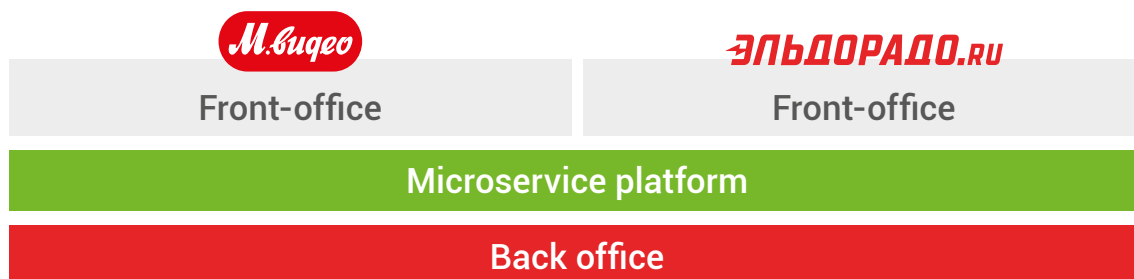


# INNOVATION AND INFORMATION TECHNOLOGIES

RETAIL IS A HIGH-TECH INDUSTRY IN WHICH A HIGH RATE OF CHANGE AND INNOVATION IS A COMPETITIVE ADVANTAGE. THE INTERNET AND DIGITAL TECHNOLOGIES ARE BECOMING AN INCREASINGLY IMPORTANT DRIVER OF MARKET DEVELOPMENT. ACCORDING TO THE GROUP, THE TECHNOLOGICAL FUTURE OF TRADE IN CONSUMER ELECTRONICS IS ASSOCIATED WITH THE FURTHER INTEGRATION OF ONLINE AND OFFLINE CUSTOMER INTERACTION AND THE COMPLETE DIGITISATION OF PROCUREMENT AND LOGISTICS MANAGEMENT, MARKETING AND OTHER FUNCTIONS BASED ON MOBILE TECHNOLOGIES AND DATA ANALYTICS.

M.VIDEO-ELDORADO GROUP IS CONSTANTLY INTRODUCING INNOVATIONS AIMED AT STRENGTHENING THE COMPETITIVE ADVANTAGES OF ITS BUSINESS MODEL, AND IT USES A WIDE RANGE OF TECHNOLOGIES: FROM BLOCKCHAIN SOLUTIONS IN WORKING WITH SUPPLIERS TO MACHINE LEARNING IN FORECASTING SUPPLY CHAINS AND BIOMETRICS IN DETERMINING FLEXIBLE STAFFING SCHEDULES. THE GROUP IS STRIVING TO DEVELOP AS AN IT COMPANY AND A DIGITAL RETAILER WITH THE BEST INNOVATIVE CUSTOMER SERVICE IN THE RUSSIAN MARKET.

## Target IT architecture: two brands, two front offices, combined back office



### IT transformation of M.Video-Eldorado Group

In 2018, as part of the consolidation of M.Video and Eldorado into a single company, the Group team launched an unprecedented project to integrate the IT functions of both retail networks with different management models.

The key tasks in building a unified IT infrastructure are:

- maintaining the independence of the M.Video and Eldorado brands in the development of front-end solutions
- transferring Eldorado's back-office operations to the M.Video model
- optimising costs and ensuring synergies from the merger.

In accordance with the development strategy for the two brands, the Group decided to continue the development of the front-office systems of both networks (websites, commercial systems, including the mobile application for m\_RTD employees and CRM systems). In this regard,

several new departments were created within the IT Division for the development of information systems for both the M.Video brand and the Eldorado brand.

The design of the architecture, the selection of the target model for the merger and the new organisational structure of the IT Division were carried out by the Group's transformation office together with consultants from McKinsey.

In February 2019, the legal merger between the Group's main operating company, LLC MVM, and LLC ELDORADO and the transition to a single SAP ERP system took place. The key project results were as follows:

- The successful integration of back-end processes based on SAP ERP and an increase in productivity of the Group's systems (the number of operations conducted by the systems has approximately doubled);
- The processing of about 300 thousand checks per day by the unified system;
- An essential update of Eldorado's front-office systems;
- Ensuring synergies: reducing the operating costs of IT and for staff in the IT Division.

