equal share in the distribution of the surplus assets of the Company pari passu with all other ordinary shares and Class A shares upon the winding up of the Company.

Each Class A share has the right to twenty five votes and each ordinary share has the right to one vote at a meeting of members of the Company or on any resolution of members of the Company.

For additional details on the options over the shares of the Company outstanding as of December 31, 2019 and 2018, refer to Note 24.

Notes to Consolidated Financial Statements (continued)

14 Share capital (continued)

14.2 GDR buying programme

Starting 2011, the Trustee commenced a GDR buying programme in order to cover a part of the employee and director options. Under the GDR buying programme, the Trustee acquires GDRs representing shares of the Company and will subsequently transfer the GDRs to the respective option holders upon the exercise of the options. The Trustee intends to hold the GDRs to be used over the next seven years.

During 2019 the Trustee acquired a total of 572,437 GDRs on the market for an aggregate consideration of RUR 896. The Group accounts for GDRs repurchased as treasury shares.

In December 2018 an additional extension of the RSU 2017 Plan for 2,000,000 units and acquisition of required number of GDRs on the market were approved.

15 Other assets

The table below represents other non-current assets:

	December 31, 2019	December 31, 2018
Advances for royalties	–	1,176
Advance under office lease contract	115	398
Total other non-current assets	115	1,574

In a number of non-cash transactions, the Group disposed certain MMO games titles including advances for royalty of RUR 1,176 and obtained equity investment in Modern Pick with carrying value of RUR 551. The Group recognised gain of RUR 400 as a result of these transactions.

16 Other payables and accrued expenses

Other payables and accrued expenses consist of:

	December 31, 2019	December 31, 2018
Payables to personnel	2,482	2,140
Accrued vacations	1,314	1,046
Accrued professional consulting expenses	71	41
Contingent consideration liabilities (Note 6, Note 22)	5,472	1,997
Deferred consideration on formation of joint ventures (Note 6, Note 22)	5,076	–
Other current payables and provisions	933	386
Total other payables and accrued expenses	15,348	5,610

17 Revenue

The presentation and disclosure requirements in IFRS 15 are more detailed than under previous standard. As required for consolidated financial statements disaggregation of revenue from contracts with customers for the year ended December 31, 2019, based on the Group's segment reporting (Note 5) is presented below:

	Communications and Social	Games	New initiatives	Eliminations	Group
Revenue					
External revenue	50,313	30,551	6,206	–	87,070
Intersegment revenue	208	118	27	(353)	–
Total revenue	50,521	30,669	6,233	(353)	87,070
Services transferred at a point in time	40,969	4,299	4,242	(353)	49,157
Services transferred over time	9,552	26,370	1,991	–	37,913

Disaggregation of revenue from contracts with customers for the year ended December 31, 2018 based on the Group's segment reporting (Note 5) is presented below:

	Communications and Social	Games	New initiatives	Eliminations	Group
Revenue					
External revenue	43,575	24,841	2,748	–	71,164
Intersegment revenue	191	4	1	(196)	–
Total revenue	43,766	24,845	2,749	(196)	71,164
Services transferred at a point in time	35,562	2,119	1,920	(196)	39,405
Services transferred over time	8,204	22,726	829	–	31,759

18 Income tax

The business activity of the Group and its associates is subject to taxation in multiple jurisdictions, including:

The Russian Federation

The Group's subsidiaries and associates incorporated in the Russian Federation are subject to corporate income tax at the standard rate of 20% applied to their taxable income. Withholding tax of 15% is applied to any dividends paid out of Russia, reduced to as low as 5% for some countries (including Cyprus), with which Russia has double-tax treaties.

Cyprus

The Company and the Group's subsidiaries and associates incorporated or tax residents in Cyprus are subject to a 12.5% corporate income tax applied to their worldwide income. Capital gains derived from sale of securities are tax exempt (except for capital gains realised in connection with sale of shares in companies deriving their value or the greater part of their value from immovable property located in Cyprus). Dividend income is also tax exempt.

British Virgin Islands

The Company and its subsidiaries and associates incorporated in the British Virgin Islands are exempt from all taxes under the respective laws, unless they become tax residents in other jurisdictions.

United States of America

The Group's subsidiaries incorporated in the USA are subject to federal corporate income tax at standard rates of up to 35% applied to their taxable income.

The Netherlands

The Group's subsidiaries incorporated in the Netherlands are subject to corporate income tax at a standard rate of 25% applied to their taxable income. Dividend income and capital gains received by the Dutch subsidiaries are exempt from the corporate income (participation exemption).

