

ECOSYSTEM TRANSFORMATION OVERVIEW

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MTS GROUP IN 2021

534

billion RUB

Revenue of MTS Group

8.8

million

Ecosystem customers

229

billion RUB

OIBDA of the Group

+72%

increase in registered
users of MTS Cashback
service by 2020

206

billion RUB

Issuing loans
to individuals

>51%

contribution of non-
telecom areas to the
Group's revenue growth

80.4
million

**Mobile business
customer base
in Russia**

8.4
million

Pay TV users

1/3

**new subscribers —
choosing MTS
convergent offers**

Nº 1

**Leader in mobile business
customer base in all
countries of operation**

Nº 1

**By BBA subscriber base
growth rate**

2x

**multiple growth of MTS
Premium paid subscription
users**

/ MTS ECOSYSTEM VERTICALS AND POSITION IN THE RUSSIAN MARKET



Key markets by verticals

Telecom

The largest mobile operator in Russia and a dynamically developing ecosystem.

- > 80%+ of the population of the Russian Federation are in the LTE coverage area
- > A total of 3 million sq. km covered by 2G/3G/4G networks
- > 25+ pilot zones of 5G networks deployed in 10+ regions of the Russian Federation
- > 35% of active base stations are 5G-ready
- > Growth in the IoT connections amount exceeded 30%
- > Coverage in 83 Russian regions supports NB-IoT
- > In terms of market share of fixed-line services, MTS is second only to Rostelecom (MTS share is 11%)

FinTech

MTS Bank is a fast-growing digital bank focused on developing its own mobile apps as a communication channel or breakthrough financial services.

The MTS FinTech vertical includes the areas of MTS Bank, mobile commerce, insurance, factoring and credit broker.

- > MTS Bank is a dynamically developing digital bank forming a part of the MTS ecosystem
- > The main strategic focus segment is retail lending, e-banking
- > In 2021, almost 12 million users used the Bank's products, of which 25% are clients of MTS Bank
- > The share of online services for the Bank's main products (lending to individuals and servicing credit cards) exceeded 60% in 2021

- > The MTS Bank Big Data capabilities allow using advanced credit scoring models to control risks, while keeping the share of bad loans within 10%

Media

Leading video streaming service (KION) and entertainment content provider MTS Media produces and distributes its own and licensed VOD and TV content via cable/IPTV, satellite channels and OTT platforms.

Priority areas for MTS Media development:

- > Developing the KION streaming platform — deep integration into the MTS ecosystem, improving the quality of the content offered through high-quality own content and exclusive partner content
- > Subscriber base growth in the OTT and IPTV segments at a faster pace than the market
- > Using Big Data toolkit to improve the customized interface convenience and the quality of TV content recommendations and, as a result, to improve the subscriber's lifetime value

Retail

All-Russian consumer electronics retail chain (B&M + e-commerce) with a long-term strategy for sustainable rate of return. The largest telecom retailer in the Russian Federation (in sales of mobile phones). A strong brand built on trust and goodwill.

Vectors of the MTS retail chain strategic development:

- > 100% omnichannel approach
- > Delivery services
- > MTS ecosystem entry point
- > Expansion of the product range

- > Expansion of financial services (+online)
- > Introduction of the best industry practices

Entertainment

MTS Entertainment is a division within the MTS Group responsible for asset management and development of the Company's entertainment projects. The management perimeter of MTS Entertainment included ticket services Ticketland and MTS Live.

In 2021, sales at MTS ticket windows grew by 84.5% year-on-year. The total number of tickets sold was 3.5 million.

Partnerships have been signed with major theaters and the MTS Live Hall in Yekaterinburg, the opening of the MTS Live Arena in Moscow and the launch of a network of its own concert venues in key regions are planned, investments have been made in our own productions and musicals. The hall and bar in the Moscow Youth Palace (Moscow) were rebranded.

MTS Live customers get access to all the benefits of the MTS ecosystem: from convenient authorization using MTS Login or easy payment for MTS Pay in a mobile application to special MTS Premium subscription offers and the ability to accumulate or write off MTS Cashback program points.

MTS Marketer

MTS Marketer is a service for independent targeted messaging and Internet advertising launch. The service is based on MTS Big Data: depersonalized data about the operator's subscribers, which allow displaying advertising only to the audience that is most likely to be interested in the services or goods advertised.

2021 key MTS Marketer business results:

- > Revenue growth amounted to +89%
- > Growth in the volume of implemented advertising campaigns amounted to +211% year-on-year
- > 3.7 thousand — customer base with at least one advertising campaign launched
- > The Digital revenue share of MTS Marketer reached 40%

MTS Belarus

In Belarus, the 2021 revenue indicator reached BYN 1,357 million (an increase of 11.0% by 2020) mainly due to the growth of income from communication services and income from the sale of phones and accessories. OIBDA grew by 8.4%, reaching BYN 694 million in 2021. The main growth driver of the indicator is income from communication services. The subscriber base remained largely unchanged at the level of 5.7 million users at year-end 2021.

The principal development vectors are as follows:

- > Optimized 4G investment pending 5G solution
- > Continuing the strategy of maintaining leadership in the mobile business while strengthening the No. 1 position in retail
- > Continued Cloud area development, as well as strengthening of the IoT and digital products (BATC, MAAS, Big Data) area
- > Continued development of the products forming the ecosystem basis: My MTS, FinTech, Online cinema

MTS Armenia

In Armenia, 2021 revenue reached AMD 49.0 billion (an increase of 0.9% compared to 2020), which is mainly due to revenue from providing communication services. The OIBDA indicator for 2021 reached AMD 25.8 billion (an increase of 3.5% compared to 2020). The subscriber base volume at year-end 2021 amounted to 2.2 million users, which is approximately equal to the value a year earlier.

The priority development areas are Telecom, TV and Content, Cloud, partnerships, and financial services.

Throughout 2021, the Company was demonstrating strong growth in line with the previously approved CLV 2.0 strategy. The growth in revenue indicators was driven by positive contributions from all business segments, including Telecom, FinTech and Media. Over the past year, significant progress has been made in developing priority business areas.

In the Telecom vertical, strong and steady growth continues in the areas of mobile and fixed-line businesses. The priority vectors for developing fixed-line business are penetration into new households by



building and upgrading our own network, as well as by launching sales of new equipment along with the classic service bundles (mobile+fix+TV), using new ways to attract customers: KION, Smart Home. At the end of 2021, about 11% of households in Russia used fixed-line services from MTS

Significant steps were taken in the Media areas: the launch of the KION platform, which is confidently strengthening its position through creating its own content, exclusive partnerships, vertical integration of production processes, distribution, management of all types of rights; as well as in the FinTech area (according to Frank RG, MTS Bank became the fastest growing bank in terms of loan portfolio growth in the unsecured lending segment — 83%. The Bank became the market leader in POS lending occupying the leading position in terms of lending and third place in terms of POS lending portfolio in 2021).

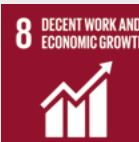
There has been a deepening of integration within the expanding digital ecosystem. One of the most important factors for successful implementation of a long-term corporate development strategy, in particular, is the growth of the lifetime value of the customer base. Within the interconnection of the

products of the verticals, the Premium subscription was further developed and the conditions for the MTS Cashback loyalty program were improved.

MTS Premium and the services integrated (Music, Spam Blocking and KION) are a significant factor of the ecosystem base growth in 2021. Among the 2.9 million active Premium users, involvement in MTS products (MTS Bank, MTS Cashback, MTS Music, KION) is growing every month of their use.

MTS Cashback is yet another efficient tool to involve customers into the ecosystem. In 2021, 4 million program participants have tried those Ecosystem products that were new to them. Cashback is natively integrated into all mart products and the main component of success is a constant influx of points from all product verticals, together with the implementation of a convenient bonus accumulation/write-off mechanism for all Ecosystem products.

The versatile Ecosystem mart is the My MTS app, which provides the customer with easy access to the entire range of ecosystem products and services (Premium, MTS Cashback, Telecom, Bank, etc.).



Key Quantitative Indicators by MTS Business Segment

ECOSYSTEM

8.8 million

Ecosystem customers reached 8.8 million at the end of 2021, which is 40% more than a year earlier

2.9 million

The number of customers with an MTS Premium subscription doubled reaching 2.9 million people

25.1 million

The number of 1M active users of the My MTS app reached 25.1 million users at year-end 2021

FINTECH

5 RUB billion

The 2021 net income of MTS Bank amounted to RUB 5 billion

3.0 million

The number of MTS Bank customers amounted to 3.0 million at year-end 2021

1.8 million

The number of 3M active MTS Bank mobile app users amounted to 1.8 million at year-end 2021

TELECOM

416.5 RUB billion

Revenue from providing communication services in Russia grew by 5.1% in 2021 reaching RUB 416.5 billion

80.4 million

The customer base of mobile business in Russia increased to 80.4 million users as of year-end 2021

68.9 RUB billion

Sales of phones and accessories increased by 10.2% reaching RUB 68.9 billion at year-end 2021

MEDIA

13.7 RUB billion

In 2021, MTS Media revenue amounted to RUB 13.7 billion, an increase of 30% as compared to 2020

4.0 million

The number of KION users reached 4.0 million as of year-end 2021, the growth dynamics reached 160% as compared to 2020

8.4 million

The cumulative number of Pay TV subscribers reached 8.4 million at year-end 2021

/ 2021 HIGHLIGHTS

Corporate News

- > **Vyacheslav Nikolaev**, who previously held the position of MTS First Vice President for Customer Experience, Marketing and Ecosystem Development, has been appointed **President of MTS since March 13, 2021**.
- > **In Q2 2021**, Olga Ziborova, who previously held the position of MTS Ecosystem Marketing Director, was appointed Vice President for Ecosystem Development and Marketing.
- > **In June 2021**, the MTS Board of Directors elected Felix Evtushenkov as Chairman of the Board of Directors of MTS PJSC.
- > **In 2021**, the General Meeting of Shareholders approved the following:
 - separation of MTS tower infrastructure (towers and related assets) into a 100% subsidiary of MTS being Tower Infrastructure Company LLC (BIK LLC) with an authorized capital of RUB 25 million. Alexander Teremetsky, MTS Director for Tower Infrastructure development, was appointed CEO of the company;
 - separation of a significant part of the network and digital infrastructure of MTS (radio subsystem, switching, transport and fixed-line networks, data centers, cloud infrastructure) into a 100% subsidiary of MTS being MTS Web Services JSC (MWS JSC), which will be headed by Igor Egorov, MTS Vice President for Infrastructure Development.

Mergers and Acquisitions

- > **In June 2021**, MTS announced the closing of the transaction for acquiring a 100% stake in Interregional TransitTelecom OJSC (MTT), a federal provider of smart telecom and IT solutions for business, one of the top 10 largest telecom companies in Russia, for RUB 5.0 billion, excluding net debt. In addition to classic B2B and inter-operator telecom services, MTT occupies a leading position in Russia in providing smart services for business customers based on CPaaS communication platforms and API communication application programming interface.
- > **In December 2021**, MTS announced the signing of binding documentation on the transaction to acquire VisionLabs B.V for RUB 6.5 billion. VisionLabs is one of the global leaders in the field of creating products computer vision- and machine learning-based products. The company has implemented more than 500 projects in the field of computer vision in 37 countries for more than 270 customers from the financial, telecom, retail, transport, and energy sectors. Over 1.7 million cameras worldwide use VisionLabs software. The 2020 revenue of the company exceeded RUB 1.1 billion.

Bonds and Loans

- > **In July 2021**, MTS announced that it was raising a loan from Sberbank PJSC for RUB 30 billion. The loan maturing in 2024 was raised under a revolving line of credit from Sberbank opened in May 2018 with a total limit of RUB 150 billion. After the transaction, the total volume of the existing MTS loans raised from Sberbank will amount to RUB 115 billion.

Leadership in Telecommunications

- > **In February 2021**, MTS announced construction of three private LTE networks: 1) a commercial private 5G-ready network for the steel and mining company EVRAZ; 2) a pilot underground LTE network to support mining operations of Russia's Uralkali, one of the world's largest potassium producers; 3) a network in the territory of the Kochubeevskaya wind farm of NovaWind JSC that unites wind energy assets of Rosatom.
- > **In February 2021**, MTS deployed the NB-IoT network at Russia's Antarctic Station "Progress" to transmit data from the device complex of the Arctic and Antarctic Research Institute. Trackers, multi-sensors and sensors powered by the network will make it possible to study glacier and snow movement, as well as to monitor the integrity of snow runways and the microclimate in living accommodations and working premises.
- > **In July 2021**, MTS MediaTek, international semiconductor developer, and Ericsson demonstrated the world's first two-carrier frequency aggregation in the n79 band (4.8–5.0 GHz) in the 5G pilot network. As a result of testing aggregation of the 5G spectrum with a total width of 180 MHz combined with two bands of LTE 1800 (20 MHz) and LTE 2100 (15 MHz), a record-setting data transfer rate for the n79 band in Russia of up to 2.9 Gbps was reached.
- > **In July 2021**, MTS and Ericsson announced successful testing of aggregating five carrier frequencies with a total bandwidth of 75 MHz on the LTE network in Ufa. Based on the test results, the data transfer rates of up to 1.4 Gbps were achieved on a 4G commercial network. The aggregation demonstrates the potential of the 4G MTS network after refarming the GSM 1,800 MHz and UMTS 2,100 MHz bands.