### Management of technological development

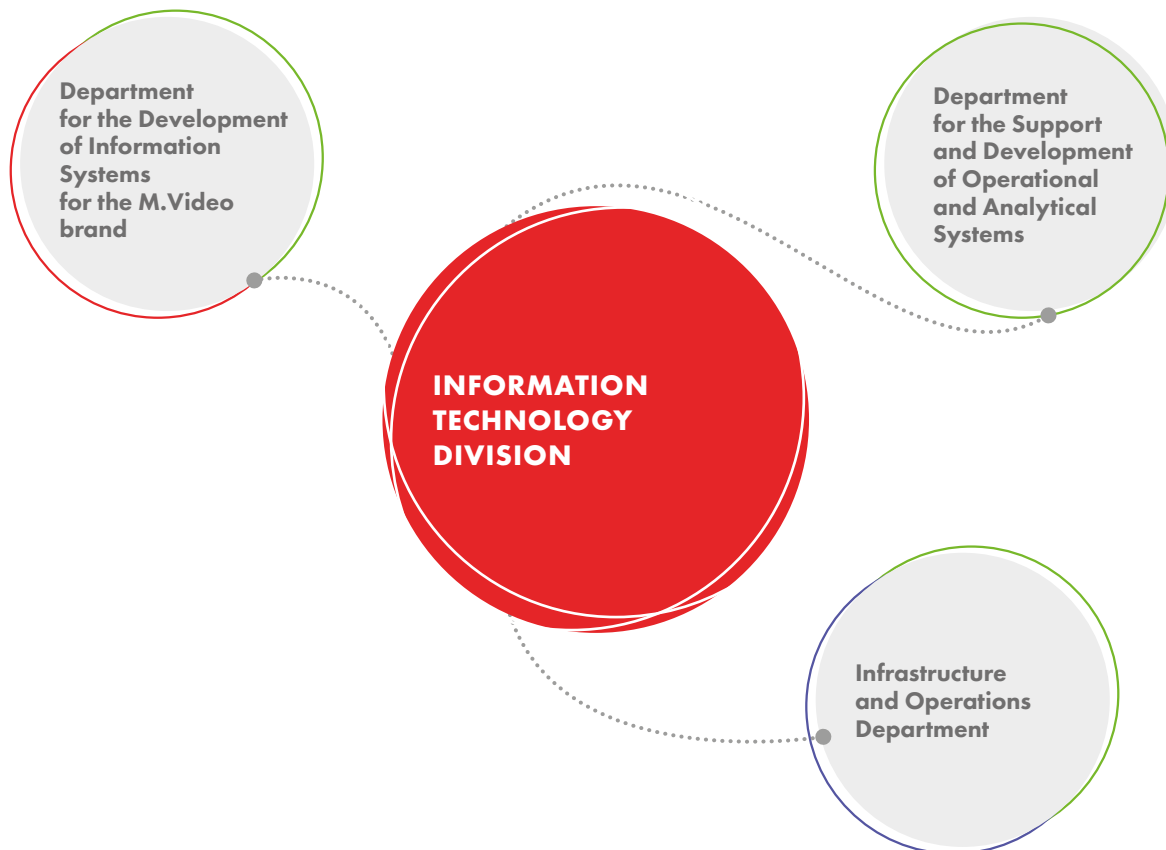
As of the end of 2018, the Group's IT team was supporting more than 100 IT systems, including both their own products and external services and solutions produced by Russian and foreign startups, such as Verme, VeeRoute, a credit broker system, etc.

Maintenance and development of the Group's IT systems and information services are the responsibility of the Information Technologies Division, which employs more than 460 people. The IT Division takes a classical approach to project management and also works in accordance with agile principles (flexible management within working groups), which makes it possible to optimise the speed and cost of implementing complex business solutions based on a specific task.

Within the Group, there is also a centralised Project Management Division, which represents a project office responsible for the complete cycle of portfolio

management and the implementation of strategic, business and IT projects. A centralised approach to the introduction of new solutions and common standards for evaluating and making investment decisions ensure timely support for the Group's priorities and impactful investments in further development. In 2018, the project office implemented more than 40 projects of various sizes in the fields of logistics, finance, retail sales and IT.

To effectively support the transition to the ONE RETAIL model, retail systems that have a direct impact on customer experience are being developed using a product approach. To this end, management forms product teams responsible for the continuous development of key IT products such as M.Video and Eldorado's websites, mobile applications, the order management system, etc.



## Business digitisation programme

In 2019, the Group began work on a new large-scale programme to digitise front- and back-office processes in order to create a new customer experience, increase revenue and reduce operating costs.

See 'Strategy', p. 47



The programme includes large-scale projects in such areas as logistics, financial management, HR, etc., that were selected jointly with KPMG consultants. Scheduled for a period of up to three years, the programme includes plans for the implementation of up to 50 projects.

## Digital workspace

The Group is introducing a flexible digital workspace for employees both at corporate headquarters and in retail stores. In particular, personal computers for more than 800 employees from corporate headquarters have been replaced by thin clients, a virtual machine integrated with cloud storage, i.e., with just laptop and Internet access, employees can access their work documents anywhere. This approach enables staff mobility and makes it possible to quickly assemble operational teams for specific tasks.

## Data Science Centre

In 2018, M.Video–Eldorado Group created the Digital Retail Data Science Centre, which has expertise in the areas of data analytics and machine learning. The Centre's main function is the development and implementation of mathematical algorithms in the Group's business processes: marketing, online sales, logistics and personnel management. The Group expects that technologies based on data analysis will reduce operating costs and could bring in up to RUB 5 billion in additional turnover in the medium term.

In 2018, the Centre's team began piloting a number of services based on machine learning, including targeted marketing solutions and pickup of online orders using algorithms and a chat bot.

See "Customer experience", p. 71



The Data Science Centre's priorities in 2018 were personalised marketing and optimisation of the customer experience on the website. Developments in these areas could significantly improve the level of service personalisation. In particular, M.Video–Eldorado analyses the behaviour of customers both online and offline, including their purchase history, their use of bonus points and other discount mechanisms, their behaviour on the site and in stores, views, abandoned baskets and responses to marketing communications, SMS and e-mail newsletters.

The Group is also implementing solutions based on data analytics in internal processes, including logistics and personnel management. For example, M.Video and Eldorado forecast the daily need for personnel in retail, as well as the demand for managing logistics supplies. When planning schedules for personnel and for the transportation of goods to each store, the geographic location of the store, traffic, seasonality, as well as the speed of retail sales and potential pickup volumes of online orders are taken into account.

**By the end of 2019, the Group plans to increase the number of staff at the Centre**

**to 17** people