The major components of income tax expense in the consolidated statement of comprehensive income are as follows:

	2019	2018
Current income tax expense	3,370	3,067
Deferred income tax expense/(benefit)	58	(2,521)
Total income tax expense	3,428	546

The reconciliation between tax expense and the product of accounting profit multiplied by domestic rates applicable to individual Group entities for the years ended December 31, 2019 and 2018 is as follows:

	2019	2018
Profit/(loss) before income tax expense	22,279	(7,517)
Tax at domestic rates applicable to individual group entities	(4,934)	1,103
Non-deductible expenses	(485)	(1,723)
Non-taxable foreign exchange and other gains	3,618	559
Adjustments in respect of current income tax of previous year	(119)	135
Effect of changes in tax rates	(393)	–
Tax accruals and penalties	(45)	(42)
Unrecognised deferred tax assets	(539)	(618)
Effect of reameasurement of assets held for sale	(565)	–
Other	34	40
Total income tax expense	(3,428)	(546)

The majority of our taxable profits as well as income tax expenses in 2019 and 2018 are generated in Russia. Pre-tax gains and losses in other jurisdictions in 2019 mostly relate to share based payment expenses, fair value revaluation, foreign exchange gains and losses, and other similar items which are generally non-taxable (non-deductible) in those jurisdictions. These items affect pre-tax profit, but do not have an influence on income tax expense, which has an effect on the blended tax rate.

18 Income tax (continued)

Deferred income tax assets and liabilities as of December 31, 2019 and 2018 are summarised below:

	Consolidated statement of financial position		Consolidated statement of comprehensive income	
	December 31, 2019	December 31, 2018	2019	2018
Deferred tax liabilities arising from:				
Intangible assets book basis in excess of tax basis	(2,634)	(3,002)	381	804
Basis of investment in associate in excess of tax basis	12	–	12	47
Unremitted earnings of subsidiaries	(10)	(7)	(4)	(6)
Other	(725)	(579)	(121)	(229)
Deferred tax liabilities netting	1,071	1,183	–	–
Related to assets held for sale	105	–	–	–
Total deferred tax liabilities	(2,181)	(2,405)	268	616
Deferred tax assets arising from:				
Tax credit carryforwards	735	1,733	1,423	698
Deferred compensation and accrued employee benefits	673	549	133	172
Accrued expenses	461	336	40	64
Revenue recognition	972	3,107	(1,965)	1,054
Unrealised intercompany profit	105	105	–	(56)
Other	204	146	43	(27)
Deferred tax assets netting	(1,071)	(1,183)	–	–
Related to assets held for sale	(305)	–	–	–
Total deferred tax assets	1,774	4,793	(326)	1,905
Net deferred tax assets/(liabilities)	(407)	2,388	(58)	2,521

The temporary differences associated with investments in subsidiaries for which a deferred tax liabilities have not been recognised, aggregate to RUR 79,968 (2018: RUR 79,659).

Changes in net deferred tax liabilities from January 1, 2018 to December 31, 2019 were as follows:

	2019	2018
Total deferred income tax liabilities, net at January 1	2,388	(216)
Translation reserve	(27)	86
Effect of disposal of subsidiary	(2,502)	–
Deferred tax (expense)/benefit	(29)	2,554
Effect of acquisition of subsidiaries (Note 6)	(72)	(36)
Assets held for sale	(165)	–
Total deferred income tax assets/(liabilities), net at December 31	(407)	2,388

19 EPS

19.1 Basic EPS

Basic EPS amounts are calculated by dividing earnings/loss for the year attributable to equity holders of the parent by the weighted average number of ordinary and Class A shares outstanding during the year.

	2019	2018
Net profit/(loss)attributable to equity holders of the Company	18,686	(7,991)
Weighted average number of ordinary and class A shares in issued and outstanding	216,694,354	213,798,296
Basic EPS (RUR per share)	86	(37)

19.2 Diluted EPS

Diluted EPS is calculated by adjusting the weighted average number of ordinary and Class A shares outstanding by the assumption of the conversion of all potential dilutive ordinary shares arising from share options and RSUs granted by the Company (collectively forming the denominator for computing the diluted EPS).

For share options and RSUs, a calculation is done to determine the number of shares that would have been issued assuming the exercise of the share options and RSUs. The above number is added to the denominator as an issue of ordinary shares for no consideration. Net profit/loss attributable to equity holders of the parent (numerator) is adjusted for the charge that would arise if equity settlement took place.