MTS Digital Ecosystem

- > **In April 2021**, MTS introduced KION, a new online cinema, the catalog of which includes more than 200 TV channels, thousands of films, series, cartoons and documentary projects. The online cinema's own original films and series, as well as a new content format being film stories, became an important aspect thereof.
 - > **In June 2021**, MTS announced investment in the TalkBank FinTech platform by the MTS Corporate Venture Fund. The total investment in the round will amount to RUB 218.36 million. The share of MTS investments exceeded a half of the total amount in the round.
 - > **In June 2021**, MTS launched the MTS IoT HUB Internet of Things platform. The service allows developers, startups and large companies creating their own products and IoT solutions based on a ready-made set of tools. MTS IoT HUB operates on the PaaS (Platform as a Service) model and makes it possible to connect any IoT devices, monitor their status and manage them, as well as collect data from third-party platforms.
- The solution is compatible with any communication networks and protocols, including MQTT, TCP/IP, CoAP, NIDD.
- > **In June 2021**, MTS AI launched the MTS GROM supercomputer whose performance reaches 2.26 petaflops, making it the third most powerful supercomputer in Russia. MTS will use MTS GROM for the digital ecosystem development. The supercomputer will accelerate the creation and market launch of products in the field of machine vision and industrial analytics, natural language processing and smart video surveillance. Universities, large scientific and medical centers will be able to use MTS GROM in their research involving the modeling of complex processes.
 - > **In August 2021**, MTS opened a representative office of the MTS StartUp Hub, an innovation and investment center, in Nizhny Novgorod. The center will select, test solutions and accelerate tech companies and startups in the Volga Region for their further scaling at the regional and federal levels.



Partnerships



- > **In January 2021**, MTS launched a partnership program to search for startups for third-party companies. Scouts from the MTS StartUp Hub innovation and investment center will select projects which take advantage of the 5G technology to offer their developments to partner corporations. Selected startups undergo an incubation program at the MTS 5G Center at VDNKh (Exhibition of Economic Achievements), which provides them with training, test sites, access to API, as well as other development tools, based on the company infrastructure.
- > **In June 2021**, MTS President Vyacheslav Nikolaev was elected a member of the Global GSM Association Board for 2021–2023. The GSM Association Board consists of 25 representatives of the world's largest carrier groups, such as AT&T, China Mobile, Deutsche Telekom, Orange Group, TURKCELL, Verizon, and others.
- > **In June 2021**, MTS and Avtodor Group of Companies signed an agreement on cooperation in constructing a telecom infrastructure and providing mobile communication services along federal high-speed toll roads, including the M-4 Don, the Central Ring Road in the Moscow Region, the M-12 Moscow — Kazan and its continuation from Kazan to Yekaterinburg. Under the terms of the agreement, Avtodor Group of Companies will install antenna-mast structures and arrange entrances to them providing power connection to communication facilities along the entire length of high-speed roads, while MTS will place communication equipment on the telecom infrastructure constructed.
- > **In June 2021**, MTS and FSUE Morsvyazspunik, operator of the transarctic FOCL, signed a strategic partnership agreement for planning

and implementing infrastructure projects based on the construction of an underwater transarctic fiber optic communication line along the Murmansk-Vladivostok route with exit points along the Northern Sea Route (Polar Express project).

- > **In July 2021**, MTS, jointly with the Moscow Institute of Physics and Technology and the SKOLKOVO Business School, launched the Digital Technologies in Business master's program for technical degree bachelors of the Russian universities. The two-year master's program combines obtaining technical and managerial knowledge and skills with an internship at MTS and working on real business issues as part of term papers and theses.
- > **In November 2021**, MTS joined the 5G Future Forum (5GFF) international association of telecom carriers, whose task is to develop specifications and introduce advanced solutions based on 5G tech and edge computing (Multi-access Edge Computing — MEC). 5GFF was established in January 2020 by América Móvil, KT Corporation, Rogers, Telstra, Verizon, and Vodafone to develop common specifications, share best practices, manage intellectual property and participate in R&D projects aimed at implementing and globally scaling commercial solutions based on 5G and MEC technologies.
- > **In February 2022**, MTS and KT Corporation (KT), a leading company in the field of information and communication technologies in the Republic of Korea, signed a memorandum of strategic cooperation in developing new business areas, including the establishment of data centers and creation of joint AI-based solutions, as well as media content.

Cloud and Digital Solutions for Business

- > **In January 2021**, #CloudMTS provider launched a line of cloud project solutions for business with MTS experts providing strategic IT advice services, designing the digital environment of an enterprise and drafting a roadmap for business development based on cloud technologies (customer cloud journey), as well as implementing complex infrastructure projects.

/ SIGNIFICANT EVENTS AFTER THE REPORTING DATE

Corporate News

- > **In February 2022**, the MTS Board of Directors established a Special Committee for Cloud Technologies and Infrastructure Development, which was headed by Nadia Shouraboura, an

independent director. Moreover, the Management Board made changes to the composition of the ESG Committee under the MTS Board of Directors.

Credit Rating

- > **In January 2022**, NCR, the Russian rating agency ("National Credit Ratings"), confirmed the AAA.ru credit rating of MTS with a stable forecast. In the report, the NCR noted a number of key factors in MTS activities that impacted the rating confirmation: low systematic risk of

MTS operations; moderate debt load, high debt service margin, significant operating profitability, as well as a sufficient business liquidity level; positive quality assessment of management and strategic planning.

Partnerships

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strategic cooperation in developing new business areas, including the establishment of data centers and creation of joint AI-based solutions, as well as media content.

Private LTE/5G Zones

- > **In January 2022**, MTS announced the world's first uplink aggregation tests in a 5G pilot network built on the basis of virtualizing network functions on a vRAN radio access network. vRAN solutions will be widely used in 5G networks and in the open radio access architecture (Open RAN).

MTS BRAND

EFFIE AWARDS RUSSIA 2021 AWARD in the Ecosystem Brands nomination

>99%

Brand awareness among
Russian consumers

70%

of consumers are ready
to try new MTS services

BRAND FINANCE RUSSIA 50 2021

For the fifth time since 2017, the MTS brand
was included in the TOP-10 most valuable and
strongest¹ brands in Russia



2nd

among all brands in Russia
in terms of brand strength

9th

in brand value ranking

BRAND FINANCE TELECOMS 150 2022

For the fourth time since 2019, the MTS
brand was included in the TOP-10 strongest
telecom brands in the world.



4th

in brand strength ranking

64th

in brand value ranking

¹ Brand strength is assessed using a balanced system of indicators (Brand Strength Index (BSI)), which takes into account marketing investment, equity and business performance.

MTS RATINGS



Credit Ratings

- > **In January 2021, the Russian National Rating Agency assigned MTS an AAA.ru rating with a stable outlook, the highest possible credit rating according to the agency's scale,** which points to a number of score-determining positive factors, including the company's high operating profitability, low level of leveraged capital, sufficient liquidity and stable leadership positions in the Russian mobile communications market. In addition, the National Rating Agency separately assigned MTS Bank an A.ru rating with a stable forecast.
- > **In March 2021, Expert RA agency upgraded the MTS Bank credit rating to ruA** — with a stable forecast taking into account the increasing role of the Bank in the MTS digital ecosystem.

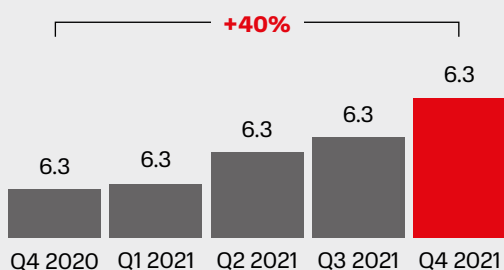
Sustainable Development Ratings

- > **In October 2021, the Russian AK&M agency awarded MTS the highest rating in the ESG reporting** rating upon noticing the completeness of information in the field of corporate sustainability and ESG reporting. AK&M analysts upgraded the position of MTS in the ESG reporting rating to RESG1 from RESG2 a year earlier noting the highest degree of information disclosure regarding sustainable development in MTS public reports, as well as the company's successful work in the social sphere and elaboration of a sustainable development strategy until 2025.
- > **In December 2021, MTS announced the receipt of a Governance (B) rating from CDP**, an international non-profit organization operating the world's leading environmental impact disclosure platform. MTS started reporting through the CDP platform in 2019 within the GSMA initiative to develop a roadmap for the telecom industry actions to achieve zero greenhouse gas emissions by 2050 pursuant to the Paris Agreement. MTS currently discloses a wide range of environmentally important data about its operations, including resource consumption and direct and indirect greenhouse gas emissions.
- > **In December 2021, MTS was awarded the highest A+ category of the Leaders in Corporate Charity rating**, which is annually issued by the Donor Forum Association of Grant-Giving Organizations to identify the best practices of corporate social investment and charity and promote them in the business environment and society. In 2021, MTS became the only tech company to receive the highest A+ rating category, which indicates the highest possible results in all the evaluation criteria.

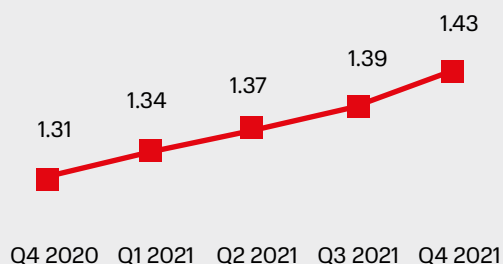
MTS ECOSYSTEM DEVELOPMENT

/ GROWTH IN ECOSYSTEM USER BASE

Ecosystem customers¹
million



Average number of products used by one customer

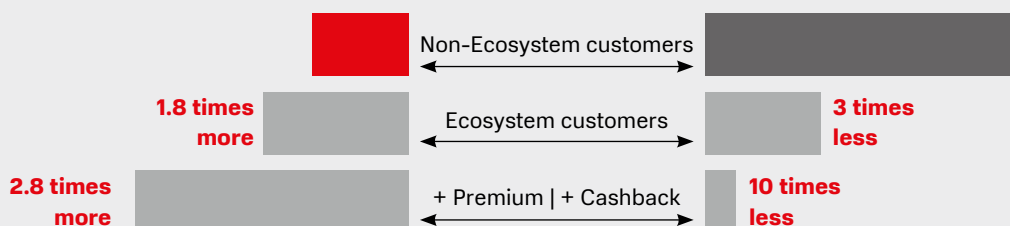


Ecosystem revenue growth in Q4 2021, year on year

+27%

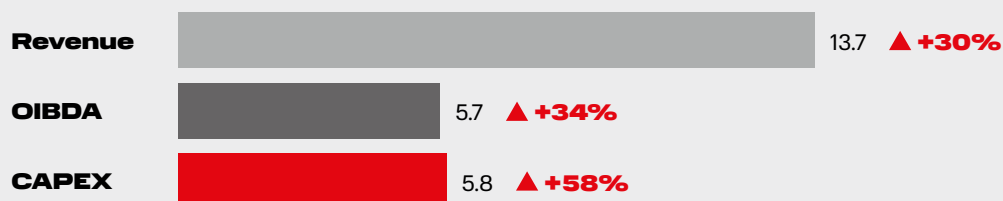
NPS

Churn

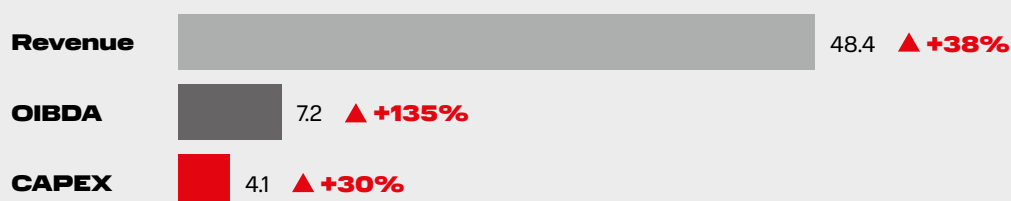


/ INDICATORS OF NEW ECOSYSTEM AREAS

Media, RUB billion, year-on-year



FinTech, RUB billion, year-on-year



Retail, RUB billion, year-on-year



Contribution of non-telecom areas to the revenue growth of the Group amounted more

more than **51%**

/ TELECOM

Mobile Business

Mass Market

In 2021, we actively developed and offered our customers favorable data plans, in which each customer could choose a set of standard telecom services, as well as a wide range of ecosystem digital products, best suitable for them.

The range of ecosystem services and integration with Big Data to deeply understand our customers' preferences allow us to perform the transition from traditional price competition in telecom products to the creation of offers for consumer segments. This helps increase customer loyalty and emotional attachment to the brand, as well as improve customer experience.

The MTS Premium subscription, which has existed since 2020, sets itself the task of the Company penetration into the daily life of the customer. Within the ecosystem project, in January 2021, a partnership was signed with Yandex.Plus, and in April, the KION online cinema was launched with original series of its own production. For MTS Premium subscribers, priority service is available at the MTS and MTS Bank offices as well.

The launch of convergent services is a part of the MTS ecosystem development program. Convergent products are one of the key tools to retain subscribers and increase their loyalty. Combining the capabilities of fixed-line and mobile communications, the MTS designs and continues to develop convergent services. MTS intends to significantly increase the number of convergent subscribers. All MTS data plan is a bundle of services in three telecommunication areas: home internet + TV + mobile communications. The Company is the only operator in Russia, which, in addition to standard telephony, internet, cable or IPTV, also allows connection to satellite TV services. The development of convergent products is one of the main drivers of fixed-line communication sales growth, which allows MTS to maintain the rates of subscriber base growth for fixed-line communication services outstripping the market.

In 2021, we launched more than 10 different subscriber offers combining a beneficial offer for equipment purchase (phones, watches, laptops) and MTS ecosystem products. MTS opened new formats of retail outlets under the franchise scheme aimed at expanding distribution in small towns. Also, togeth-

er with the partners (Xiaomi, BQ manufacturers), MTS opened a number of co-branded retail outlets presenting a wide range of equipment and services included in the MTS ecosystem.

Retail Distribution

The MTS retail chain remains the main channel for attracting MTS subscribers. More than 40% of SIM card sales are carried out through MTS retail outlets. MTS own network demonstrates high rates in the number and quality of SIM card connections.

At MTS offices, subscribers receive a full range of services provided by the operator, including services involving broadband access to the internet and television. Being points of contact with the MTS ecosystem, MTS outlets allow increasing cross-sales. Any new service released by the Company automatically becomes available for sale in the retail chain office. Furthermore, we offer the customers an extensive list of financial services, such as: consumer lending, money transfers, credit repayment, life insurance (voluntary medical insurance), product insurance and MTS Money cards.

Our own sales channel enables us to more effectively manage the number and quality of activations, as well as to maintain our level of service.

Mobile Business Network

MTS increased the network development pace to ensure a consistent level of coverage and high quality of mobile Internet, alongside with executing a record-setting volume of construction of new base stations (BS) in 2021.

