

Medical University - Varna

Building Excellence Through Technology



The Medical University – Varna has implemented technologies from Fujitsu to maintain and upgrade its IT systems, thereby continuing to deliver excellent education and hospital care via modern and high-tech training methods.

Challenge

To continue providing excellent medical education with technologically advanced systems, the university needed to upgrade its servers and data center without any breaks in operations.

Solution

Fujitsu delivered a full upgrade of its servers and storage technologies, replacing outdated hardware and software. No downtime during the process ensured continuing university functions.

Outcomes

- Ensured high availability for all departments and solutions
- Supported continuous performance and operation of the university
- Enabled the creation of University TV

“With Fujitsu solutions, we can count on zero downtime during the ongoing upgrade, and 24/7 availability to support our mission of training the best medical professionals while providing excellent patient care.”

Deyan Grancharov, Vice Rector, Medical University – Varna

Industry:

Higher education

Location:

Varna, Bulgaria

Employees:

1,500



25x

growth in
international students



0

downtime

Maintaining an edge in healthcare education

Medical University – Varna offers stellar education in medicine, dental medicine, pharmacy, and public health. With its state-of-the-art facilities, as well as real-world and simulation training that uses cutting-edge technologies, it attracts increasing numbers of international students each year. Its current solutions include the Blackboard Learn e-learning platform; 3D technologies, printing, and holograms in anatomy training; virtual microscopy; and a library with electronic reading rooms.

Early on, the focus on reaching and maintaining its status as Bulgaria's most high-tech university, required a scalable and sustainable digital foundation—especially considering the institution's continued growth, its modern hospital, partner hospitals, and three affiliates offering training programs in nursing and midwifery.

The university established this base over a decade ago when Lirex—a leading Bulgarian IT company and a Fujitsu implementation partner, won the tender for a full technical overhaul and upgrade of the institution's IT infrastructure. Lirex's expertise in comprehensive information and communication technology solutions stood out to the university. The university procured numerous successful IT and communication projects over the years, the latest being an ongoing upgrade of Fujitsu servers and storage technologies.

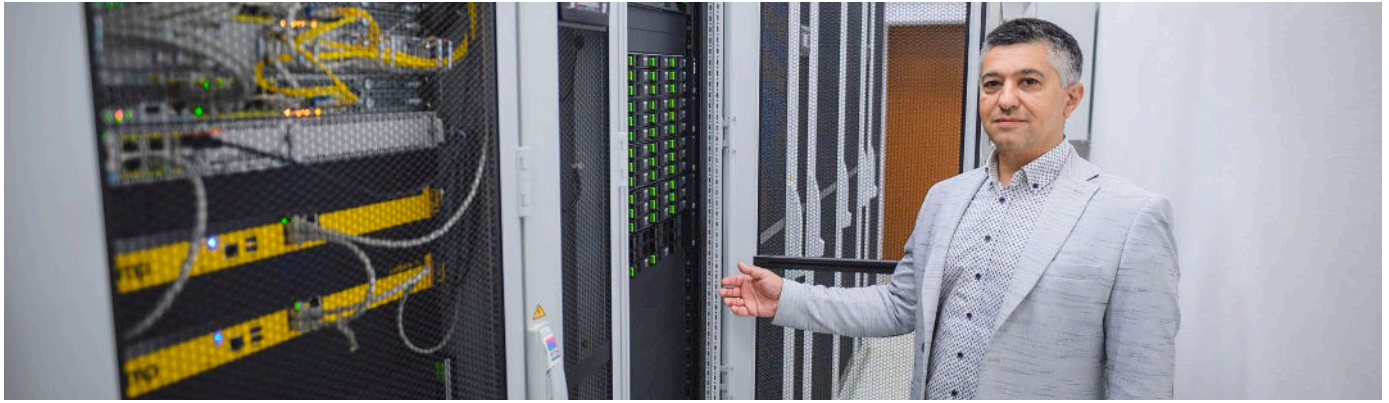
Providing solutions via modern platforms

The long collaboration originally started with the virtualization of the university library and database, which aimed to enhance accessibility and support for students and faculties. This was achieved through digital access to resources, integration with learning platforms, and remote access to scientific databases. By virtualizing its library and databases, the institution enhanced the flexibility and efficiency of its educational and research activities, leading the way in advanced digital trends.