Notes to Consolidated Financial Statements (continued)

19 EPS (continued)

19.2 Diluted EPS (continued)

The calculation of diluted EPS is summarised in the table below:

	2019	2018
Net profit/(loss) attributable to equity holders of the Company	18,686	(7,991)
Adjustment for the gains from cash settled option	(111)	(82)
Adjusted net profit/(loss) attributable to equity holders of the Company	18,575	(8,073)
Weighted average number of ordinary and class A shares in issue and outstanding	216,694,354	213,798,296
Effect of equity-settled share based payments of the Company	2,466,961	2,844,785
Total diluted weighted average number of shares	219,161,315	216,643,081
Diluted EPS (RUR per share)	85	n/a

20 Commitments, contingencies and operating risks

20.1 Operating environment of the Group

Most of the Group's operations are in Russia. Russia continues economic reforms and development of its legal, tax and regulatory frameworks as required by a market economy. The future stability of the Russian economy is largely dependent upon these reforms and developments and the effectiveness of economic, financial and monetary measures undertaken by the government.

The Russian economy has been negatively impacted by sanctions imposed on Russia by a number of countries. The Rouble interest rates remained high. The combination of the above resulted in reduced access to capital, a higher cost of capital and uncertainty regarding economic growth, which could negatively affect the Group's future financial position, results of operations and business prospects. Management believes it is taking appropriate measures to support the sustainability of the Group's business in the current circumstances.

20.2 Taxation

Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant regional and federal authorities. Recent events within the Russian Federation suggest that the tax authorities are taking a more assertive position in their interpretation of the legislation and assessments and as a result, it is possible that transactions and activities that have not been challenged in the past may be challenged. As such, significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

Management estimates that possible exposure in relation to the aforementioned risks, as well as other profits tax and non-profits tax risks (e.g. imposition of additional VAT liabilities), that are more than remote, but for which no liability is required to be recognized under IFRS, could be few times as high as income tax payable and VAT and other taxes payable reflected in the statement of financial position at that date. This estimation is provided for the IFRS requirement for disclosure of possible taxes and should not be considered as an estimate of the Group's future tax liability.

20.3 Legal proceedings

The Group has been and continues to be the subject of legal proceedings and adjudications from time to time, none of which has had, individually or in the aggregate, a material adverse impact on the Group. Management believes that the resolution of all current and potential legal matters will not have a material adverse impact on the Group's financial position or operating results.

20.4 Managing Joint Ventures

To pursue our strategic development goals we entered into joint venture agreements with third parties in ecommerce and online-to-offline (O2O) segments. Failure to successfully develop new businesses and to operate those in a sustainable and efficient manner could cause us to face unanticipated liabilities and harm our overall financial results.

20.5 Private information

To become registered on a website operated by the Group, users have to input their personal data, which is then protected by the Group from access by third parties. Should such data become available to third parties as a result of hackers' attacks, the Group may become a party to litigation from its users. Management believes it takes all necessary steps to reduce the related risk to an acceptable level.

20 Commitments, contingencies and operating risks (continued)

20.6 Intellectual property rights

The Group may be subject to infringement claims from third parties in the future resulting from the technology and intellectual property used in the provision and marketing of its services. If the Group is found liable for infringement, it may be required to pay significant damages, and if it is unable to license or develop non-infringing technology on a timely basis, it may be unable to continue offering the affected services without risk of liability. Similarly, third parties may obtain and use the Group's intellectual property without authorisation. The validity, application, enforceability and scope of protection of intellectual property rights for many Internet-related activities are uncertain and still evolving, which may make it more difficult for the Group to protect its intellectual property and could have a material effect on its business, results of operations and financial condition. The Group has been subject to such proceedings. Although none of them was individually significant, similar potential claims may subject the Group to significant losses in the future, which currently cannot be reliably estimated.

20.7 Development

A failure to innovate, to provide popular products and services or to react quickly to changes in the market could affect the popularity of the Group's sites and, in turn, could affect the Group`s revenue. An inability to develop competitive products and services which are compatible with new mobile devices could result in a failure to capture a significant share of an increasingly important market.

20.8 Regulation

The Internet and its associated technologies are subject to government regulation. Substantial part of Group's business is subject to Russian laws.

On January 1, 2019 the Russian law on aggregators of goods and services came into force. Such law introduced obligations of aggregators to disclose certain information on the goods and services and on the seller of goods and the provider of services. The law determined liability of aggregators for causing damages to a buyer of goods or services by providing false information to the buyer.