In 2021, more than 25,000 4G BSs were commissioned (network growth totaled 30%). Construction volumes in 2021 exceeded those of 2020 by almost 30% and the growth of 4G BS in the Moscow Region was 2.7 times ahead of 2020 volumes. In key regions, the LTE network grew by 40%.

In addition to the classical capacity increase methods, the redistribution of the use of the 2G/3G frequency resource to LTE technology (Moscow, St. Petersburg, the coast of the Krasnodar Territory, etc.) is actively applied, which allows for the most efficient



use of the current network resources and provides subscribers with high-quality services.

Smart Rollout

The approach to investment planning has changed. When making decisions, the perception of subscribers comes to the foreground in relation to the technical specifications of the network.

Big Data has taught AI to predict the income of planned sites, which allows finding the most efficient locations for investment.

Fixed-Line Business

B2C Fixed-Line Business

In 2021, MTS continued to implement a large-scale program for modernization and construction of fixed networks; the project affected more than 47 cities — at year-end 2021, data plans with Internet access speeds of up to 2021 Gbps became available for 61% of MTS network. The development of a new TV platform continued as well, expanding the capabilities of traditional TV with interactive components. Interactive TV products (IP TV and Hybrid TV) were relaunched in all cities of fixed business presence.

As part of the investment program for the development of fixed networks, it is planned to modernize more than 80% of the capacity by 2023. In 2021,

5G

MTS is strengthening its leadership position in terms of new technologies. The company was the first in Russia to launch 5G test zones for mass market subscribers: Moscow (29 sites) and St. Petersburg (23 sites).

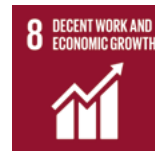
Innovative Projects

MTS is also developing advanced digital solutions based on the current LTE network. In 2021, work was carried out on 20 projects (of which 18 are private LTE networks). At the end of the calendar year, certificates of successful technical testing were signed for the SUEK Izykhsky and EVRAZ Sheregeshkaya projects.

MTS also expanded the geography of its fixed business presence both through the construction of its own networks and acquisition of Green Point Group of Companies.

The share of Internet BBA penetration into the telecom market of the Russian Federation in 2021 remained at the level of 61%. The subscriber base grew by only 0.8% (earlier in 2020 — by 2.1%) — the growth rates slowed down against the backdrop of high market saturation. A significant impact on the BBA market growth in 2021 was caused by the spread of convergent products of operators.

Revenue of the Russian telecom market in 2021 grew significantly higher than in 2020 — by 3.0% against



EXPANSION OF GEOGRAPHY

Own construction 2020–2021:

Yakutsk — Republic of Sakha (Yakutia);

Aprelevka, Zvenigorod, Domodedovo, Lytkarino, Noginsk, Podolsk — Moscow Region.

Purchase of an asset (Green Point Group of Companies):

Stavropol, Nevinnomyssk — Stavropol Territory;

Elista — Republic of Kalmykia.

1.1% a year before. One of the positive factors was an increase in sales due to convergent products, as well as targeted revision of commercial conditions in certain BBA market segments.

The growth of the Pay TV market almost stopped: at year-end 2021, the subscriber base increased by only 0.5% (against 1.8% a year before) and reached 46.4 million. The service penetration was recorded at 82%. The churn in the cable TV segment was somewhat slowed down by the COVID-19 pandemic: low mobility of citizens and increased interest in TV (as one of the principal leisure types). In turn, the growth in the number of competing offers from non-operator video services had a negative impact on the pay TV subscriber base dynamics.

At year-end 2021, the increase in the BBA and TV subscriber base at MTS was 10% and 7%, respectively (including the Green Point Group of Companies). MTS retains its market leader position in terms of revenue growth year-on-year: by 13% in the BBA segment and by 10% in the TV segment. In the market saturation conditions, MTS continues to keep its leadership in the telecom market of the Russian Federation due to intensive subscriber attraction and retention, as well as due to extensive (synergy of the effect from taking over the Green Point Group of Companies) factors.

Fixed-Line Network

The pace of developing fixed-line access networks in 2020–2021 was several times higher than in 2019. The wave program for upgrading the fixed-line network, approved in 2020 and designed to provide subscribers with high-speed broadband Internet access data plans, continued.

TV services for subscribers also underwent active development: the IP TV technology distribution providing high image quality, ease of connection and the opportunity for flexible changes in the rate policy

commenced. By the end of 2021, it became possible to connect to the IPTV service for subscribers of more than 2/3 of the fixed-line MTS network.

Regional network construction and upgrade projects using GPON technology are being actively implemented. New construction projects were launched in the regions of no presence of a fixed-line MTS network, such as Yakutia and Bashkiria.

In 2021, due to the difficult economic situation in the metal and plastic market, calculations of the rise in the cost of certain items of rate and price indicators (RPI) were made and the RPI indexation mechanism was introduced. This made it possible to retain the majority of contractors on MTS FB projects and not to slow down the high work pace.

In 2021, the FB projects were implemented to construct a new network (538,000 households) and upgrade the existing network (1.7 million households).

Convergent

The company continues to develop offers for the Family segment —We Are MTS and We Are MTS+ data plans, which include mobile communications, home Internet and TV, as well as the ability to share traffic with family members (up to five SIM cards).

In 2021, MTS launched a partnership scheme for providing convergent subscriptions, within which it became possible to launch convergent services in settlements where MTS does not have its own fixed-line network. Within this product, the subscriber gets the opportunity to take advantage of all the benefits of a convergent paying for all mobile and fixed-line services using a single personal account, while remaining a subscriber of his/her home communications service provider. At year-end 2021, this scheme was implemented in five regions of the Russian Federation.

B2B/B2G

B2B

In 2021, MTS demonstrated a revenue growth rate exceeding 16%. The main contribution to revenue growth was made by the sale of equipment, socially significant facilities (SSF), A2P, Digital advertising, Cloud, Collocation and SCN services.

The growth of mobile business and international roaming revenues shall be noted as well.

2021 Key Projects

- > Socially significant facilities — more than 5 thousand facilities connected.
- > In 2021, the MTS B2B team filled 100% of the Advantage Data Center.

A new modern design of the MTS Business Personal Account to manage corporate numbers was also implemented. The MAU of the MTS Business Personal Account increased to 65% (+36 p.p.) by the end of 2021.

At the St. Petersburg International Economic Forum (SPIEF), MTS signed agreements on strategic partnership and cooperation with the Roscosmos Corporation, the operator Morsvyazsputnik, as well as a memorandum of cooperation with NOVATEK.

B2G

Revenue in the B2G segment increased by 36%. In 2021, revenue growth was ensured by implementation of federal and regional infrastructure projects,



Service development for B2B/B2G



Private LTEs

More than 15 projects of corporate LTE/5G networks for leading Russian companies



Services for unified communications

Virtual PBX, call tracking and voice robots. The largest Telecom API platform

No. 1 in Russia, market share ~ 30%¹



Cloud solutions

Cloud & Data Center revenue growth **+95%** year-on-year



MTS Marketer

Smart Targeted Advertising Service, **58 thousand** advertising campaigns launched in 2021



Geo-analytics

16% revenue growth in 2021, projects launched in **46** regions of Russia



Smart digital city/region

42 agreements on digital upgrade of cities and regions as of year-end 2021

¹ Based on company data and market analysis.

as well as digital projects for federal and regional government customers. For the coming years, MTS sets a goal to keep the rate of revenue growth in the B2G segment by strengthening participation in national programs and federal government projects, as well as developing a line of digital products.

In 2021, government contracts for connecting socially significant facilities of the Russian Federation to the Internet within the Digital Economy of the Russian Federation national program were successfully implemented to the fullest extent, 5,354 facilities were connected.

Successful implementation of government contracts led to connecting additional customers.

Infrastructure projects were implemented jointly with regional authorities, including the projects for constructing communication facilities in small towns. As an example, a project was implemented with the Pskov Region administration, just as similar projects were implemented in the Novosibirsk and Voronezh Regions, as well as in the Krasnoyarsk Territory. These projects are also socially significant for the regions in terms of the regional work to eliminate the digital divide in small towns.

In 2021, the implementation of digital projects, such as the provision of geoanalytics and BD services to customers, continued.

B2B Products

Mobile Business

In the corporate market, the most highly demanded and sold offer since the time of launch to the present is the range of Smart Business data plans. For a subscription fee, the rate includes bundles of minutes, Internet traffic, SMS and useful tools for work. One may choose a rate from the range for any type of business, employee tasks and communication budget. Within the selected rate, the customer can set the ratio of minutes and gigabytes required at the moment through his/her personal account or mobile app.

In 2021, following market trends and customer convenience, MTS expanded the possibilities of unlimited communication within the data plans: now, in addition to calls to MTS Russia and messengers, all users can use social media and navigation services unlimitedly. Separate data plans provide for unlimited video services and the Second Memory service for cloud data storage.

During the year, MTS offered its customers the opportunity to double the bundles of minutes and

gigabytes without increasing the monthly fee within the Double Benefit campaign, as well as receive the Mobile Employees Promo service for 12 months when activating the Smart Business data plans.

Fixed-Line Business

In 2021, MTS completed the second stage of the transaction to acquire the assets of Green Point Group of Companies, which provides broadband Internet access and digital television services in 12 cities of Russia: MTS bought the remaining 49% in the authorized capital of six regional fixed-line communication operators of Green Point Group of Companies in Stavropol, Mikhailovsk, Nevinnomyssk, Elista and Tambov. Consolidation of the assets of the acquired company allowed MTS to accelerate the development of convergent offers combining fixed-line and mobile communications, as well as to provide modern digital solutions for business.

In March 2021, MTS completed the commissioning of a BBA node — LESS was launched in the Chechen Republic. The implementation of this project will allow MTS to develop fixed-line communication in six regions of the North Caucasus. The first project implemented in 2021 thanks to launching LESS was the project for the provision of fixed-line communication services in the Grozny Mall shopping center. Moreover, each of the six republics already has both implemented and elaborated projects for a range of fixed-line communications services.

A project to provide socially significant facilities with fixed Internet access in eight regions being Moscow, Amur, Kemerovo, Kaliningrad, Leningrad, Tambov, Tver and Yaroslavl Regions was completed.

MTS is able to offer a turnkey solution as early as within one business day. Equipment is part of the service, including, among other things, a system for its operation monitoring, to enable the client to identify the root cause in case of a failure. The service allows you to generate basic network settings in your personal account and then apply them on the customer's terminal equipment.

Convergent Rate (mobile services + fixed internet)

MTS offers the customers bundle solutions that help develop their business through

- > receiving a full range of services to solve business problems from one operator;
- > saving when buying a bundle.

Within the Business where You Are campaign, the customers could receive free mobile communi-

cations and up to 40% discounts on value-added services when purchasing wired Internet. The participants of the Save Once, Save Twice campaign received a 35% discount on mobile communication when purchasing multi-channel telephony (automatic attendant, VPBX or 8-800).

DDoS

During the pandemic, the number of DDoS attacks in Russia and globally has increased many times over. This also affected MTS customers. The DDoS protection service helped repel attacks against a number of large Russian companies. This service was also connected by customers from the government, including regional administrations.

The service allows you to protect customers' web resources (website, store, personal account, etc.) and infrastructure from malicious attacks. When the service is connected, the Internet traffic entering the protected resources undergoes constant behavioral analysis for the occurrence of volumes that are not characteristic of the given resource (both bigger and smaller) or requests. When an attack is detected, the traffic is redirected to the clearing center, after which the customer receives legitimate requests only.

SCN

In October 2021, MTS launched the High Season — High Sales campaign: 8-800 number and 100 minutes for RUB 299 per month. This offer helped small businesses increase sales during a period of high business activity and seasonal demand for goods and services around Black Friday, New Year's Eve and gender-related holidays.

Auto Attendant

Virtual multichannel telephony services based on "Auto Attendant" (federal and city numbers) and "Free 8800 call" (8-800 format numbers) proved to be essential for remote work. The services allow

deploy telephony at the company without wires and special equipment, since PBX functionality is organized on the side of MTS virtual platform.

Successful project of 2021 under the "Auto Attendant / Free 8-800 call" service: when developing joint projects, two companies from the IT and advertisement placement sector purchased from MTS 250 thousand new numbers with the Auto Attendant service;

Contribution of MTT JSC

In June 2021, MTS closed the transaction for acquiring a 100% stake in Interregional TransitTelecom OJSC (MTT).

Virtual PBX (VPBX) from MTT combines complementary communication services for business: convergent fixed-line and mobile communication (FMC SIM cards), Calltracking service, Callback service, business process automation (CRM), call recording, messaging, mobile apps, etc. It is possible to connect subscribers to the system, regardless of where they are and what devices they use (computer, laptop, tablet, smartphone).

With the help of an open API, it is possible to implement new functionality required for a particular business in VPBX and make the product use even more convenient. The open API provides additional options for corporate telephony users. Thanks to it, one can integrate any third-party apps and information systems into the VPBX.

According to the study conducted by TMT Consulting Agency "The Russian Virtual PBX Market — 2021 Results" and "The Russian Market of the Toll-Free Call Service (8800) — 2021 Results", MTS (together with MGTS and MTT) topped the ratings of digital VPBX and 8-800 services for the first time displacing in these segments the traditional leaders of previous years.

Business in the Markets of Operation

Armenia

MTS Armenia CJSC (MTS Armenia) is a 100% subsidiary of MTS PISC and the largest of the three mobile operators working in the Armenian market.

Under the Viva-MTS trademark, the company provides mobile and fixed telephony services, as well as offers cloud and financial services (payments and transfers are carried out by the Mobidram CJSC subsidiary) for its subscribers.

MTS Armenia is the leader in the mobile communications market of Armenia by the number of subscribers and revenue.

MTS Armenia's own retail chain is the main channel for attracting subscribers with 73 sales and service offices, covering all regions and key cities of Armenia.

MTS 2G communication covers 69.4% of the territory of Armenia, where 99.3% of the country's population lives. MTS 3G communication covers 71.3% of the territory of Armenia, where 99.8% of the country's population lives. The MTS 4G-LTE network is available on 69.4% of the territory of Armenia to 99.3% of the country's residents.

