LANIT-TERCOM Inc. has been working in the international outsourcing market since 1991.
Our company has evolved from the Software Engineering Laboratory in the Mathematics and Mechanical Engineering Department of St. Petersburg State University.

Today LANIT-TERCOM Inc. is one of the largest software companies in Russia with about 350 employees. All of our researchers and developers hold either Master's or PhD degrees, as well as professional certificates.

Our core competences are software development, hardware design, re-engineering of legacy systems, network & telecommunication solutions and scientific intensive R&D. From the USA, to Finland, Denmark, Germany, Italy and Russia, we provide world-class, cost-effective services for our clients all over the world. We offer a comprehensive Software and Hardware development process, which meets the international standards of planning, management and quality assurance.

Expertize

Networks & telecommunications solutions

The development of telephony software and hardware is one of the main activities of LANIT-TERCOM. Telephony has become the background from which new lines of business, such as CASE technologies, real-time operating systems and hardware design, have emerged in our company.

Our first telephony project – a switch for secure government communications - included hardware, an operating system and functional software. To accomplish this we created our own object-oriented CASE system “Real,” based on SDL, UML and ROOM methodologies. Again using this CASE system, we successfully transformed the core software into our next product – the rural-area switch “Beta.” Deploying and maintaining these telephony switches gave us a unique opportunity to gain experience in the needs and problems of operational services; in particular, the need to dramatically improve the operator’s workplace and remote maintenance system.

In Russia there are not many companies that have our capabilities in developing highly reliable telecommunication software. As a result, many producers of switches who had faced the problem of maintaining “manually written code,” have now migrated from the their previous softwares to ours. For example, we have already ported our software to the Kvant-E Telephone Exchange (Sokol Inc, Belgorod, Russia) and to KSM-400 (Morion Inc, Perm, Russia).

SmartServer

The SmartServer computer telephony system is designed to enhance the capabilities of typical Automatic Telephone Exchanges. New services and varied tariff plans for the ATE subscriber can then be added, giving a competitive edge in the global marketplace.

The SmartServer system offers a wide array of options for subscribers, including automatic secretary, answering machine, voting system, re-addressing and specification of a subscriber's number with simultaneous calling from the database with call information. The IP-telephony capability allows the cost of long-distance and international telephone calls to be reduced.

The user-friendly interface enables quick configuration of system settings according to the user's needs. The embedded script language allows practically any customized service to be added to the system.

The SmartServer computer telephony system is an up-to-date and reliable method, which will be profitable for any growing business.

Real-time & embedded systems

The Lanit-Tercom Electronic System Department offers a broad range of outsourcing services, including:

- The development of various embedded systems and hardware. Over the course of 12 years our staff has successfully completed more than 50 projects in the development of system connections, specialized computing systems and embedded systems;
- Digital Signal Processing Systems
  We have more than 25 years of experience in this area.
  Moreover, we have outstanding project: development of a programmable platform for DSP-algorithms emulation. We developed the methods of optimum architecture construction of the embedded DSP-processor oriented on the predefined class of applications. According to these methods the architecture of the target processor was designed on the basis of the analysis of software with the help of internally developed tools. These tools allow us to allocate an optimum set of objects for hardware implementation and to generate the command system of the DSP-processor. Then the obtained DSP architecture and the program solution for initial algorithms are investigated and debugged on the hardware emulator. The prototype was implemented as the independently-developed processor with the changeable command set on the basis of FPGA Xilinx 4013 in combination with a coprocessor with the flexible architecture on the basis of Xilinx FPGA and crosspoint arrays ICUBE-320. The estimations obtained of the method's efficiency increased the acceleration up to 80 times in comparison with implementation on a universal platform;
- Video-Audio Systems
  We have experience in development of a stand-alone video server for compression and transmission via Fast Ethernet network of 4 high-quality video streams. The device implements MPEG-4 compression algorithm and supports standard video formats. The device also supports user control on the stream formats, frame rates and compression density.
- Hardware Design (http://www.lanit-tercom.com/services/hardeng.asp)

For more information, please, find our corporate presentation:
http://www.lanit-tercom.com/download/LANITGroupOutsourcingServices.pps.

Re-engineering of legacy systems

LANIT-TERCOM offers a full cycle of services for re-engineering both program, and hardware-software complexes.

In our re-engineering services we use a comprehensive package of automated tools, dramatically reducing cost and speeding time of delivery. Depending on the client's requirements, we can completely transform an entire application or simply migrate key business functions to work with newer technologies by using knowledge mining.