On March 18, 2019 new law came into force banning publishing "fake news" and information showing "disrespect" to government bodies in mass media and internet. In March 2019 a law aimed at increasing Russian "sovereignty" over Russian internet has been adopted with effective date November 1, 2019 and certain provisions to come into force on January 1, 2021. The law seeks to create national system of routing web traffic and proposes building a national domain name system to allow the internet to continue functioning even if Russia is cut off from foreign infrastructure.

The Group is also subject to other various specific Russian laws, such as so called Anti-Piracy Law, Anti-extremism Law, Black List Law etc. Non-compliance with the applicable regulations could lead to penalties or blocking of non-compliant services. The Group complies with the existing and new laws in all material respect.

20.9 Personnel

As competition in Russia's internet industry increases, the Group's business and operations could be adversely affected by difficulties in hiring, motivating and retaining highly-skilled people. Competition for senior managers is high. One or more could join a competitor, or set-up a competing company, with the result that operations and profitability could be affected by a loss of strategic direction, users, know-how and additional staff.

20.10 Infrastructure and capacity

If the infrastructure in Russia were not able to support increased demand, the Group's services could be interrupted or the Group's systems damaged. A limited availability of third-party providers of network and server capacity could limit the Group's ability to offer certain services or to expand. Network or power failures could result in the loss of data and in a reduction in the number of users, which could have a material effect on the Group's business, results of operations and financial condition.

21 Balances and transactions with related parties

The following table provides the total amount of transactions, which have been entered into with related parties for the relevant financial year, excluding Directors and key management of the Group (see Notes 21.2 and 21.3). All related party transactions were made in accordance with contractual terms and conditions agreed between the parties. Other entities represents other than equity accounted associates (Note 3.18).

	Sales to related parties	Purchases from related parties	Amounts owed by related parties	Amounts owed to related parties
2019				
Equity accounted associates	1,212	208	795	202
Joint ventures	442	1	1,040	10,651
Other entities	705	1,313	629	15,050
2018				
Equity accouned associates	1,156	574	305	136
Joint ventures	–	–	–	–
Other entities	1,124	22	833	7

All related party transactions were made in accordance with contractual terms and conditions agreed between the parties.

21 Balances and transactions with related parties (continued)

21.1 The ultimate controlling party

Starting October 18, 2018, no single shareholder of JSC MF Technologies is entitled solely to nominate 5 directors to the Company's Board of Directors at its discretion. As such, starting from that date, the Group does not have an ultimate controlling party.

21.2 Directors of the Company

Total cash remuneration of the members of the Board of Directors (each a "Director" and collectively, "Directors") of the Company amounted to RUR 107 for the year ended December 31, 2019 (2018: RUR 144). In 2019 no RSUs or options over the shares of the Company were granted to Directors (2018: nil RSUs). During the year ended December 31, 2019, Directors did not forfeit any RSUs or options (2018: nil) and exercised 2,500 options (2018: 2,500). The corresponding share-based payment expense was a negative RUR 31 for year ended December 31, 2019 (2018: negative 49).

21.3 Key management of the Group

Total cash remuneration of the key management of the Group (excluding Directors) amounted to RUR 843 for the year ended December 31, 2019 (2018: 563). In addition to the cash remuneration for the year ended December 31, 2019, key executive employees of the Group were granted 1,280,000 RSUs out of 2017 RSU Plan (2018: 200,000). During the year ended December 31, 2019, key management of the Group (excluding Directors) did not forfeit any options (2018: nil) and exercised 1,268,750 RSU`s and options over shares of the Company (2018: 3,082,500). In Q4 2018 3,535,000 RSUs held by key management of the Company were accelerated. The corresponding share-based payment expense amounted to RUR 583 for year ended December 31, 2019 (2018: 3,405).

22 Financial instruments

The carrying amounts of the Group's financial instruments approximated their fair values as of December 31, 2019 and December 31, 2018 and are presented by category of financial instruments in the table below:

	Category*	December 31, 2019	December 31, 2018
Financial assets at fair value through profit and loss			
Non-current			
Financial investments in venture capital investees	FAFVPL	673	256
Derivative financial assets over the equity of investee	FAFVPL	110	92
Convertible loans	FAFVPL	452	1,167
Financial derivative under lease contract	FAFVPL	514	500
Current			
Derivative financial assets over the equity of investee	FAFVPL	3	2
Convertible loans	FAFVPL	87	1,070
Financial assets at amortised cost			
Trade accounts receivable	FAAC	12,288	9,916
Loans and interest receivable	FAAC	941	145
Cash and cash equivalents	FAAC	9,782	11,723
Total financial assets		24,850	24,871
Financial liabilities at fair value through profit and loss			
Current			
Contingent consideration liabilities (Note 6, Note 16)	FLFVPL	5,472	1,997
Financial liabilities at amortised cost		–	
Current			
Trade accounts payable, other payables and accrued expenses	FLAC	17,739	11,876
Short-term portion of long-term interest-bearing loans	FLAC	4,044	–
Short-term lease liabilities	FLAC	3,153	–
Non-current			
Long-term interest-bearing loans	FLAC	19,474	–
Non-current lease liabilities	FLAC	1,568	–
Total financial liabilities		51,450	13,873

* Financial instruments used by the Group are included in one of the following categories:

- FAFVPL – financial assets at fair value through profit or loss;
- FLFVPL – financial liabilities at fair value through profit or loss;
- FAAC – financial assets at amortised cost; or
- FLAC – financial liabilities at amortised cost.

22 Financial instruments (continued)

None of the Group's financial investees are public companies and none of the Group's financial instruments are traded in active markets. Accordingly, fair values of the Group's financial assets and liabilities at fair value through profit or loss are determined using valuation techniques, including discounted cash flow models, comparison to similar instruments for which observable market prices exist, option pricing models and other relevant valuation models. Such valuation techniques require management to make certain assumptions about model inputs, including credit risk and volatility.

Fair value of cash and cash equivalents, short-term time deposits, short-term accounts receivable, other current assets, trade accounts payable approximate their carrying amounts largely due to the short-term maturities of these instruments.

22.1 Financial assets at amortised cost

The Group classifies the following financial assets at amortised cost:

- The asset is held within a business model with the objective of collecting the contractual cash flows and the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding;
- Trade receivables;
- Cash and cash equivalents

Detailed information on short-term receivables, cash and cash equivalents and short-term time deposits is available in Notes 12 and 13.

22.2 Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

As at December 31, 2019 and 2018 the Group held the following financial instruments measured at fair value through profit or loss:

	December 31, 2019	Level 1	Level 2	Level 3
Financial assets measured at fair value through profit or loss				
Financial assets at fair value through profit or loss:				
Financial investments in venture capital investees	673	–	–	673
Convertible loans	539	–	–	539
Financial derivative under lease contract	514	–	–	514
Derivative financial assets over the equity of investee	113	–	–	113
Total financial assets at fair value through profit or loss	1,839	–	–	1,839
Total financial assets measured at fair value through profit or loss	1,839	–	–	1,839
Financial liabilities measured at fair value through profit or loss				
Contingent consideration liabilities	5,472	–	–	5,472
Total financial liabilities measured at fair value through profit or loss	5,472	–	–	5,472

22 Financial instruments (continued)

22.2 Fair value hierarchy (continued)

	December 31, 2018	Level 1	Level 2	Level 3
Financial assets measured at fair value through profit or loss				
Financial assets at fair value through profit or loss:				
Financial investments in venture capital investees	256	–	–	256
Convertible loans	2,237	–	–	2,237
Financial derivative under lease contract	500	–	–	500
Derivative financial assets over the equity of investee	94	–	–	94
Total financial assets at fair value through profit or loss	3,087	–	–	3,087
Total financial assets measured at fair value through profit or loss	3,087	–	–	3,087
Financial liabilities measured at fair value through profit or loss				
Contingent consideration liabilities	1,997	–	–	1,997
Total financial liabilities measured at fair value through profit or loss	1,997	–	–	1,997

The balance of Level 3 measurements as of January 1, 2019 is reconciled to the balance of those measurements as of December 31, 2019 as follows:

	Balance as of January 1, 2019	Gains/(losses) recognized in profit and loss	Foreign exchange gains/(losses)	Purchases/ settlement	Convertible loan execution	Recognition of deposit	Balance as of December 31, 2019
Financial assets measured at fair value through profit or loss							
Financial assets at fair value through profit or loss:							
Financial investments in venture capital investees	256	(139)	(29)	484	101	–	673
Derivative financial assets over the equity of investee	94	(90)	–	109	–	–	113
Convertible loans	2,237	(468)	–	1,508	(2,738)	–	539
Financial assets and derivatives under lease contracts	500	(245)	–	–	–	259	514
Total financial assets at fair value through profit or loss	3,087	(942)	(29)	2,101	(2,637)	259	1,839
Financial liability measured at fair value through profit or loss							
Financial liabilities at fair value through profit or loss – *contingent consideration liabilities*	(1,997)	45	132	(3,652)	–	–	(5,472)
Total financial liabilities measured at fair value through profit or loss	(1,997)	45	132	(3,652)	–	–	(5,472)