MTS Armenia closed 2021 with a 59.67% (+0.79 p.p. year-on-year) market share by subscribers in Q4 2021, the market share by revenue in 2021 was 57.8% (-1.5 p.p. year-on-year due to the ongoing pandemic restrictions, which led to the revision of the inter-operator roaming and interconnect agreement). The market share of subscribers of bundled data plans reached 82% (+6 p.p. year-on-year) and the share of subscribers using data transfer in Q4 2021 amounts to 78.9%. The average volume of calls per one MTS Armenia subscriber in Q4 2021 amounted to 724 minutes per month and the use of data transfer amounted to 6.3 gigabytes per month (+36% year-on-year).

MTS Armenia is a confident leader in the Net Promoter Score (NPS) on the market, significantly ahead of competitors.

In 2021, MTS Armenia expanded its LTE network by building more than 399 stations in the 800 MHz LTE band.

2021 was a year of recovery for MTS in Armenia after a tough 2020 due to COVID-19 and the conflict in Nagorno-Karabakh. In 2020, the coronavirus pandemic had a negative impact on the Armenian

economy. The most significant consequences of the pandemic for MTS Armenia were a decrease in roaming revenue, temporary closure of retail outlets, and a decrease in the subscriber base. In 2021, MTS managed to restore the subscriber base in Armenia and ensure normal operation of retail outlets, however, the fall in roaming revenues continued throughout 2021.

Belarus

Mobile TeleSystems JLLC (MTS Belarus) was established in 2002 by the Russian MTS PISC (49%) and the Belarusian Beltelecom RUE. The company operates under the MTS brand and is the largest mobile communications operator in the Republic of Belarus. Its main competitors are BeST CJSC ('life' trademark) and A1 UE (Unitary Enterprise).

In Belarus, MTS provides mobile communication services of GSM 900/1800, UMTS 900/2100 and 4G standards (including 2600/800), home Internet and TV services, offers cloud services and products for business and financial services in partnership (MTS Money).

MTS Belarus is the leader in the mobile communications market of Belarus with the largest market share in terms of the number of subscribers and revenue.

MTS Belarus' own retail chain together with single-brand stores of the partners is the main channel to attract subscribers. The chain of sales and service offices consists of 93 own offices and 257 single-brand partner retail outlets, allowing to connect subscribers and provide service operations in all regions and key cities of Belarus.

MTS 2G communication covers 98.0% of the territory of Belarus, where 99.9% of the country's population lives. MTS 3G communication covers 96.5% of the territory of Belarus, where 99.9% of the country's population lives. MTS 4G-LTE communication covers 47.1% of the territory of Belarus, where 85.6% of the country's population lives. In 2021, MTS Belarus continued to expand access and provide new 4G network opportunities to the residents of Belarus through developing coverage in the 800 MHz LTE band. The new band made it possible to provide high-speed communication to wider areas, including the suburbs, remote villages, highways in the Gomel, Mogilev, Vitebsk and Minsk Regions of the country.

MTS Belarus retained its leading position and a significant market lead over its competitors and

terminated 2021 with a market share by subscribers in Q4 2021 of 47.1% (–0.1 p.p. year-on-year), in terms of mobile business revenue — 51.0% (0 p.p. year-on-year), revenue — 51.9% (–0.2 p.p. year-on-year). The share of subscribers of V&D data plans reached 63% (+1 p.p. year-on-year) and the share of subscribers using data transmission reached 69% (+1 p.p. year-on-year). The average volume of calls per one MTS Belarus subscriber in Q4 2021 stayed at the last year level of 603 minutes per month (–0.5% year-on-year) and the use of data transfer amounted to 17 Gb per month (+14% year-on-year).

The company is leading in terms of the net promoter score (NPS) in the telecommunications market of Belarus. According to internal marketing research of MTS, Belarus is the leader in satisfaction with the quality of mobile Internet and perception of reputation/image.

In 2021, MTS Belarus expanded its LTE network by using the assistance of an infrastructure operator to

launch 578 LTE base stations in the 800 MHz band in order to cover rural areas and more than 336 base stations in the 1,800 and 2,600 MHz bands in order to increase capacity and maintain consistent coverage of the LTE network.

In 2021, MTS Belarus actively developed the cloud area in working with business customers, the revenue from which grew by 2.3 times last year. MTS Belarus provides the services for creating private and hybrid clouds, IaaS-based disaster recovery and backup services are provided. Moreover, SD-WAN, BaaS, DRaaS services are available to the customers.

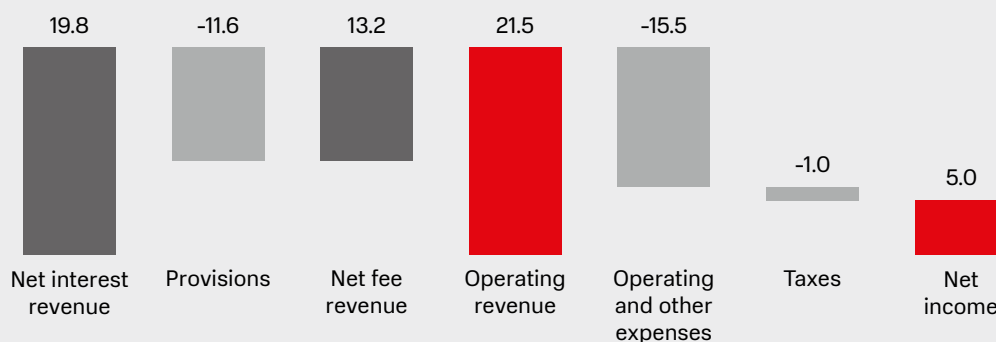
Also, MTS Belarus continued to expand its network coverage for the Internet of Things in Belarus last year. Minsk, regional centers and cities with a population exceeding 50,000 people are provided with NB-IoT communication. In the future, the systematic expansion of the NB-IoT network coverage area by MTS Belarus in rural areas will go on.

/ FINTECH

MTS Bank-based FinTech became a significant driver of revenue growth for the entire MTS group. At year-end 2021, the FinTech contribution to the growth in the MTS group revenue amounted 34%, and to the growth of OIBDA – 29%.

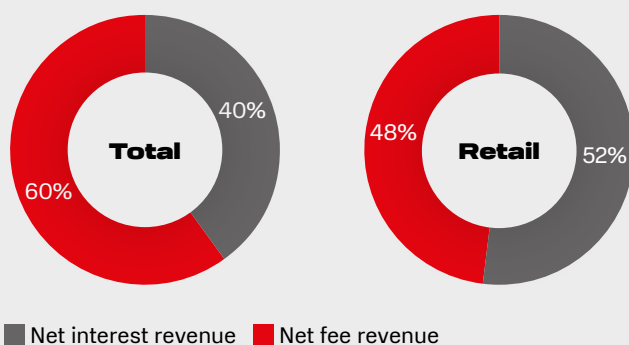
/ MTS BANK RATE OF RETURN AND PROFITABILITY

MTS Bank revenues
RUB billion

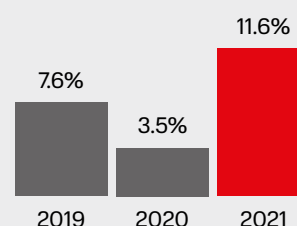


Source of revenue, 2021

% of operating income before deducting the provisions



Return on equity¹
%



¹ Management accounting data of MTS Bank

² IFRS data

- > The NCR rating agency assigned an **A.ru rating** to MTS Bank with a stable forecast, Fitch improved the forecast for the rating of MTS Bank to **“Positive”**
- > Over 2021, the Bank’s operating revenue before deducting the provisions increased by **47%**.

In 2021, MTS Bank demonstrated impressive growth rates. The net income of the Bank, according to the MTS Group data¹, at year-end 2021 amounted to RUB 5 billion as per IFRS, which is almost five times more than the indicator of last year.

The net interest revenue of MTS Bank for the reporting period reached RUB 19.8 billion, an increase of 28% compared to 2020. The net fee revenue reached RUB 13.2 billion increasing by 88% year-on-year. The operating revenue before deducting the provisions increased by 44% year-on-year to RUB 33 billion.

MTS Bank is actively increasing the contribution of transaction services, settlements and payments to operating revenue paying great attention to the fee revenue growth. Thus, in 2021, the ratio of net interest and fee revenue in the operating revenue structure amounted 60% to 40%, respectively, against 70% to 30% a year ago. The profitability of average capital increased to 11.6% in 2021 due to the net income growth in 2021 against 3.5% in 2020.

The retail portfolio of MTS Bank grew by 62% year-on-year and amounted to RUB 244 billion.

According to Frank RG, MTS Bank became the fastest growing bank in terms of loan portfolio growth in the unsecured lending segment — 83%. The Bank became the market leader in POS lending occupying the leading position in terms of lending and third place in terms of POS lending portfolio in 2021. The share of the Bank in terms of the volume of POS loans issued was 18.2%. General consumer loans still make up the major part of the portfolio; as of the end of Q4, the share of the GCL reached 55% of the total retail loan portfolio. The Bank doubled the sales of loan products during the reporting period.

Due to the loan portfolio growth (77% of assets), the growth of MTS Bank's assets in 2021 reached 33%; as of December 31, 2021, the assets of MTS Bank amounted to RUB 289.1 billion.

The loan portfolio active growth is supported by the growth of deposits and customer accounts. As at December 31, 2021, the term deposits of the customers amounted to RUB 158.2 billion, 55% of the liabilities of the Bank. The customer accounts amounted to RUB 42.7 billion.

In order to diversify the passive base in 2021, the Bank issued debut bonds for RUB 5 billion, while the demand for bookbuilding exceeded supply by more than four times.

Herewith, the loan portfolio quality is one of the best on the market. Following the pandemic-driven NPL increase in 2020, we are observing a steady improvement in the retail loan portfolio quality; as of December 31, 2021, the NPL share decreased by 4.3 p.p. to 5.7%, while the coverage of retail non-performing loans by provisions increased to 162%.

As of December 31, 2021, the capital of the Bank reached RUB 51.1 billion, which is 42% higher than at year-end 2020. As of January 1, 2022, the capital adequacy ratio H1.0 reached 12.5%, which provides for a moderate capital stock compared to the minimum regulatory requirement, taking into account the surcharges of 10.5%.

Product Development and Launch

MTS Bank offers its customers a wide range of retail and corporate lending products. The development of retail lending and transactional services became a driver for the growth of the loan portfolio and revenues of MTS Bank in 2021.

In terms of **general consumer loans**, MTS Bank actively developed its partner base and product solutions. In 2021, the Bank showed an outstanding growth in selling general loans, compared to 2020, the figure increased by 2.9 times. The main sales growth drivers in 2021 were as follows:

- > reducing and improving customer journeys on the Bank's digital platforms;
- > improving the processes for generation and sale of fully approved offers for the "Cash Loan" and "Refinancing" products;
- > development of "visit-free" technologies for issuing a loan, including the loan delivery.

Already in Q4 2021, 67% of general loans were issued through remote channels without visiting the physical channels. The share of sales of fully approved offers reached 72%.

In terms of **POS lending**, over the previous two years, the Bank became the market leader and was ranked first in terms of the volume and number of POS loans issued in 2021.

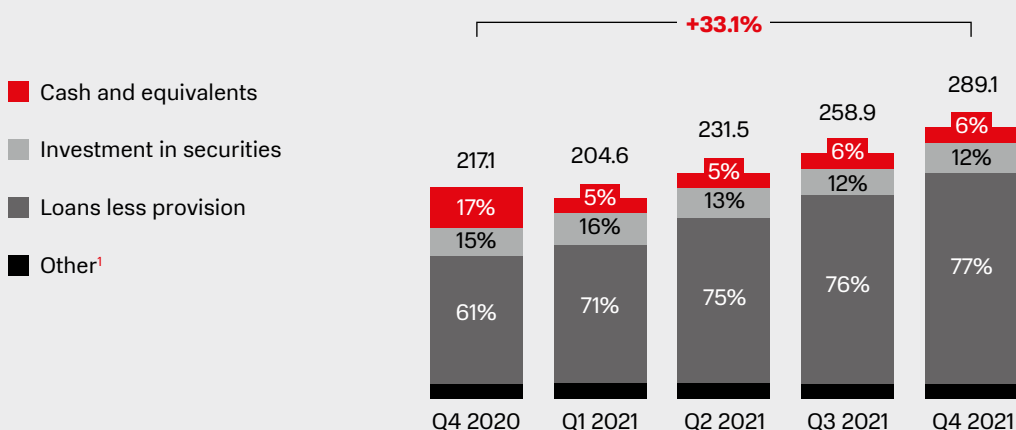
In 2021, the Bank grew 2.5 times faster than the market, with a 65% year-on-year increase in loan volumes. The POS lending market has gradually recovered after the pandemic. In 2021, MTS Bank

¹ Including intra-group adjustments.