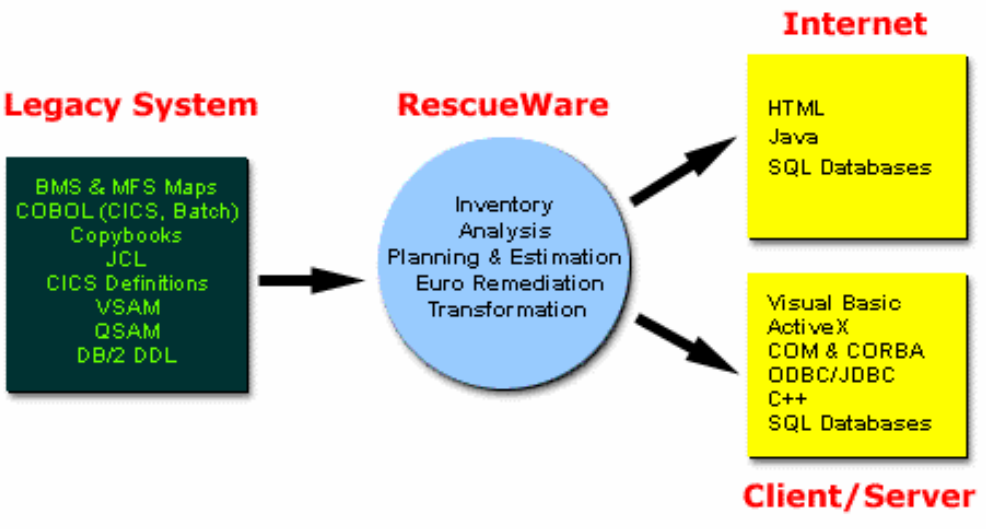
Service Offering:

- Knowledge mining
- Version and functionality upgrades
- Language migration
- Database migration
- Platform porting
- System re-development

Equipment re-engineering allows a firm to safely save existing, reliable software in the system while at the same time move to new more powerful hardware platforms. We offer our clients a full range of services, which enable the re-engineering of hardware/software systems, while preserving the original software. Re-engineering also provides a solution for the replacement of aging equipment with modern specialized systems, which are fully compatible with the old in terms of software support and periphery interfaces.

- One of the most successfully project is reengineering of the telephone exchange MT3202E, originally designed by Alcatel, France. Our team designed the control computer (CC) with the integrated adapters of peripherals completely compatible at interface-level and at software-level with the original equipment. The new CC increases the performance of telephone exchanges 6-7 times, memory capacity 8 times, quantity of the maintained subscribers 4-5 times, and also enables implementation of modern software functions (SS7 etc.).

- For 12 years we develop and maintain re-engineering technology and the product RescueWare® Modernization Workbench for "Seer Tech." и "Relativity Tech." Inc. RescueWare® is the first end-to-end solution designed to automate, simplify and speed the transformation of legacy systems to component-based architectures and modern technology platforms.



In 2005 IBM integrates Relativity's Software Solutions Into Its Application Transformation Solution. The agreement includes the integration of the Modernization Workbench with IBM's WebSphere Studio Asset Analyzer and WebSphere Studio Enterprise Developer. The Modernization Workbench is increasingly accepted as the standard platform for EAM and IBM chose the Modernization Workbench because of the technology's proven ability to drive down costs while accelerating and reducing the risk of Enterprise Application Modernization (EAM) initiatives.

Outsourcing Software development

LANIT-TERCOM is a leading Russian provider of offshore software development services. We work according to a strict software development process, which meets the international standards of planning, management and quality assurance.

Service Offering:

- Custom software development
- Customization of packaged applications

Offshore Development Center set-up

Here are two most interesting software ODC project reviews. The first one is ODC of e-commerce system and the second – of workflow system.

Navio Systems

During the period of cooperation the ODC team, provided to Navio Systems in Saint-Petersburg has grown up to 25 specialists.

Navio Systems has given a high rating to the work of Lanit-Tercom’s programmers and managers. Stefan Roever (President and CEO, Navio Systems, Inc.) said, “The Russian team worked very hard on AV Publish and contributed a lot of original ideas to it.

The success of this product is a positive contribution to the growing image of Russian companies as reliable partners in the IT industry."

Laerdal Sophus

The team of ODC now consist of 15 specialists. Laerdal-Sophus expands its cooperation with LANIT-TERCOM and proceed to new phase in cooperation: the role of the Russian team in upcoming developments was explained and management was moved to Saint Petersburg.

"The recent successful installation of the Competence Management System in Australia is only the last in a series of successful deliveries by our ODC in Russia. The Australian project demonstrated that the ODC can even be relied on to interact directly with customers on our behalf. Currently development is going on in Russia in co-operation with programmers in the Washington D. C. branch of Laerdal - again with Russian project management.

In summary, Lanit-Tercom has succeeded in building a very responsible, agile, productive and dedicated team in St. Petersburg."