Microscopy at the digital level.

Digital microscopy system

2023



CRoboScope

Problems

Transportation and storage



Also the lack of space and limited shelf life

Outdated fleet of scanners



As well as a slow update rate

Acute staff shortage



And a high level of compatibility of necessity

Lack of access to information



From doctors and clinicians

Lack of inexpensive solutions



For digitization of microscopic preparations

No cloud system



For storing and transmitting digitized data

Benefits of RoboScope

Specificity



Quality improvement

Digitized image allows for more detailed analysis with peer review and quality control



Resource Saving

Cloud storage instead of physical, no need in the transportation of medicines, increased labor productivity



Reducing the burden on the doctor

Оцифровку проводит средний медицинский персонал





Defense strategy

Intellectual property



Know-how for production

Robotic platform



Program registration

Scan control system



Patent

Platform utility model



Patent

For an industrial design



Trademark

RoboScope



Business model

B2B + B2G

Private medical centers and the Ministry of Health

Direct sales

A profit-sharing sales-model of scanners is possible



100 000 USD

Average Market Price



Up to 1500 in Russia

Laboratories without equipment



25 000 USD

Selling price



5 000 USD

Cost price

Global market

Market situation



Reduced demand for expensive solutions

Producers from unfriendly countries are increasingly leaving the Russian market



High research growth potential

The number of research year by year is limited by the capacity of the system and, thanks to digitalization, can grow significantly



The volume of the Russian market is 5 million USD

We plan to occupy 10% of the market for 3 years

PAM \$ 200 billion

TAM \$ 10 billion

> SAM \$ 2 billion

> > SOM \$ 900 million

Comparison of competing companies

Competitors

	RoboScope	OneCell.Al	KFBIO	WestMedica	Leica	Phillips
Image Format	Open (DICOM,TIFF)	Close	Close	Close	Close	Close
Own robotic platform	Yes	No	Yes	No	Yes	Yes
Price	starts from 25 000 USD	starts from 50 000 USD	starts from 70 000 USD	starts from 80 000 USD	starts from 100 000 USD	starts from 150 000 USD
Al solution	Developing	Developing	No	Yes	No	No
Microscope body	No	Yes	No	Yes	No	No
PC included	Option	No	No	Option	No	No
Country	Russia	Russia	China	Austria	USA/Germany	Netherlands

Advantages

Open DICOM format



Does not require additional customer costs for software for work with digitized images

Flexibility and integrativity



Integration into any telemedicine platform, LIS or MIS and patient's medical record

Affordable price – from \$ 25,000



At least 2 times cheaper than competitors

Own development and prototyping



Hardware and Software components are produced and developed in Russia

Automation data collection



And the primary reporting process

Ecosystem



4 components of the RoboScope ecosystem: RS Digital Scanner, RS Slide Manager, RS Stainer, RS Viewer

What is already done in the project?



Robotic platform



Autofocus and auto-prescan



Software for managing the digitization process



Uploading data to our DICOM server

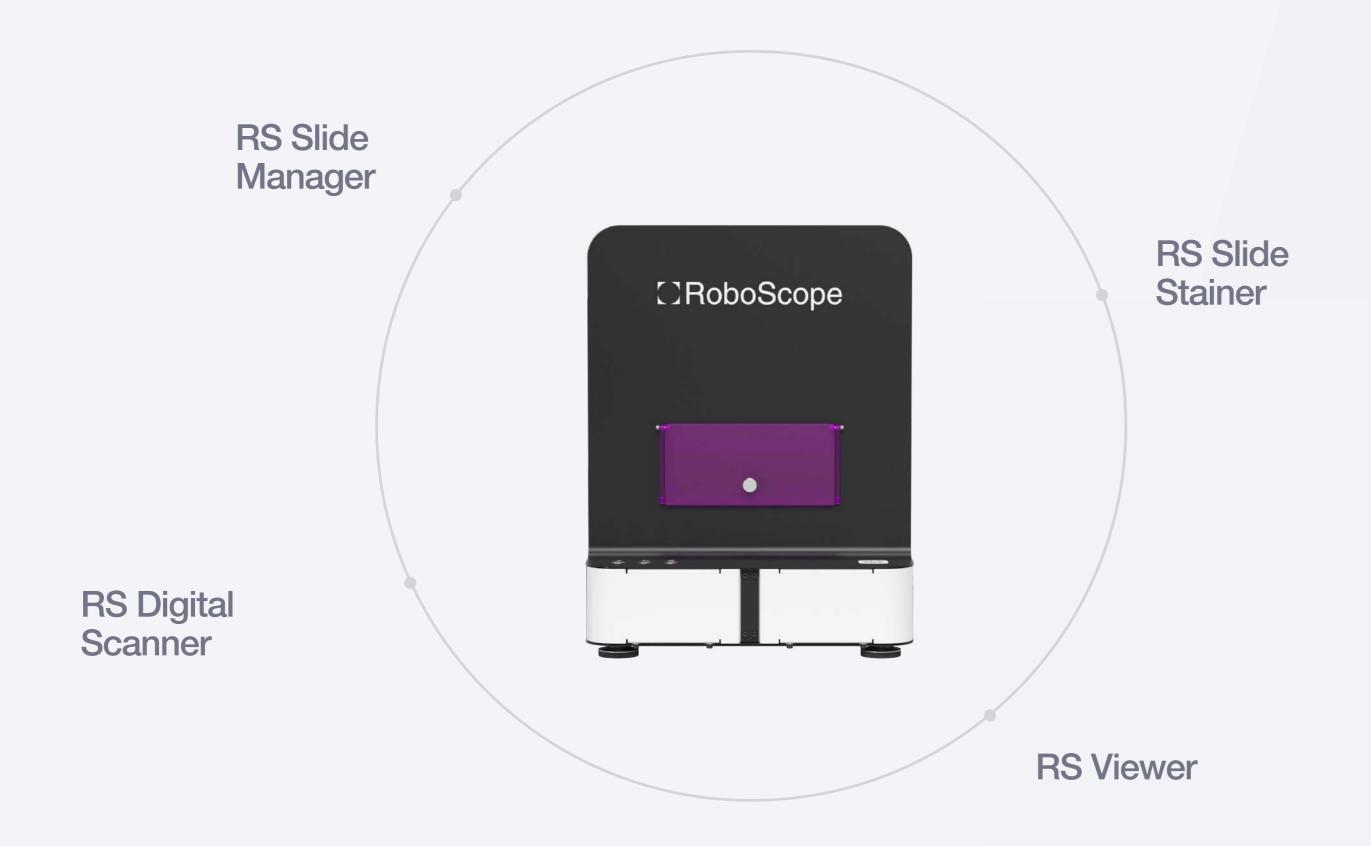


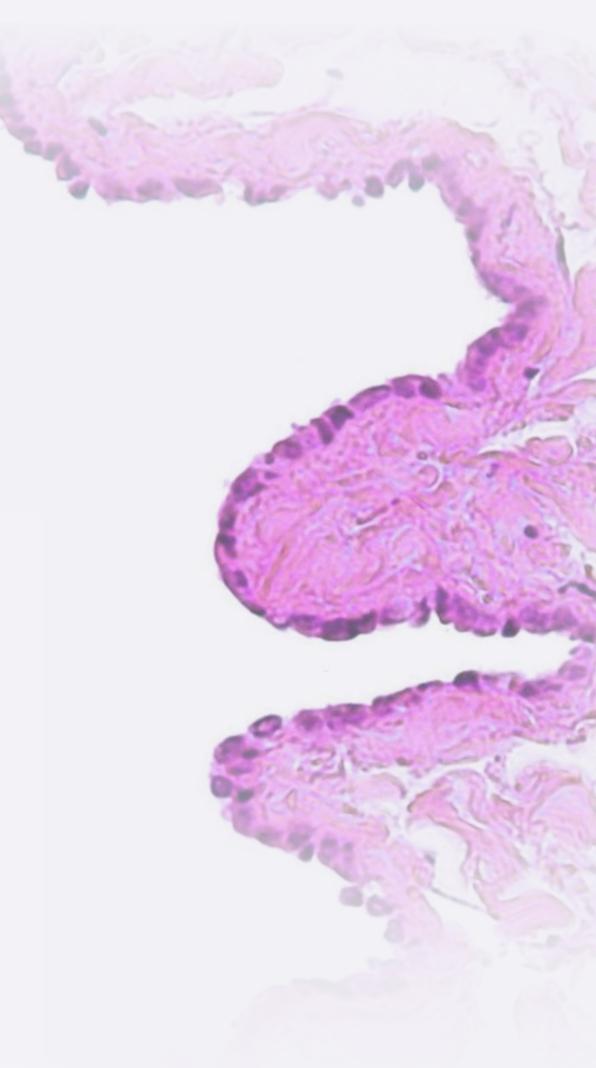
Industrial Design



Data access via telemedicine platform

RoboScope Ecosystem





Digital scanner

Central component of the RoboScope ecosystem with three use cases

• Development status: Pre-production sample



Slide Manager

Robotic slide handling and storage system that increases the throughput of digital scanners