/ CONTINUING GROWTH OF THE LOAN PORTFOLIO OF MTS BANK

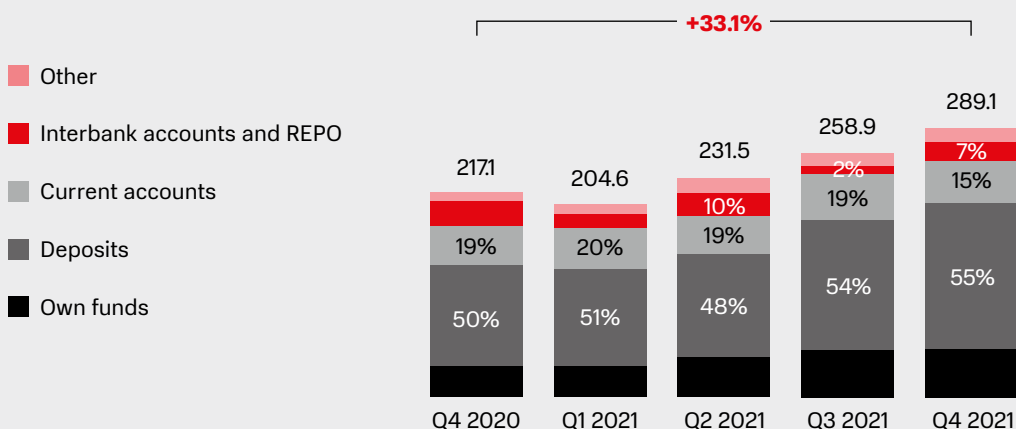
Assets

billion RUB at the end of period



Liquidity sources

billion RUB at the end of period

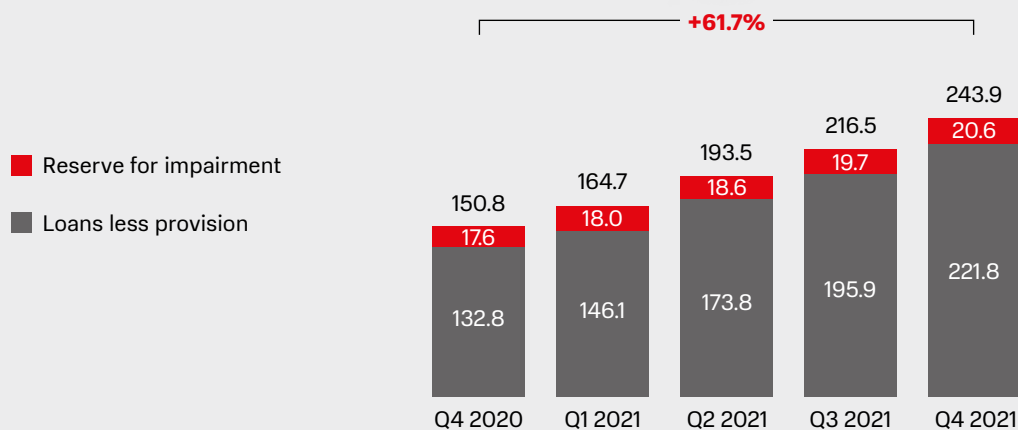


- > **The Bank's retail portfolio grew by 75% year-on-year. At the end of Q4 2021, the share of general consumer loans reached 55% of the total retail loan portfolio. The 2021 loan product sales more than doubled year-on-year. The share of issuance of credit cards and general loans in digital channels exceeds 60%**

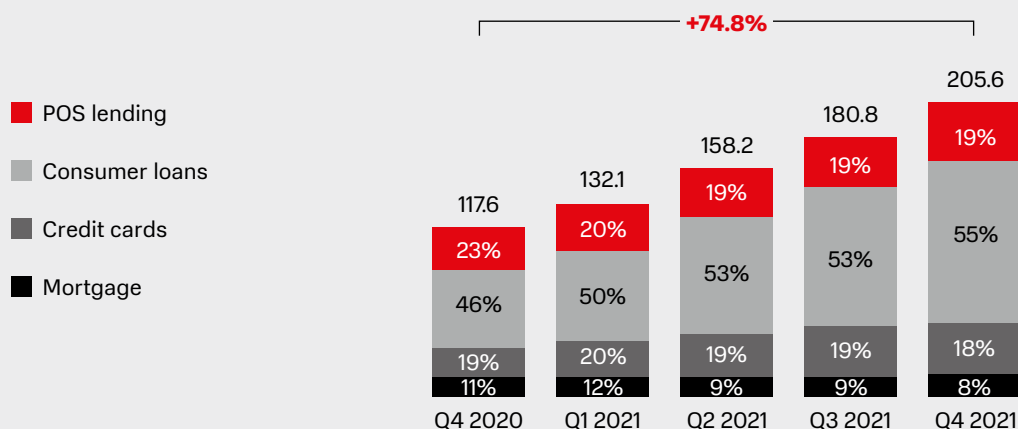
¹ Other assets include real estate, property, plant and equipment, deferred tax, intangible assets and other assets.

Total loan portfolio

billion RUB at the end of period

**Personal loans**

billion RUB at the end of period



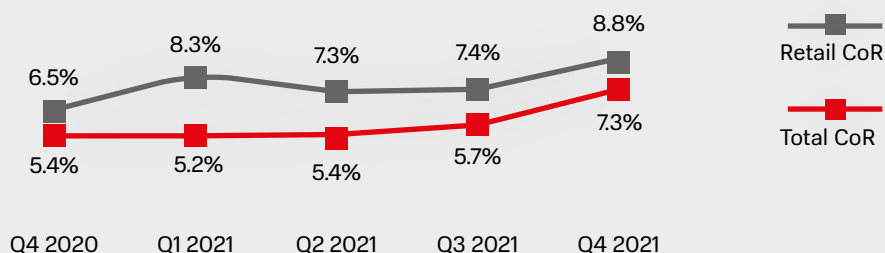
- > The bank ranks **1st in terms of issuance and 3rd in terms of POS portfolio in 2021¹**. The growth of market share in terms of issuance amounted to **+4.5 p.p.** year-on-year
- > At the end of 2021, MTS Bank entered the **TOP-3** ranking of mobile banks and the **TOP-10** best mobile banks for day-to-day tasks in the published Markswobb rating of bank mobile apps

¹ Frank Research

/ FOCUS ON LOAN QUALITY

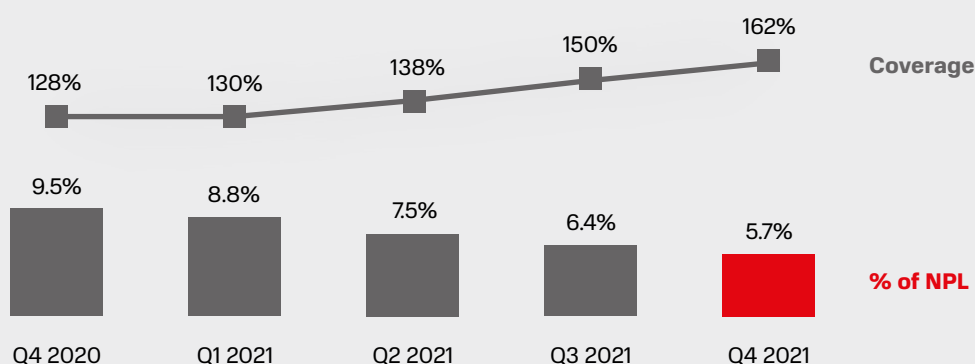
Cost of risk (CoR)

%



Non-performing loans (NPL)

% of retail portfolio, % of NPL coverage by provisions



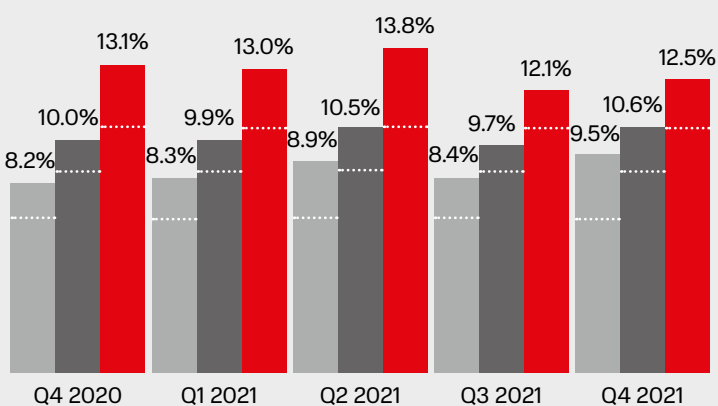
Capital adequacy (Basel III)

%

CB RF minimums

- H1.1. (Basic capital adequacy standard)
- H1.2. (Fixed capital adequacy standard)
- H1.0. (Equity capital adequacy standard)

..... H1.1 — 7.0%
 H1.2 — 8.5%
 H1.0 — 10.5%



launched a number of new partnerships and projects that contributed to achieving high results:

- > beginning of cooperation with Inventive Retail Group — a chain of ReStore, Xiaomi and Samsung retail stores;
- > start of cooperation with Maria Kitchens within a pilot project without photographing the customer in retail stores;
- > launch of lending in Ascona and Asus online stores;
- > integration with the personal broker of DNS, one of the leaders in the electronics and household appliances market in Russia;
- > implementation of our own solution for lending to customers in partner online stores.

The bank is actively developing the **daily banking**, area represented by a wide range of FinTech products for day-to-day operations for retail customers. It includes five key areas:

- > cards and deposits;
- > transactional business;
- > investment and personal finance;
- > money transfer system;
- > development of payment technologies and processing.

The Bank continued expanding its product range, improving the quality of services rendered and increasing brand awareness.

2021 Highlights in terms of **Credit Cards**:

- > MTS Bank entered the top 7 in terms of the gross portfolio of credit cards, leaving behind Home Credit, Russian Standard, OTP Bank, Raiffeisenbank and Citibank banks;
- > the Bank held the third place in credit card portfolio growth with a result of 68.1% (December 2021 to December 2020);
- > the MTS Cashback card became the leader of the Frank RG rating of the best bank cards in the “Best Credit Card with a Grace Period” nomination;
- > the bank continued to increase sales in digital channels. The share of credit card sales there amounted to 47% as compared to 30% in 2020;

- > despite high competition, the number of credit cards sold by MTS Bank in 2021 amounted to 637 thousand units, which is 24% more than a year earlier.

Separately, it is worth highlighting the development of **virtual cards**, of which 457,000 were issued in 2021. MTS Bank is developing new digital channels for issuing virtual cards: through the website with instant issuance, in popular messengers Telegram and WhatsApp, together with a Fintech Platform TalkBank is the first robot bank of MTS Bank Now; through the MTS Cashback mobile app. Within the virtual card development, the MTS Bank team developed the virtual card issuance within the MTS Premium subscription, the launch of a new co-branded MTS Bank-Magnit card with loyalty program in the Magnit retail chain, the launch of a new prepaid virtual card MTS Cashback Lite Mir (the first easy card combining two loyalty programs), the launch of a virtual card to the personal account of an MTS subscriber — MTS Cashback Mobile, the launch of the process of issuing virtual debit cards for the incoming stream of POS loans, for which more than 1 million cards have been issued.

In 2021, the launch of the best loyalty offer on the bank card market being 5% in supermarkets with an MTS Premium subscription became another significant event.

MTS Bank is actively developing **payment and transfer services** for MTS subscribers and MTS Bank customers, both in online channels and through retail chains featuring its own chain of MTS retail outlets, Bank offices and partner chains. The 2021 key product areas were as follows:

- > acceptance of payments in favor of MTS Group of Companies;
- > payments in favor of individuals and legal entities.

The main focus in developing the services is aimed at increasing the penetration of using services in on-line channels on in-house marts — My MTS and MTS Bank apps, the MTS Money mart (payment.mts.ru). In 2021, we managed to achieve significant results in this area: the volume of transfers and payments in the online channel grew by 1.9 times to RUB 208 billion and the number of 3MAU customers, users of payment and transfer services, grew by 1.6 times and reached 7.2 million people.

By the end of 2021, the turnover on in-house marts in favor of MTS Group of Companies reached RUB 28 billion, which is 56% more than the corresponding indicator for the previous year, and amounted to

about 10% of the total volume of payments in favor of MTS Group of Companies.

By the end of the year, the number of connected auto payments amounted to 1.9 million, which is 27% more than the corresponding indicator for the previous year.

The penetration of in-house marts into the MTS Bank customer base paying for the services of MTS Group of Companies increased from 22% at the beginning of the year to 47% at the end of 2021.

One of the main **local transfer service** tasks is to provide functionality to top up debit and credit cards, repay loans.

The 2021 key achievements within the product development of customer services were as follows:

- > expanding the set of payment tools for loan repayment services of MTS Bank;
- > launching transfers to Sberbank using a phone number;
- > implementing the me2me pull functionality for transfers via Faster Payments System;
- > topping up MTS Bank brokerage accounts.

As a result of active service development and quality improvement, it was possible to achieve growth by more than 155% over the year in terms of turnover and an increase in the service penetration into the Bank's active customer base to 45% in December compared to 12% in January 2021.

One of the priority areas for developing products for foreign citizens, as well as residents who have relatives and friends abroad, is the creation of **cross-border transfer services**.

In 2021, the Bank launched the following customer services and brought them to its own online channels — the MTS Bank app, namely:

- > transfers using international money transfer systems Western Union, Unistream and Contact;
- > transfers by card number to national cards of the CIS countries under direct agreements: Uzcard/ Humo, Korti Milli, Elcart;
- > transfers by phone number to Tajikistan and Kyrgyzstan;
- > payment for mobile communication of the CIS countries.

In 2021, MTS Bank cardholders got access to more than 30 services in Kazakhstan, Armenia, Tajikistan, Uzbekistan and Kyrgyzstan: mobile operators, providers, loan repayment, e-wallet top-up, transfers to cards of foreign banks through Visa and Mastercard payment systems and national systems, payment for patents.

In December 2021, the Bank announced the start of issuing MTS Cashback debit cards to individuals not being residents of the Russian Federation from the CIS countries in the chain of MTS Bank branches, as well as launched cooperation with the Unified Migration Center in St. Petersburg. A plastic card for ruble currency with free annual service can be issued on the same day at any MTS Bank branch throughout Russia. The card allows executing money transfers to the cards of national payment systems in CIS countries with cashback accrual.

The card for non-residents of the Russian Federation is the Bank's flagship product for foreign citizens in the MTS ecosystem. The implementation of this service has a high potential to engage a huge number of new customers: 12.9 million people are non-residents of the Russian Federation, which is 9% of the population of the country. MTS Bank pays special attention to customer support and communication in national languages. The IVR service, SMS communication and push notifications in national languages are already functioning. In March 2022, the Bank announced the launch of a chat bot in the Telegram channel.

Acquiring Services

In 2021, the total acquiring turnover of the Bank increased by 28% and reached RUB 117 billion, while the number of retail and service outlets increased by more than 80%, largely due to developing partner sales channels. 2021 total net fee revenue from merchant and Internet acquiring amounted to about RUB 170 million.

Within the development of payment services, the Bank implemented the following projects:

- > Internet acquiring in Ozon;
- > Faster Payments System payment functionality both through the Bank's payment terminals and through the partner's cash equipment (chain of MTS communication retail outlets);
- > finalization within the Visa Micro-Merchant program, which made it possible to receive additional income (~RUB 2 million per month) for the companies in the micro and small business segment.

MTS Payment

MTS Payment is a payment service for the MTS ecosystem and subsidiaries. Today, the principal module value lies in a single payment CJM (Customer Journey Map), centralized card storage and an easy onboarding process (business and technology), which allows starting payment in a matter of a few days.

In 2021, the Bank made a complete technical solution refactoring: it abandoned vendor development, generated the basic microservice architecture of the solution, formed an integrated approach to solving the issues of monetization and payment with the corporate architecture of the company. In the middle of the year, jointly with KION, the Bank launched a pilot project.

The MTS Payment product aims to reach satisfaction with the payment service on the part of the customers of the products.

For 2021, MTS Payment was integrated in the following products of MTS Group of Companies:

- > MTS Cashback
- > e-Sim
- > MTS Premium
- > MTS Finstory

In 2021, MTS Payment switched to payment within a single CJM (Customer Journey Map):

- > MTS At home
- > MTS Insurance

By 2023, MTS Payment plans to transfer 16 previously connected partners to payment within a single CJM. More than 12 new ecosystem products expressed their wish to integrate MTS Payment.

Mobile Commerce

In 2021, the turnover of payments on partner marts amounted to RUB 18 billion. The customer involvement in payments from personal accounts amounted to 8.6 million unique users. A number of qualitative achievements contributed to the growth in demand for payment services using a personal account:

- > connection of 500+ new trade and service enterprises to MTS Bank through aggregators and directly;
- > the product was fully transferred to a single processing solution of PCEC, all partners are connected to the single platform solution;
- > restoration of contractual binding with telecom operators Tele2 and Beeline through Single Cash Desk NSCA settlement organization;
- > integration of mobile commerce with the payment solution of MTS Bank (RBS) for the possibility of payments using the MTS personal account;
- > work to audit the activities of counterparties in terms of compliance with the requirements of No. 115-FZ "On Countering the Legalization (Laundering) of Criminally Obtained Incomes and the Financing of Terrorism" and regulatory legal acts of the Central Bank of the Russian Federation was intensified.

Today, 4 million MTS subscribers regularly, at least once in three months, use the opportunity to make payments and transfers from their subscriber account.

/ MTS RETAIL CHAIN

The retail chain is the MTS ecosystem mart promoting the ecosystem products.

Through its 100% subsidiary RTC JSC (RTC), MTS PJSC has one of the largest non-food retail chains in Russia, which includes about 3,413 retail outlets selling telecom equipment and communication services, customer service, financial and banking services.

Developing on an omnichannel basis, implementing a single approach to the customer at all points of contact and the interconnectedness of communication channels, RTC interacts with 120 million customers a year. Live communication, personal contact, expert knowledge of RTC employees help familiarize the buyers with the best MTS ecosystem products.

About 80% of new customers of the MTS ecosystem who visited RTC retail outlets and learned about the MTS Premium subscription signed up for the program.

More than 200,000 new customers who learned about MTS convergent products at RTC selected a product combining Satellite TV and fixed-line communication.

The number of participants engaged in the MTS Cashback program through RTC almost doubled, as

compared to 2020. 70% thereof are new participants registered in the program for the first time. In addition, more than 20% of the service members converted the points received into a repeated purchase.

The MTS online store (shop.mts.ru) is implementing an “endless shelf” project, the essence of which is that the goods not fitting in a physical retail outlet are available for purchase digitally. The buyers have the opportunity to place an order with delivery to a specific address or to any MTS retail outlet / point of issue of the order.

RTC is constantly working on reducing the time of customer service without losing the quality, improving the software operation and optimizing organizational processes; much attention is paid to the professional training of first-line employees.

During the pandemic, the RTC retail chain was not only able to quickly transform the processes within the company while maintaining its main strategic priorities, but also strengthened those its parts that allowed minimizing losses in such unprecedented circumstances.

/ KION/MEDIA

On April 20, 2021, a new online cinema KION was created and launched on the basis of the MTS TV OTT platform and became a part of the MTS product ecosystem.

The MTS Media LLC (MTS Media) subscriber base dynamics is positive Y-t-Y +27%, the main increase was due to online cinema subscribers (+58%):

- > KION video service rebranding;
- > launch of KION Originals;
- > implementation of MTS Media marketing campaigns: 100/100, KION for 199, as well as MTS Premium ecosystem products and convergent.

The flagship area of the KION platform is the KION Originals content line: exclusive series, feature films and documentaries. In the originals pool of the KION online cinema, there are such well-known film and series projects as “Crystal”, “Kidney”, “My Mom’s Penguins”, “Secrets of Family Life”, “Durov”, “Clinic of Happiness” and many others.

In total, KION released 21 original projects in 2021.

In 2021, the release of original content became possible thanks to strategic partnerships with key federal TV channels (Channel One, NTV) and cooperation with the leading production companies: Look-Film, Sreda, Bazelevs, Mediaslovo, VISH Media, etc.

Projects and works released by KION online cinema were awarded Russian and foreign awards (to date, KION series and films have received more than 18 film awards), including:

- > the “Clinic of Happiness” series received the Bolshaya Tsifra national award in the “OTT Originals: Content Created Specifically for Online Cinema” nomination;
- > KION online cinema received the 2021 Bolshaya Tsifra national award in the “Discovery of the Year” nomination;
- > KION original series “The Spit” won the New York International Film Festival (INYFF) in the “Best TV / Web Series” category;

- > the “Secrets of Family Life” project won The Digital Reporter Special Prize at the Realist Web Fest;
- > KION original series “Father Sergius” was awarded at the third annual Pilot festival of TV shows for “masterful genre mix-up”;
- > promo videos of the series “The Spit”, the movie “Sakharov. Two Lives” and branding of KinoJam TV channels were awarded at the ninth Media-Brand competition;
- > victory of the KION online cinema commercial “Frenchman” at MIXX Russia, ADCE, Eurobest, Red Apple and ADCR Rewards (bronze in the “TV/Cinema Commercials” category; silver in the “Online Videos” category; gold in the “Craft — direction, cinematography and editing” category);
- > KION original series “Secrets of Family Life” was acknowledged as the “Best Comedy Series” at WEBFEST BERLIN.

Regular citation in top business and specialized media, PR and GR events, co-producing of feature films with a high social response, release of our own high-rated series content, as well as a focus on content promotion, made it possible to increase KION brand awareness to 30% by the end of the year.

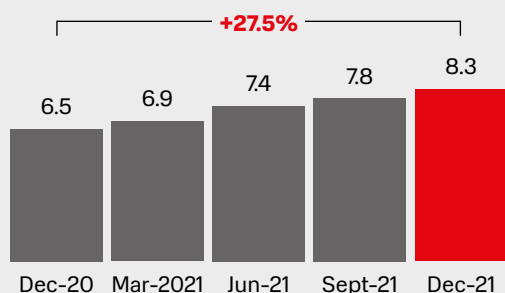
Thanks to the service restart and rhythmic original content releases, the share of VOD library viewing on the service increased significantly (three times), just as the time spent watching content on the service.

In 2021, MTS Media continued to work on its own TV channels with Russian and foreign content: KinoJam1 and KinoJam2 streaming HD movies and series. The KinoJam1 TV channel is dedicated exclusively to domestic cinema, while the KinoJam2 channel focuses on popular foreign TV series and films.

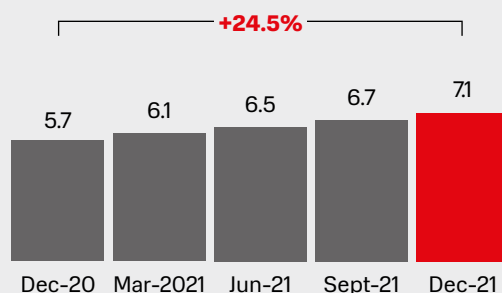


/ DEVELOPMENT OF KION, THE LEADING ONLINE CINEMA

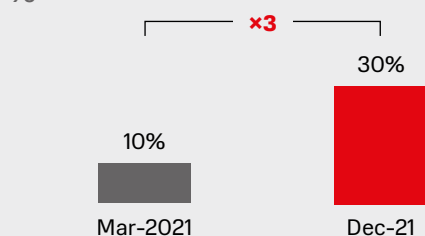
3M TV subscribers million subscribers



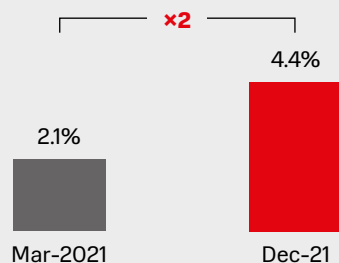
Paying 3M million subscribers



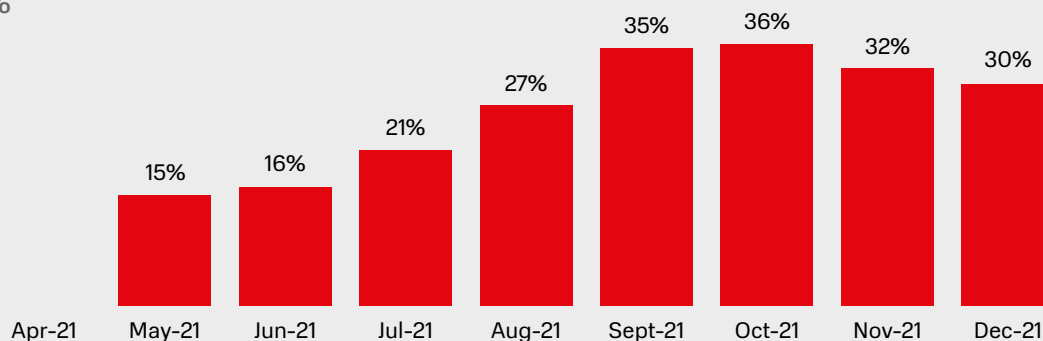
The share of time spent watching VOD content in the total time spent watching on the service (TVT) %

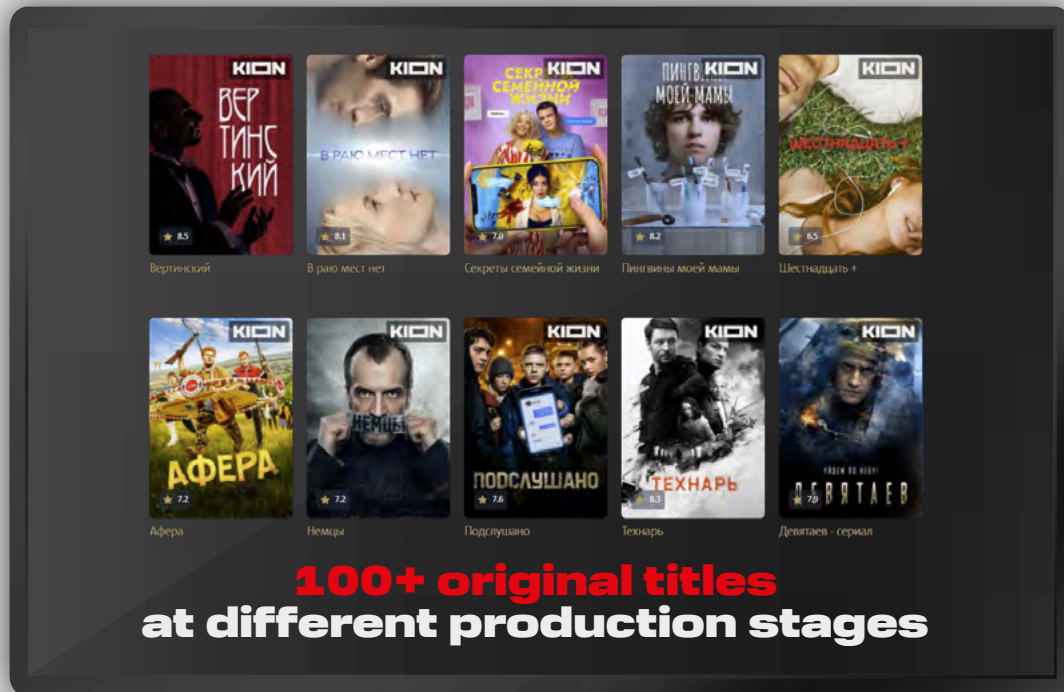


KION watching by an active subscriber per week (TVTU) hours



KION brand awareness %





Original content

21 **x3** **x2**
title MAU TVTU

Main driver — VOD

Partnering with OZON e-commerce platform is a new source of user base growth (starting Dec'21)

VOD Library



Positive audience feedback

ОНЛАЙН-КИНОТЕАТР
KION
Created by MTC

Leading feedback aggregator

★ 9.2..... Crystal	★ 8.1
★ 8.6.....Clinic of Happiness.....	★ 6.7
★ 7.7..... Devyataev	★ 6.2
★ 6.6.....Secrets of Family Life.....	★ 6.5
★ 7.2..... The Spit	★ 5.6
★ 7.0..... Heard It on the	★ 6.1
★ 6.7.....Scam.....	★ 5.0
★ 8.1..... Durov	★ 6.3

/ QUALITY AND CUSTOMER EXPERIENCE AND SERVICE IMPROVEMENT

In 2021, we continued our work to increase customer satisfaction with the company services and provide the best customer experience in the MTS ecosystem. To this end, we are working on building a unified omnichannel customer experience, where our customer receives a high-quality product and seamless service, regardless of the product or point of contact.

The customer has been and remains our company value. In 2021, we actively developed the customer ecosystem. We arranged the work with each customer in such a way that he/she would receive maximum support using any of our services.

Particular attention was paid to the development of convenient customer service tools. Based on AI, we created speech and text analytics, and now we understand much better the way the customer communicates with Help Desk personnel. We see what is already working well and what is subject to improvement. Moreover, we made sure that contact center employees feel comfortable in the new pandemic reality. For security reasons, more than 50% of employees worked remotely from a comfortable home office being equipped with everything required for work.

In 2021, we went on developing the automatic voice assistant (IVR). We connected an internal intellectual platform thereto and now we offer the customer such scenarios that are best for him/her. IVR efficiency increased to 65%.

In 2021, customer service was launched in the popular WhatsApp, Telegram and Apple Messages messengers; we also actively developed the chat bot. The bot solves more than 50% of incoming questions on its own, without transferring to operators. New services have also appeared: we inform the customer about the terms for executing his/her application, as well as about the terms and status of reviewing his/her claim. The bonuses for those customers who got affected by network outages are provided automatically.