	Balance as of January 1, 2018	Gains/(losses) recognized in profit and loss	Foreign exchange gains/(losses)	Purchases	Acqusition of control in investees	Acquisition of significant influence in investee	Balance as of December 31, 2018
Financial assets measured at fair value through profit or loss							
Financial assets at fair value through profit or loss:							
Financial investments in venture capital investees	264	26	5	72	(111)	–	256
Derivative financial assets over the equity of investee	122	275	–	3	(11)	(295)	94
Convertible loans	–	(626)	–	3,006	–	(143)	2,237
Financial derivatives under lease and hosting contracts	150	350	–	–	–	–	500
Total financial assets at fair value through profit or loss	536	25	5	3,081	(122)	(438)	3,087
Financial liability measured at fair value through profit or loss							
Financial liabilities at fair value through profit or loss – *contingent consideration liabilities*	–	(515)	(257)	(1,225)	–	–	(1,997)
Total financial liabilities measured at fair value through profit or loss	–	(515)	(257)	(1,225)	–	–	(1,997)

22 Financial instruments (continued)

22.3 Interest-bearing loans

In 2019 the Group raised several loans in the total amount of RUR 23,500 (net of loan origination fees of RUR 117) for funding increasing M&A activity. All loans are unsecured. The loan agreements contain restrictive financial and non-financial covenants that the Group as the borrower is obliged to fulfil. Restrictive covenants include maintaining certain financial ratios. As of December 31, 2019 all restrictive covenants are met. The table below represents the major loans as of December 31, 2019:

	Original currency	Interest rate	Maturity date	Outstanding principal amount as of December 31,2019
Sberbank RUR 6.5 bln loan	RUR	7.5%	October 6, 2023	6,500
Sberbank RUR 8.5 bln loan	RUR	7.0%	December 7, 2023	8,500
Raiffeisen bank loan	RUR	9.0%	March 6, 2023	8,500

23 Financial risk management objectives and policies

23.1 Introduction

The Group's principal financial liabilities mainly comprise a contingent consideration liability and trade accounts payable. The main purposes of these financial liabilities are to finance the Group's operations and, in the case of the contingent consideration, a business acquisition. The Group has short-term receivables, short-term time deposits, cash and cash equivalents and other current financial assets that arise directly from the Group's operations.

The Group also has a venture capital investment portfolio consisting of equity investments in Internet start-ups and smaller Internet companies and derivative contracts over the equity of the Group's venture capital investees.

The Group also has a venture capital investment portfolio consisting of equity investments in Internet start-ups and smaller Internet companies and derivative contracts over the equity of the Group's venture capital investees.

The Group's senior management is responsible for identifying and controlling risks. These activities are supervised by the Board of Directors, the Group's governing body that is ultimately responsible for the Group's overall approach to risk management. The Board of Directors is developing risk management policies covering the following major aspects: identification and analysis of the risks the Group faces, setting appropriate risk limits and controls, and monitoring risks and adherence to limits. Risk management procedures and systems are contemplated to be reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and responsibilities.

The Group's Audit Committee has been established to oversee, inter alia, how management monitors compliance with the Group's risk management practices and procedures when these are approved by the Board of Directors.

23.2 Liquidity and financial resources

Liquidity risk is defined as the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Group monitors its risk of a shortage of funds using a liquidity planning tool. Management regularly monitors projected and actual cash flow information, analyzes the repayment schedules of the existing financial assets and liabilities and performs annual detailed budgeting procedures.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of operating cash flows, bank loans and overdrafts. Other financial liabilities of the Group are mostly represented by trade payables with maturity less than one year.

The contractual maturities of the Group's financial liabilities are presented below:

Year ended December 31, 2019	Less than 3 months	3 to 12 months	1 to 3 years	> 3 years	Total
Short-term and long-term interest-bearing loans and borrowings	708	3,336	14,526	4,948	23,518
Trade accounts payable	7,863	–	–	–	7,863
Current and non-current lease liabilities	966	2,403	1,608	291	5,268
Contingent consideration liabilities	–	5,472	–	–	5,472
Other payables, accrued expenses	4,800	5,076	–	–	9,876
Total financial liablities	14,337	16,287	16,134	5,239	51,997

Year ended December 31, 2018	Less than 3 months	3 to 12 months	1 to 3 years	> 3 years	Total
Trade accounts payable	8,263	–	–	–	8,263
Contingent consideration liabilities	–	1,997	–	–	1,997
Other payables, accrued expenses	3,613		–	–	3,613
Total financial liablities	11,876	1,997	–	–	13,873

23 Financial risk management objectives and policies (continued)

23.3 Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss.

Financial assets, which potentially subject the Company and its subsidiaries and associates to credit risk, consist principally of cash and cash equivalents, short-term time deposits, short-term receivables and convertible loans. The total of these account balances represents the Group's maximum exposure to credit risk.

The Group places its cash and cash equivalents with highly rated financial institutions, which are considered at the time of deposit to have minimal risk of default. The Group does not require collateral or other security to support the financial instruments subject to credit risk. Accounts receivable from the two largest customers collectively represented 12% of total trade accounts receivable of the Group as of December 31, 2019 and 12% as of December 31, 2018. No customer accounted for more than 10% of revenue in 2019 or 2018. The Group provides credit payment terms to its customers in accordance with market practices and based on thorough review of the customer's profile and creditworthiness. Although collection of receivables could be influenced by economic factors, management believes that there is no significant risk of loss beyond the allowance already recorded.

23.4 Capital management policy

For the purpose of the Group's capital management, capital includes issued capital, share premium and all other equity reserves attributable to the equity holders of the parent. The primary objective of the Group's capital management is to maximise the shareholder value. The Group manages its capital structure and makes adjustments in light of changes in economic conditions.

23.5 Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. The market risks the Group is exposed to comprise two types of risk: currency risk (Note 23.6) and equity risk. The Group's financial instruments affected by market risk include payables, cash and cash equivalents, short-term time deposits, financial investments in associates and derivative financial instruments. The Group's equity risk arises from uncertainties about future values of the investment into unlisted securities.

23.6 Foreign currency risk

The following table demonstrates the sensitivity to a reasonably possible change in USD and EUR exchange rate, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of monetary assets and liabilities. The Group's exposure to foreign currency changes for all other currencies is not material.

	Change in USD rate	(Negative)/Positive effect on profit before tax
2019	`+15%	(681)
	`-15%	681
2018	`+14%	(456)
	`-14%	456

	Change in EUR rate	(Negative)/Positive effect on profit before tax
2019	`+20%	397
	`-20%	(397)
2018	`+15%	12
	`-15%	(12)

24 Share-based payments

24.1 Share-based payment arrangements of the Company

24.1.1 Option plans

During 2019 and 2018, the Company had the following outstanding option plans:

	2010 Option Plan	2015 RSU Plan	2017 RSU Plan
Adoption date	November 2010	February 2015	November 2017
Type of shares	Ordinary shares	Ordinary shares	Ordinary shares
Number of options or RSU reserved	10,706,403	5,795,500	7,202,471
Exercise price	Granted: • prior December 31, 2011 – USD 19.60 • since December 31, 2011 – USD 17.50	Nil	Nil
Exercise basis	Prior to November 2011 – net share basis only Since November 2011 – net share basis or cash at the Group's discretion	Shares or cash at the Group's discretion	Shares or cash at the Group's discretion
Expiration date	December 2022	December 2022	December 2026
Vesting period	Generally 4 years	Generally 4 years	Generally 4 years
Other major terms	• The options are not transferable; • All other terms of the options under the 2010 Option Plan are to be determined by the Company's Board of Directors or Remuneration Committee.	• The RSUs are not transferable; • All other terms of the options under the 2015 RSU Plan are to be determined by the Company's Board of Directors or Remuneration Committee.	• The RSUs are not transferable; • Performance conditions • Immediate vesting due to change of ultimate controlling party. • All other terms of the options under the 2017 RSU Plan are to be determined by the Company's Board of Directors or Remuneration Committee.

24.1.2 Changes in outstanding options

The table below summarises the number and weighted average exercise prices (WAEP) of and movements in share options and RSUs in 2019 and 2018:

	Number of options/RSU	WAEP
Outstanding as of December 31, 2017	7,204,764	4.04
Exercisable as of December 31, 2017	2,464,597	11.01
Available for grant as of December 31, 2017	2,393,864	4.79
Granted during the year	1,352,293	5.05
Exercised during the year	3,796,842	1.68
Cancelled during the year	0	n/a
Forfeited during the year	110,200	6.75
Outstanding as of December 31, 2018	4,650,015	6.18
Exercisable as of December 31, 2018	3,586,139	5.94
Available for grant as of December 31, 2018	3,151,771	1.71
Granted during the year	2,938,000	1.07
Exercised during the year	1,839,423	0.65
Cancelled during the year	0	n/a
Forfeited during the year	201,250	8.48
Outstanding as of December 31, 2019	5,547,342	5.22
Exercisable as of December 31, 2019	1,598,622	13.58
Available for grant as of December 31, 2019	415,021	9.51