Development status: Prototype

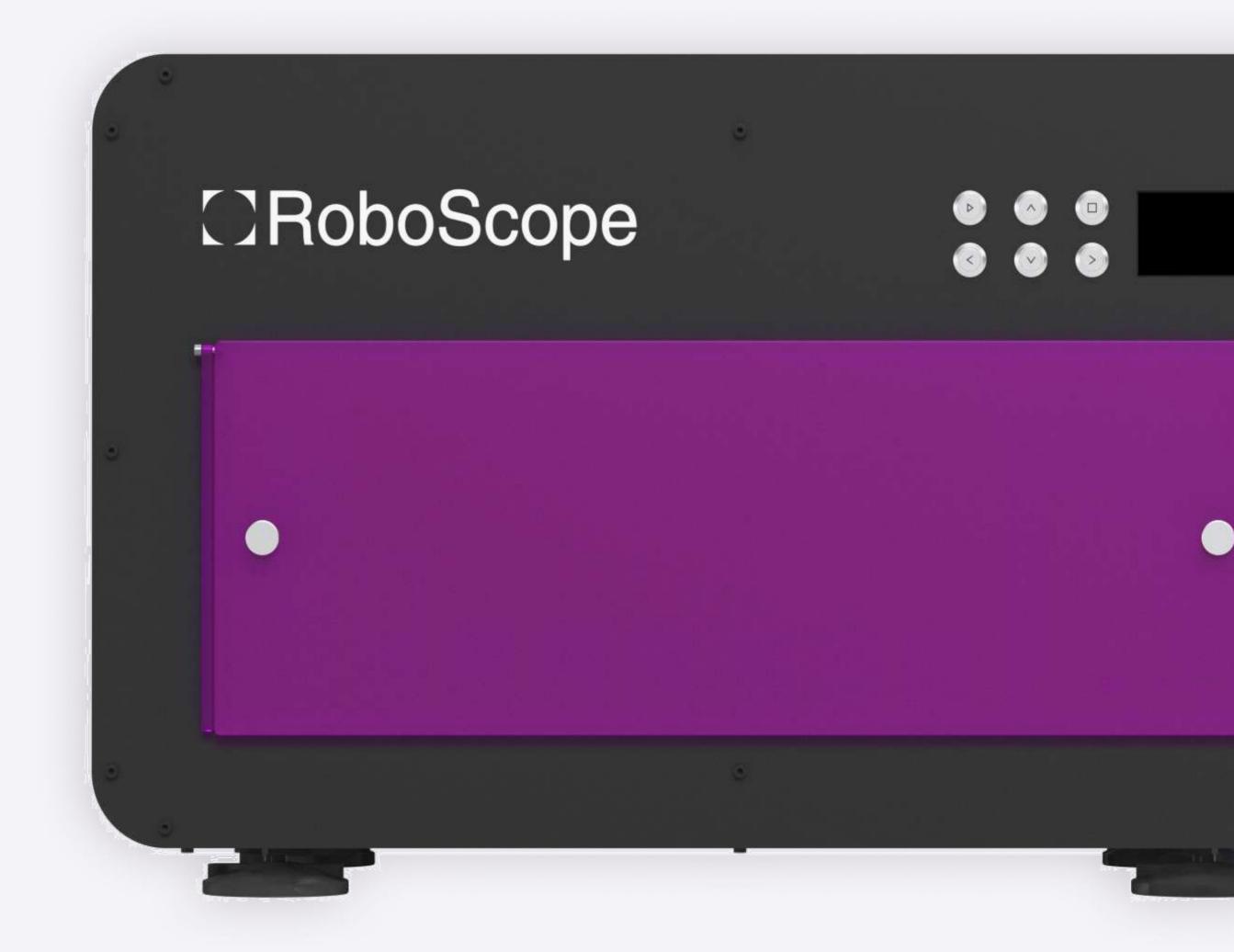


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Slide Stainer

Robotic system for staining and dehydration of histological preparations

 Development status: 3d modelconcept



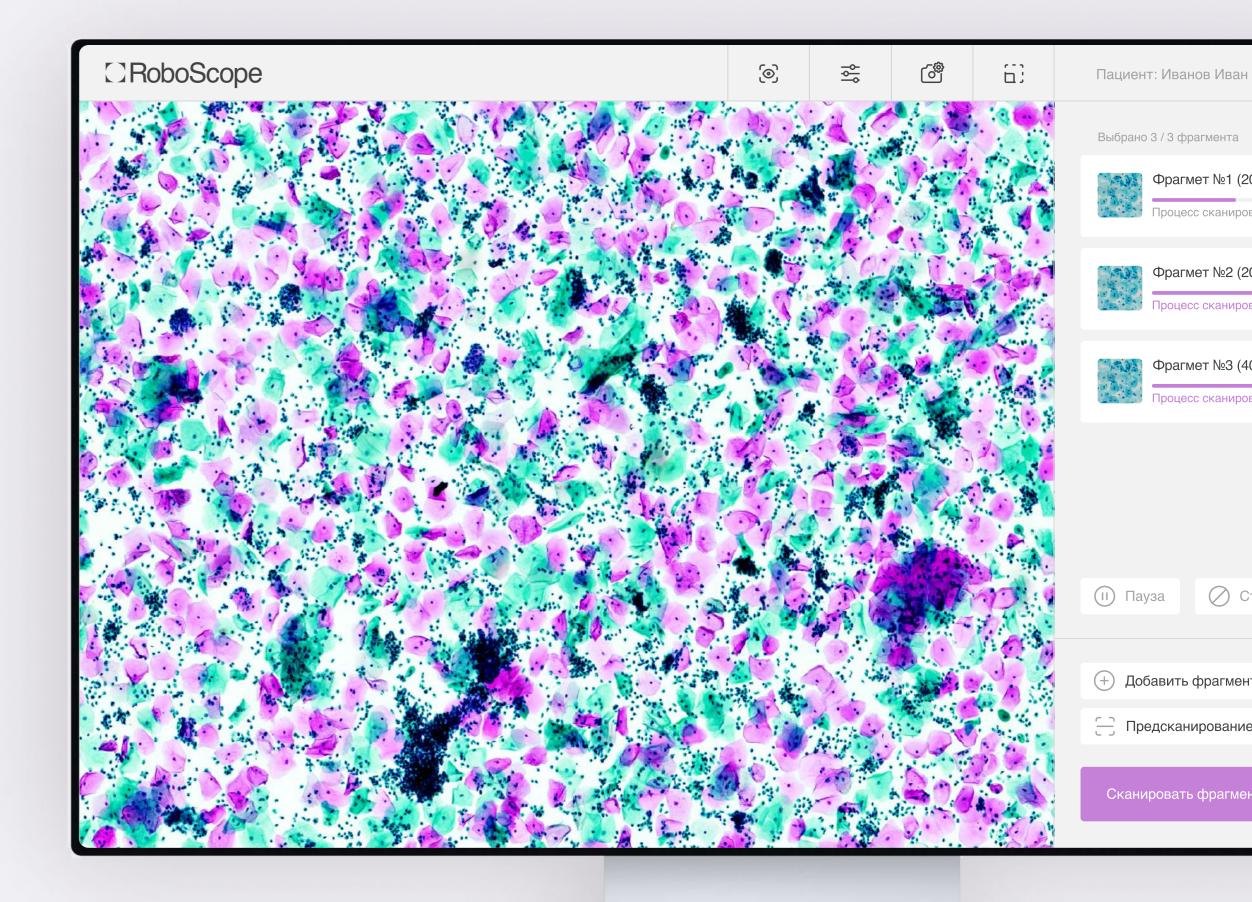


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Viewer

View digital imaging medical data

Development status: MVP



Prototyping

Already in work

CNC milling machine (2 pieces)

3D printers

Assembly and debugging line

Will be soon

CNC lathe

CNC EDM

Our competencies



3D construction and design



Development of design documentation and drawings



Node testing



Building and Debugging

Team RoboScope



Ilya Efremov

CEO

Russian Technological University, Institute of Information Technologies, Department of Applied Mathematics, area of study "Information-analytical and control systems" - 2016-2020. From 2020 to the present, Operations Director of UroWeb LLC.



Igor Boltov

CTO

Kuban Technological University, faculty of CTAS ("Computer technologies and automated systems"), specialty "software engineer" - 2001-2007. Head of software development team at NetHealthLab

CTO of the telemedicine platform NetHealth.ru



Nikolay Gonivolk

Software Engineer

College of the branch of the Maikop State Technological University, faculty of "Software for Computers and Automated Systems", specialty "technician" 2001-2004. Maykop State Technological University, Faculty of Economics and Enterprise Management (Transport)

in the specialty "economist-manager" 2004-2015.



Igor Shaderkin

Scientific director

MD, PhD, Head of the E-health Laboratory of the Institute of Digital Medicine of the I.M. Sechenov First Moscow State Medical University (Sechenov University); Moscow, Russia

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info@roboscope.pro

roboscope.pro



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