Attention was paid to the retail chain as well. Employees act according to the new MTS ecosystem customer service scenarios, they have a chat with a built-in smart chat bot for additional support.

All our activities are targeted at improving the customer service quality, this is an important part of the MTS CLV 2.0. strategy. Also, we get feedback on the changes introduced through a predictive scoring model. This tool shows the exact customer needs, as well as the approach capable of quickly and efficiently solve his/her problem. Thanks to this data, we become even better, and the customer appreciates it staying with us for years.

In 2021, an important area for improving customer experience became increasing communication transparency regarding the company data plans and services. This is a key component for strengthening the trust of customers using the products and services of the MTS ecosystem. CJM (Customer Journey Map) audits for popular data plans and services were conducted. The result of the work carried out for the customer was an increase in the transparency of information on charges, including the implementation of SMS/Push-notifications containing the recommended amount for payment, the construction of unified CJMs and the provision of up-to-date and unified financial information at the main points of contact.

High competition in the telecom services market requires a reduction in time-to-market and an increase in the quality of new data plans for services and subscriptions that meet the needs of different user categories. In order to accelerate the launch of new high-quality products on the market, the company developed an updated automated testing system. Using the new system, we will be able to more than triplicate the amount of processes tested at peak performance, thus increasing the number of products tested simultaneously. Increased system performance will have a positive effect on the maximum throughput capacity, while improving the quality of the products launched.

We successfully use and go on developing the portal for alpha and beta testing of MTS products. In 2021,

we introduced a system to motivate our customers with various offers for the company products. The motivation system not only helps us engage new users, but also expands the number of the MTS ecosystem customers. Thanks to the portal, we provide high quality products, taking into account the needs and opinions of our end users.

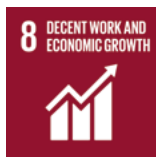
In 2021, we expanded the coverage of digital products by customer and technological quality metrics by 88%, which made it possible to comprehensively assess customer satisfaction with MTS ecosystem products and understand the customer needs better. An approach to assess the quality of individual components of digital products being the modules providing convenient and seamless customer experience at every point of contact between the customer and digital products was introduced. Comprehensive improvement and optimization of mts.ru website performance was carried out, due to which it was possible to reduce the time for the complete website upload by 41%. In general, due to the ongoing activities, it was possible to increase the

customer satisfaction indicator with our website by 3.5 times in H2 2021.

The Closed Loop project continues to develop, within which the customers are additionally contacted based on the results of satisfaction surveys to help resolve their issues. During the year, we expanded the Closed Loop areas by adding MTS and MTS Bank chat customers, as well as the users of banking products, to the project. The ecosystem services, such as MTS Premium, MTS Library and MTS Music, began to be used as loyalty tools when communicating with the customers. Upon the Closed Loop execution, the customer satisfaction doubles. This project helps adjust the existing business processes to ensure customer satisfaction with interacting with the company.

In 2021, we actively worked with the number and frequency of customer opinion surveys. As a result, it was possible to reduce the survey load on the ecosystem customers by elaborating a harmonious contact strategy within the entire ecosystem.

/ BIG DATA



Big Data develops and supports the majority of MTS products and solutions using technology platforms (recommendations, scoring, lead generation, dynamic pricing) and big data analytics competencies.

Big Data developments make it possible to provide the customers with more customized offers, which increases competitiveness, frequency and duration of customer contact with the product.

Big data processing technologies also allow to optimize processes within the company and increase the efficiency of investment in the initiation of business.

In addition, big data underlie individual services: a solution for individual organization of advertising campaigns by business customers of MTS Marketer, geoanalytics for Smart City (MTS Region), anti-spam services and others.

In 2021, a tool for automatic subscriber segmentation was developed for the MTS Marketer product, due to which the number of sold ad-hoc segments was increased by 2.5 times without increasing the staff or losing quality and meeting the set deadlines. Also, MTS Research, a marketing research product, was launched, within which a line of reports was developed to analyze the customer base, the campaign launch results (post-campaign) and to conduct other marketing research.

Big Data continues to develop FinTech areas in partnership with colleagues from MTS Bank and the MTS ecosystem. At the end of 2021, it was possible to increase the accuracy of segments and reduce the time of delivering offers to the customer by three times, introduce additional scoring models for "risks", launch Full Approve loans, as well as

integrate a recommending system for payments and transfers into RB.

MTS goes on utilizing big data analytics to efficiently plan the development of telecommunications infrastructure (Smart Rollout project). In 2021, the focus of developing the use of Big Data technologies was shifted to finding more efficient locations for new coverage. Within this activity, it was possible to increase the coverage of the analyzed facilities by seven times and to double the accuracy of models for predicting the revenue of locations due to machine learning algorithms and the ability to analyze a large number of factors. In addition, it was possible to clarify the methodology for assessing locations with low quality indicators on the basis of big data.

In 2021, the spam protection service was scaled to more than a third of the telecom business customers, which required a significant increase in the coverage and speed rate for detecting spam numbers. Together with our colleagues from the MTS ecosystem and the AI team, a service for short communication with spammers was launched, which allows the customer to receive the text of the advertising call and listen to it, if necessary.

In 2021, the Big Data team continued to cooperate with government agencies (the Situation Center of the Ministry of Digital Development, Communications and Mass Media of the Russian Federation) on the subject of fighting COVID-19 and its consequences in terms of supplying data on compliance with self-isolation regimes.



/ ARTIFICIAL INTELLIGENCE

MTS Artificial Intelligence Center

The MTS Artificial Intelligence Center has been operating since 2017. The AI Center specialists create and introduce AI solutions within the MTS ecosystem. Developments of the Center complement the existing services with new features, improve customer experience: solutions in the field of computer vision (cloud video surveillance and video analytics), natural language understanding (chat bots, voice bots, virtual assistants, speech analytics), speech synthesis, industrial analytics.

MTS is a member of the Artificial Intelligence Alliance that develops the said technologies in Russia. Other members of the Alliance are Sberbank, Yandex, Mail.ru Group, Gazprom Neft and the Russian Direct Investment Fund (RDIF).

In March 2021, MTS announced investment of around USD 10 million in a startup of Kneron, a

group of companies that develops and sells microchips used for accelerated and power-efficient processing of AI algorithms and related software.

In June 2021, the AI Center launched startup accelerator and venture fund. The authors of AI projects demonstrating a strong idea, solution prototype and development may apply to the accelerator. Currently, 13 startups from 10 countries have been selected with funding of up to USD 100 thousand approved for each project.

MTS has entered into agreements on strategic partnership in the field of AI with 30 international companies.

The MTS AI Center combines its own expert opinion with the world's leading developments in the AI field so that our solutions are in demand not only in the Russian market, but also in the global one.



/ DEVELOPING NEW SERVICES/APPS, PARTNERSHIPS



MTC Live

In 2021, MTS Live was actively developing due to the theatrical direction and support of the Russian cultural sector: we entered into partnerships with major theaters (for example, the Mossovet Theater), invested in our own productions and musicals.

The share of MTS ticket services in the dropped market was increased by strengthening its leadership in Moscow and initiating business in the regions (agreements were concluded with 130 new counterparties), as well as active participation in the Pushkin Card program. In 2021, sales on MTS ticket marts grew by 84.5% year-on-year. In 2021, the total number of tickets sold amounted to 3.5 million.

Despite the restrictions imposed on mass and cultural events, the MTS promotion department managed to hold 341 events and concerts with more than 250,000 tickets sold in total in 2021.

A partnership was signed with the MTS Live Hall in Yekaterinburg, the opening of the MTS Live Arena in Moscow and the launch of a chain of own concert venues in the key regions were planned. The hall and bar in the Moscow Palace of Youth (Moscow) were rebranded.

MTS Live customers get access to all the MTS ecosystem benefits: from convenient seamless authorization using MTS Login or easy MTS Pay payment in the mobile app to special MTS Premium subscription offers and the ability to accumulate or write off MTS Cashback program points.

improvement in NSAT being an indicator of satisfaction with MTS as a business partner: 18 p.p. to 27 p.p.

10 partners were added as part of MTS ecosystem products: MTS Cashback or MTS Premium, X5 retail group (Perekrestok Vprok), Ozon, Airo, Urent, Medsi, VK Group (Uchi.ru), Lukoil, Aeroflot, Wargaming, PUBG mobile, IGG.

Contracts with five key strategic partners were extended in terms of services (Apple Music, Yandex. Plus, MTS Music, Tinder).

Eco-modules

In 2021, we covered 90% of the top (TOP-30) ecosystem products with the major ecosystem modules (Login (MTS ID)), Profile, Design System, Help, Markup.

Seamless authorization for ecosystem products was developed and is being introduced.

A unified help system and a unified design system in code, which reduce the time for making product changes, were developed and introduced.

We developed and commenced the introduction of a system of cascade (Push, SMS, e-mail) user communication.

My MTS

My MTS becomes the versatile Ecosystem mart, which provides the customer with easy access to the entire range of ecosystem products and services (Premium subscription, MTS Cashback, telecom, bank, online store, etc.).

The customer now sees a set of widgets for digital products activated on the main page of the My MTS app and can easily manage his/her subscriptions.

Now, on average, more than 5 million customers visit the app daily (a million customers more than at the beginning of 2021).



Partnerships

The number of active joint projects with major partners reached 50:

Apple, Microsoft, Samsung, Google, HP, Xiaomi, GazpromMedia, VK Group and others.

The partner infrastructure is improving, partner connection time has been reduced, which leads to an

/ PARTNERSHIPS WITH MTS ECOSYSTEM

>1000
partners

>10 million
customers

MTS engaged for our
partners over the course of
four years

>50
RUB billion

MTS earned together
with its partners

9 out of 10
companies

are ready to recommend
MTS as a business partner



**Integration into
MTS ecosystem
in one week**



**Electronic
document
management**

Segmenets:

**BIG DIGITAL/
Worldwide**



Partnership for new
product launch-
es by international
companies

**BIG DIGITAL/
Russia**



Cross-promotion,
integration into loyalty
programs

**NON DIGITAL/
Russia**



Combining products
of offline partners with
MTS digital products

**Minority
participation**



Obtaining expertise in
the areas new to MTS

/ MTS BUSINESS MODEL: VALUE CREATION TRIANGLE

ECOSYSTEM



Multi-product customers: churn reduction, increased return per customer, additional sale of services



- > seamless customer experience
- > customization
- > subscription model flexibility
- > unified loyalty program
- > assistance in launching new services



value creating tools

GROUP



M&A



IPO

Growth in the fundamental value of the Group through the spin-off of major business areas and growth in their value



- > quality and flexibility of management through the business area autonomy
- > raising of external capital in business areas (strategic investors, IPO)
- > M&A of required assets
- > capital redistribution between business areas
- > interaction management within of the Group

COMPETENCIES



Accumulation and development of competencies is a source of efficiency and competitiveness growth for all businesses of the Group



- > reuse of competencies in other business areas increases their competitiveness
- > The Group creates sufficient domestic demand to develop the “expensive” competencies

LOOKING INTO THE FUTURE

The hype associated with ecosystems and digital platforms is gradually disappearing both globally and in Russia: the focus is shifting to the articulating a clear benefit for a customer or business partner. In the future, the emergence of new players (including those based on telecom operators) is unlikely. Cross-country differences will persist, if not increase: the Russian market will be one of the few where multi-industry companies developing local ecosystems will continue to develop. Herewith, a scenario of “rational” coexistence of ecosystems, digital platforms and marketplaces is likely, both in terms of competition between them, and in terms of consumer choice. Thus, we can expect that there will not be any significant number of mono-customers: on the contrary, people will strive to obtain the maximum utility by consuming the products and services of several ecosystems. Within this approach, we expect continued penetration of subscription consumption models and, simultaneously, a significant share of multi-subscriptions among consumers: it will also be rational, if the ecosystems strive to complement each other (even within the same service category, for example, different filling of online cinemas with exclusive content or increased cashback for different products). Thus, in the near future, a significant part of the population of the country will be covered by the principal ecosystems fighting for customer retention (for example, within the subscription model) and not competing with each other “head-on” for tugging customers to their respective side and exclusive “rights” to them.

In the field of technological development, over the next few years there will be a convergence of telecommunications and IT infrastructure: a distributed multi-level network of backbone, edge and far edge data centers connected both with each other and with the customers by high-speed FOCL-based channels, private and public 4G/5G-networks, will not only improve the quality of the existing solutions, but will also allow to create new nationwide scalable products and services, for example, in the areas of AR, VR, cloud games, vehicle remote control. It is in order to fully live up to potential of this trend and the synergy of the assets existing in the Group that MTS allocates cloud and telecom infrastructure to a separate company (MTS Web Services, MWS).

The linear TV replacement with online cinema services continues in the video content market. Competition in this market, both globally and in the Russian market, has only intensified over the past few years, but in the future, a decrease in competition and industry consolidation cannot be ruled out. Consolidation can take place not only as leaving or merging individual players, but also, for example, as generating partnerships (for joint production of content being a key and scarce resource in this market) or using the white label model (providing services in the interests of other ecosystems or digital platforms not having their own media products). Regardless of the industry development scenario, MTS continues to develop its key business area in this field being KION, which combines a full set of linear TV channels and an online cinema.

The pandemic gave a drastic nudge to the development of remote service formats: the share of online trading in the total retail trade turnover has grown and ready-made food delivery services continue to gain popularity. A number of large companies and ecosystems in Russia are developing their trading platforms (marketplaces), the competition here remains high, while developing such projects still consumes significant resources. Thus, having this kind of business area in the ecosystem will not only have its advantages, but also disadvantages, at least in the medium term. MTS, for historical reasons, has a strong offline retail chain (RTC), in which the share of online sales is also growing rapidly, and the Group will continue its organic development both as an independent business, and as a universal omni-channel tool for sales and service in the interests of the MTS ecosystem and its partners. Continued introduction of CRM, Big Data and AI tools (developed within the Group) will allow MTS to increase sales and customer service quality cost-efficiently. Separately, in the context of retail and mobile operators, it is necessary to highlight the e-SIM technology, the potential of which has not yet been fully disclosed and due to which, in the future, it may be possible to change the structure of operations in the chain of PoS and sales, as well as to reduce the cost of purchasing physical SIM cards.

Financial services are usually one of the key elements of most ecosystems, at least in Russia.

The Russian market is considered one of the most progressive and dynamic, and now, with international payment systems having left, it has almost completely switched to domestic payment solutions, which in this regard makes the market similar to the Chinese one. In the short term, we can expect further growth in the penetration of solutions based on Mir cards and Faster Payments System. From the point of view of global trends, it is necessary to single out the increasingly popular BaaS (Banking as a Service) model, within which the partners provide financial services (separately or within a cart of financial and non-financial products) to end consumers. The prospects for the widespread use of this business model in Russia are not so obvious, since the leading banks themselves are trying to expand the range of services they provide to the fullest extent possible; however, the attempts to use this concept will be probably made in the Russian Federation as well.

“Smart Home” is one of the most promising markets in Russia, which is still at the initial growth stage (compared to a number of other large countries). Generally speaking, this market is still too segmented — many large companies operating in the consumer electronics markets are building their own ecosystems not always compatible with each other, although the unification of protocols and standards would not only be convenient for users, but would also increase revenue and profit for all players. A certain hope in this matter can be given by the Matter project and family of protocols of the same name, if they are successful. However, in any case, the main obstacle to the growth of penetration of Smart Home products lies not in the presence of unified protocols and compatibility of equipment from different manufacturers, but in the absence of a selection of convenient and functioning use cases bringing real benefits to the customer. Thus, statistics on using

Smart Speakers in a number of countries shows that the main use cases are primarily related to listening to music, searching for information and content, and not only and not so much to controlling Smart Home devices. Herewith, the growth in the penetration of typical Smart Home devices (light bulbs, sockets, cameras) in a number of developed markets has already stopped at a rather low level. It can be expected that a new breakthrough will be made once new use cases are found. Herewith, it is likely that typical mass use cases will be different for different countries: something in great demand in the US (for example, a heating/air conditioning control system for private homes providing energy savings) may be of little interest to an average Russian.

Significant changes are expected in the digital advertising market. Large-scale changes thereon will be caused by the concurrence of a number of factors. The ban on cookies in the Chrome browser and the new privacy features in iOS are directly transforming the digital advertising market. The willingness of young people to share data about themselves creates long-term motivation for elaborating new tools for more precise targeting. Marketing is actively shifting into social and entertainment mechanics (including through UGC platforms). An additional Russian market feature was the withdrawal or ban of a number of foreign players, which will provide new opportunities for local companies (for example, RuTube, VK) in the advertising market. MTS will also increase its presence on it, primarily by developing MTS Marketer, as well as, for instance, by introducing an advertising model in WASD.TV. It is also important to note that, in a broad sense, the possibility of targeted sales of additional services (own and partner) to the customers underlies the MTS ecosystem construction ideology.

OUR STRATEGY



Since 2019, MTS has been following the Customer Lifetime Value 2.0 (CLV 2.0) strategy aimed at building a sustainable digital ecosystem business on the solid telecom leader foundation. This wording means that the Customer, to whom we provide a wide range of digital services, is at the center of our value proposition. We strive to extend the customer's "Lifetime" as much as possible (Lifetime is the time, during which the customer uses our services), creating and gradually strengthening emotional affection for the brand, and increasing the degree of satisfaction and customer loyalty. We focus on offering greater Value to the customer and at the same time we maximize the value that we will receive from the customer in the long run. "2.0" symbolizes our transition from the ideology of operating on a single telecommunications market (which we conventionally denote as "1.0") to the ideology of a digital service environment with a comprehensive offer including products and services of different markets to meet the needs of the customers in various spheres of their lives.

We are confident that going beyond the boundaries of the telecom business to new markets, for example, the markets of financial services and media/entertainment, with the functional support of such digital areas as Big Data and AI, will allow us to transform into a multi-service digital company. We will build up a portfolio of digital products based on our own developments, as well as by involving independent developers and service providers as partners. These mutually beneficial partnerships will allow us to bring more value to the lives of our customers, offering them more innovative, diverse and convenient services. We are planning to gradually expand capabilities of our programs, increase the number of partnerships and become the best possible choice in the market for companies looking to expand their customer base and gain additional value.

The Russian digital service market is unique to a certain degree, since local players in most segments who successfully compete with global giants occupy leading positions. This situation is down to a number of fundamental reasons, ranging from consumer preferences and language specifics to regulatory requirements and the structure of the borrowed capital market. This allows large Russian business groups, representatives of areas such as

the banking sector, retail, high-tech sphere and telecommunications, to actively develop new business directions in the digital environment, relying on the ecosystem approach in their strategies. In our opinion, the Russian market is now entering a new period of competition for the share in expenses and attention of the customer.

We are confident in the strength of our position in the context of this kind of competition. Our strong brand and deep customer knowledge, supported by powerful analytical tools based on AI and Big Data, will allow us to provide users with a seamless, deeply customized and personalized customer experience in a wide range of digital services. Even now, we are witnessing a significant synergistic effect from the joint offer of telecommunication, banking and media products, which allows us using marketing tools more efficiently and allows us to gain more and more knowledge about our customers. At the same time, the customers using several types of services bring us more value, demonstrate a greater brand commitment, a higher level of loyalty, and a greater degree of satisfaction. Our key priorities for developing the ecosystem in the upcoming years are: increasing the ecosystem customer base, developing and improving high-quality digital products and expanding the pool of partner companies.

In 2021, as the company's operating structure was brought in line with the CLV 2.0 concept principles, the efforts of MTS' senior executives and corporate governance bodies were aimed at finding the optimal "format" for key business verticals to ensure their efficient development and access to fair evaluation by the market. A comprehensive analysis helped us come to the conclusion that some of our business areas have reached such a scale and maturity level that allow them to become a driver of growth in the MTS Group fundamental value. Therefore, we intend to gradually allocate such areas into independent structures, separate companies that will freely operate on the market, raise external funding and become full-fledged entities for the investment community.

We are sure that such an approach will provide high motivation for teams of business areas, will allow to set up internal business processes in the best way and in accordance with the specifics of each of the areas, which, in turn, will ensure high dynamics in developing the products qualitatively corresponding to the level of market leaders. It will also simplify the process of raising external funding, allow new promising digital business lines to go beyond market valuation by telecom segment multiples and fully unlock the growth potential of their shareholder value. In this sense, we are striving to move away from the market seeing the MTS Group as a single inert entity to perceiving it as a "sum of parts", where each part is evaluated fairly in accordance with the results of its operation and the multipliers accepted by the market for each specific area.

The first step towards the implementation of these strategic initiatives is the separation and, in the medium term, the sale of tower infrastructure, which is currently rather a passive element of our business

not causing any significant impact on the ecosystem agenda. The funds from its implementation can be directed to developing dynamically growing business areas, in which we can count on a high return on investment.

In the next few years (depending on the situation in the financial markets), we aim to give independence to the FinTech area represented by MTS Bank, which has been demonstrating high dynamics over the past two years approaching the sector leaders not only in size, but, even more importantly, in a set of products and the degree of business digitalization in general. Other business areas, such as retail, media, cloud and infrastructure services, also have the potential to independently enter the open financial market and engage co-investors or strategic partnerships in the long term.

We would like to emphasize that the formation of independent companies does not mean our transformation into a holding of weakly connected businesses. We are still a Group and go on cultivating ecosystem links between individual areas. We see the following aspects as the main connecting forces: clear and detailed agreements on company interaction within the Group, common marketing and brand management (not necessarily unified), sharing knowledge about the customers, Big Data and AI mechanics, following the unified CLV logic, which remains decisive for all businesses, while maximizing CLV is their main strategic benchmark. In addition to ecosystem connections, in the Group, we pay special attention to the formation of competencies related to generating digital products and the ecosystem in general, as well as the mutual exchange of such competencies between areas and structural divisions of the MTS Group corporate center.

/ OUR STRATEGIC PRIORITIES

MTS ECOSYSTEM

RADICAL TRANSFORMATION
OF THE BUSINESS MODEL



**SINGLE
UMBRELLA
BRAND
OF MTS**



**SET OF
RELATED
PRODUCTS**

mutual reinforcement
and a seamless



**PARTNER
OFFERS**

convenient for customers,
beneficial for partners





STRATEGY CLV 2.0

Customer

- a user of connected digital storefronts, seamlessly receiving services from MTS and partners
- customer-centric approach: we look through the eyes of the client, and not through the prism of individual products and services
- best customer experience with a deep, personalized approach (AI / Big Data)

Lifetime

- focus on a long-term customer relationship
- we maximize the total long-term profit from the customer, and not the current revenue for individual products
- focus on maintaining loyalty and emotional attachment, including through socially and environmentally responsible actions by the Company
- focus on NPS and Love brand

Value

- high class products (including from partners)
- a convenient technology platform for effective interaction with partners and the best customer experience
- creation of new value outside telecom (including monetization through advertising and lead generation)

/ IMPLEMENTATION OF THE STRATEGY IN 2021

In 2021, the efforts of MTS were focused on developing priority digital ecosystem areas, which we perceive as the main source of growth for our business. As a result, the target levels for all key performance indicators were achieved, which confirms the correctness of the approach we have chosen and the efficiency of our strategy.

While striving to ensure long-term sustainable business growth, MTS implements the CLV 2.0 strategy and continues to build an ecosystem of digital services based on the core telecom business. At the current stage, the key strategic tasks for us are to expand the ecosystem market offering to provide more value to the customers and increase the ecosystem customer base.

The MTS Premium subscription is an important marketing tool with which we encourage our customers to use the new services in addition to those they used before. With product offer expansion, the value a subscriber receives expands as well, and we are pleased to note that our customers understand this. This is evidenced by the fact that during the year we saw a twofold quarterly increase in the amount of paid subscription users.

As for the product offer expansion, the most striking event in 2021 was the launch of the updated KION online streaming platform, which contributed greatly to the growth in the Media segment in terms of all

key indicators: number of users, viewing volumes and revenue. It may be noted that in Q4 2021, 30% of the new KION users became MTS Premium subscribers and users of convergent products, which again testifies to the customer awareness of the value of the MTS subscription model and their readiness and desire to use the capabilities of our growing ecosystem more comprehensively.

The number of MTS ecosystem customers — those actively and consciously using two or more of our services — reached 8.8 million at year-end 2021 being an increase of 40% as compared to 2020. The average number of ecosystem products per customer increased from 1.31 in 2020 to 1.43 in 2021. The growth of the ecosystem customer base, just as we expected, impacted revenue growth positively, while concurrently lowering the impact on our cost level — due to higher costs of ecosystem customers, along with lower churn and high NPS.

The past year has become a milestone for us in a sense, since new digital segments not being a part

Company's Key Performance Indicators

Indicator (MTS Group)	2021	Actual	2020	Actual	2019	Actual
	Target		Target		Target	
Change in revenue, %	High-single-digit growth+	+8	>3	+5.2 ²	+6–7	>7 ⁴
Change OIBDA, %	≥6	+6.6 ¹	up to +2	+1.7 ²	+4–5	>4 ⁴
CAPEX, RUB billion ²	~110	111	~90	91.6 ³	~90	90.7

¹ The adjusted OIBDA for 2020 does not include a loss from depreciation of non-current assets in the amount of RUB 2.088 billion.

² Taking into account NVision Group deconsolidation. The adjusted OIBDA for 2020 does not include a loss from depreciation of non-current assets in the amount of RUB 2.023 billion.

³ Including cash receipts under swap contracts related to the changes in foreign exchange rates against the ruble.

⁴ Revenues and adjusted OIBDA include the estimated impact for the 12 months of 2019 of the Group's operating activities in Ukraine based on the financial results for 11 months of 2019 and MTS internal forecast for December 2019.

of the telecom jointly provided more than half of the revenue growth of the entire MTS Group. The largest contribution to this growth was made by the FinTech area represented by MTS Bank, largely due to the consumer lending portfolio growth. In 2021, the sales of credit products more than doubled, with the share of disbursements in digital channels of credit cards and general loans exceeding 60%. At year-end 2021, the number of MTS Bank customers reached 3 million and the monthly number of active users of the MTS Bank mobile app amounted to 1.8 million, with 51% of Daily Banking customers using other products of the MTS ecosystem.

In September 2021, within the implementation of the strategic asset spin-off principle, we received shareholder approval to separate a significant part of the passive and active network infrastructure into separate legal entities. This decision is aimed at finding new opportunities for MTS Group capitalization growth and concurrently it will increase the operational target of the core business, focus more on the customer, the product offer expansion and improvement of producibility of business operations, including through digital tools. such as AI and Big Data.

In 2021, we continued targeted M&A activity in order to strengthen the telecom core and expand our presence in the promising areas, in particular:

- > acquired Interregional TransitTelecom OJSC (MTT), a federal provider of smart telecom and IT solutions for business, one of the top 10 largest telecom companies in Russia;
- > completed the second stage of the transaction to acquire the assets of Green Point Group of Companies, which provides broadband Internet

access and digital television services in 12 cities of Russia;

- > acquired GDC Energy Group LLC, which owns GreenBushDC, one of the largest data centers in Russia;
- > and also entered a number of high-tech digital projects: VisionLabs is one of the world leaders in the field of creating products computer vision- and machine learning-based products; Factorin is a high-tech blockchain platform for trade funding; Academy of Change is an educational online platform; KonnektU is a customer data management platform.

It shall be noted that we are selective about the level of our participation in new companies and projects, we do not prioritize control over the asset, but rather the long-term possibility of expanding our product portfolio with high-quality services. We understand that in many cases participation as a partner or a minority investor is the best format for ensuring dynamic independent project development with a fair sharing of risks.

Partnerships are the most important tool for us to fill the ecosystem offer, increase the business scale and the value received by the customers, partners and MTS. We are building a partner program being guided by the principles of openness and freedom in interaction with other companies and ecosystems, as well as striving for mutually beneficial cooperation. Currently, we are interacting with more than 1,000 partners who have engaged more than 10 million customers through MTS marketing channels over the past four years. A well-deserved assessment of our efforts in this area is the fact that nine out of ten companies are ready to recommend MTS as a business partner.