24 Share-based payments (continued)

24.1 Share-based payment arrangements of the Company (continued)

The weighted-average share price was USD 23.51 for options and RSUs exercised in 2019 and USD 27.59 for options and RSUs exercised in 2018

The range of exercise prices for options and RSUs outstanding as of December 31, 2019 and 2018 is presented in the table below:

Exercise price	December 31, 2019	December 31, 2018
–	3,982,670	3,101,093
17.5	808,917	782,167
19.6	755,755	766,755

24.1.3 Valuations of share-based payments

The valuations of all equity-settled options and RSUs granted during 2018 and 2019 are summarised in the table below:

Option plan/Grant date	Number of options	Share price (USD)	Fair value, total (million RUR)	Fair value per option (RUR)
2011 Option Plan/ 2018	390,000	21.54-27.96	353	905
2017 RSU Plan / 2018	962,293	22.38-35.54	1,676	1,742
2011 Option Plan/ 2019	180,000	22.20-23.70	102	568
2017 RSU Plan / 2019	2,758,000	19.01-26.26	4,389	1,591

The valuations of all cash-settled options as of December 31, 2019 are summarised in the table below:

Number of options	Dividend yield %	Volatility, %	Risk-free interest rate, %	Expected term, years	Share price (USD)	Fair value, total (million RUR)	Fair value per option (RUR)	Valuation method
435,980	0%	33%	1.67%	N/A	22.30	185	423	Binomial

The forfeiture rate used for expenses calculation in 2019 is 0.1-16.0%. It is based on historical data and current expectations and is not necessarily indicative of forfeiture patterns that may occur.

The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options/RSUs is indicative of future trends, which may not necessarily be the actual outcome.

24.2 Share-based payment expense

The Group recognised RUR 1,742 in share-based payment expenses in the year ended December 31, 2019 (2018: RUR 6,732), including RUR 1,826 (2018: 6,918) related to equity-settled share-based payments and negative change related to cash-settled portion of RUR 84 (2018: negative 186). The expense was included under “Personnel expenses” in the consolidated statement of comprehensive income. According to the terms of 2017 RSU Plan the change of control results in immediate acceleration of related RSUs. The total expense related to such acceleration recognized in Q4 2018 is RUR 3.7 bln (3,166,250 RSUs).

25 Events after the reporting period

There were no events after the reporting period to be separately reported.

cautionary statements

Forward-looking statements

The Mail.ru Group Limited Annual Report and Accounts for 2019 contain certain "forward- looking statements" which include all statements other than those of historical facts that relate to the Group's plans, financial position, objectives, goals, strategies, future operations and performance, together with the assumptions underlying such matters. Mail.ru Group Limited generally uses words such as "estimates", "expects", "believes", "intends", "plans", "may", "will", "should" and other similar expressions to identify forward-looking statements. Mail.ru Group Limited has based these forward-looking statements on the current views of its management with regard to future events and performance. These views reflect management's best judgement, but involve uncertainties and are subject to certain known and unknown risks together with other important factors outside the Group's control, the occurrence of which could cause actual results to differ materially from those expressed in Mail.ru Group Limited's forward-looking statements.

Competitive position

Statements referring to the Group's competitive position reflect the Group's beliefs and, in some cases, rely on a range of sources, including investment analysts' reports, independent market studies and the Group's internal estimates of market share based on publicly available information regarding the financial results and performance of various market participants.

Rounding

Certain figures included in this document have been subject to rounding adjustments. Accordingly, figures shown for the same category presented in different tables may vary slightly and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures that precede them.

Terminology

In this document, a reference to the "Company" means Mail.ru Group Limited, which together with its subsidiaries is referred to as "we", the "Group" or "Mail.ru Group". Any reference to the position of Boris Dobrodeev as Chief Executive Officer (CEO) means reference to his position as Chief Executive Officer (CEO), Russia. Any reference to the position of Vladimir Nikolsky as Chief Operating Officer (COO) means reference to his position as Chief Operating Officer (COO), Russia. Any reference to the position of Vladimir Gabrielyan as First Deputy Chief Executive Officer means reference to his position as First Deputy Chief Executive Officer, Russia.

see you soon

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