What followed was an overhaul that encompassed more systems, aiming to support students and staff through a new IT infrastructure that includes a data center, scalable ETERNUS DX600 storage, PRIMERGY servers, software, and security features. The most recent upgrade ensures the smooth operation of 120 virtual machines and supports around 10,000 users, at four locations, on any given day.

"We have achieved excellent results with the technologies provided by Fujitsu, and all the procedures have been running very smoothly. We have established perfect communication with the local Fujitsu authorized service partner Lirex and its certified engineers for the maintenance and support services," says Deyan Grancharov, Vice Rector at the Medical University – Varna.

With reliable and comprehensive planning, replacing the physical servers without any downtime was enabled by moving virtual machines within the digital space. This was vital to the university and its teaching hospital, which serves as the primary training base for undergraduate, postgraduate, and doctoral students, offering them hands-on experience in a real-world medical environment.



24/7

user access

With over 1,300 beds, the hospital—University Hospital “St. Marina”—is equipped with state-of-the-art facilities, including two nuclear magnetic resonance (NMR) machines, three angiography units, cutting-edge PET and SPECT scanners, three linear accelerators, and a high-tech electrophysiology room with advanced angiography and ablation technologies for cardiac treatments. It also houses the latest fourth-generation da Vinci Xi surgical system, enabling minimally invasive robotic surgeries with enhanced precision.

“We have real-time video links between the operating and training rooms, surgery rooms with robotic surgery, simulators, etc.” adds Grancharov. “It all has to work flawlessly. Stopping any of this would be unthinkable. With Fujitsu’s solutions, we can count on zero downtime during the ongoing upgrade and 24/7 availability to support our mission of training the best medical professionals while providing excellent patient care.”

Supporting innovation with technology

Medical University – Varna is one of the most dynamically developing, innovative, high-tech universities in Bulgaria, providing excellent conditions for training, education and research at a compatible European level, and very good environment for students. The university is well known and has a very good reputation as well as international recognition. It has become more and more attractive to both Bulgarian and foreign applicants. Currently, over 7,000 undergraduate, postgraduate and doctoral students are trained at the Medical University of Varna and about 2,000 of them are international students coming from over 50 different countries. Students are enticed by its innovative teaching, research and patient care. Since its establishment, the university has focused on practical training. The lecture halls, the specialized training premises and laboratories are equipped in accordance with modern European requirements. Combining the traditions of the past with the possibilities of the future, the university continues to contribute to the accumulation of the most valuable capital – highly educated and qualified medical specialists.

“Everything changes all the time,” Grancharov explains. “Not just systems but ways of thinking. And we are able to support new ideas.” Ideas such as University TV, which requires a reliable and scalable IT infrastructure, uses high-tech equipment to film, and broadcasts a 24-hour online program. It features content focused on medical themes, providing valuable information on new scientific achievements, innovative discoveries, and cutting-edge therapies for medical professionals and students, while also offering engaging and informative content on health-related topics for the general public. The channel also plays a significant role in the training process of undergraduate, doctoral, and post-graduate students by keeping them informed about university news and events, enhancing their educational experience.

Another modern development made possible by the IT upgrade is the ability to support, implement and take full advantage of various AI applications. “We have investigation programs aimed at the prediction and prevention of different patient health issues,” notes Grancharov. “It’s our hope to make that possible with AI.”

Such projects are made possible with updated and adaptable technology that can evolve with the university’s needs. In essence, the institution has become a place for innovators and pioneers whose ideas can be supported by the most advanced and scalable tech.

Customer:



in collaboration with:

