Innovation drives the development of modern enterprises. But on the way to innovative solutions there are always a number of difficult tasks associated with the adaptation of technologies and business processes, as well as the implementation of new technologies. The range of such tasks can be very wide: from simple connection of production equipment to an enterprise management system (ERP) to virtualization of manufacturing, where each process can be controlled even from the screen of a mobile device. INBO Technology helps enterprises to overcome these steps as quickly and efficiently as possible.

Manufacturing digitalization and mathematical modeling of manufacturing processes

Build your own network connecting your production and peripheral equipment and control it from the screen of your laptop using INVENTURA24 server developed by INBO Technology. Various visualization interfaces help you monitor production processes in real time. Analysis of the collected data can indicate potential problems and bottlenecks in the production cycle, and the mathematical model built using Artificial Intelligence can simplify the process of making management decisions.

Manufacturing processes virtualization

You will be able to track the movement of orders or equipment, view information about the operation of equipment, read errors remotely on Google maps or on a 3D model of your company created for you by us.

Implementation of radio frequency identification (RFID)

Our system is compatible with RFID equipment from the world's leading manufacturers. We can analyze your tasks and offer optimal solutions.

RFID Hardware Development

We are engaged in the development of RFID readers, UHF antennas and RFID tags based on microchips of European electronics factories, including unique tags with LED indication and are ready to offer solutions for your individual requirements.

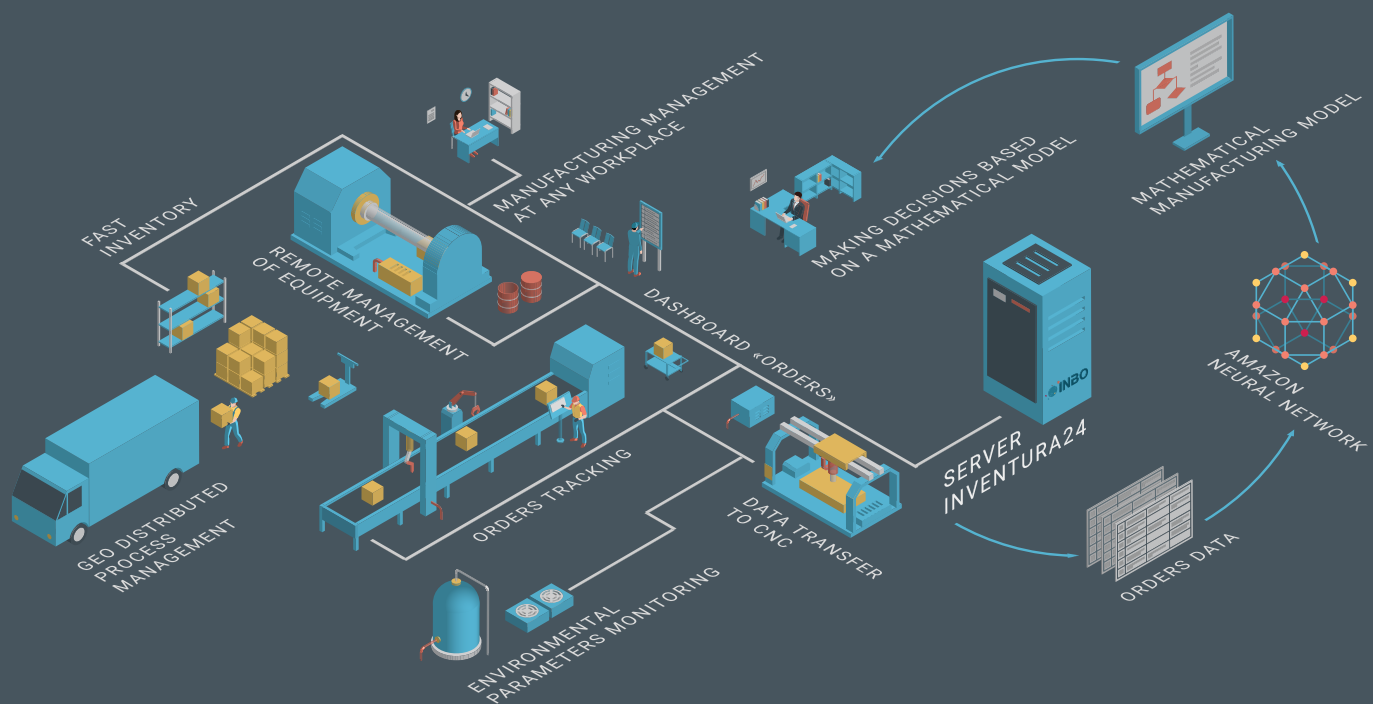### Production processes and environments automation

Our system allows you to connect various equipment and sensors for monitoring environmental parameters. Flexible automated programs provide the interaction of all equipment within a single information network. In addition, you can configure notifications that will inform you about processes changes.

Software development and integration of software systems

Having extensive experience in the field of client-server software, high-load web systems, complex software systems, as well as programs for mobile platforms, we can create a software product of any complexity for you.

The first step towards «Industry 4.0»

Manufacturing management system INVENTURA24 unites all equipment into a single information network. By collecting, accumulating and analyzing data, it provides opportunities for monitoring production processes in real time, organizing production Just-in-time and contributes to the development of the concept of Lean manufacturing.

Microcomputers running under OS Linux are used as communication nodes of the information network, which allows you to connect any equipment via COM port, USB or Ethernet, as well as directly through the GPIO ports of microcomputers. The system uses a wide variety of communication protocols, including RFID devices, electronic scales, printers and PLCs.

To access the functions of the system, no additional software installation is required, all user interface functions are available via a web-browser.

The system has a customizable module for integration with various ERPs, including Microsoft Dynamics NAV. This allows you to build personalized interfaces and transfer the technical parameters of the order to CNC.

Continuous simultaneously registration of RFID tags on the production line (up to 900 pieces in one place) and quick search allow you to establish the exact location of the order. The monitor for displaying the priority of orders is configured for the required production parameters. The system provides the ability to manage supply chains and inform the client about the status of the order, implementing Just-in-time (JIT) concept.

The visualization of your company makes the management process clear and simple. Monitoring the status of equipment and tracking the order along the production line, searching for RFID tags and displaying it on a 3D model, viewing the history of the movement of the order through the production with timestamps - all these functions help you make management decisions faster. For geo-distributed company services, the system displays process information using Google maps.
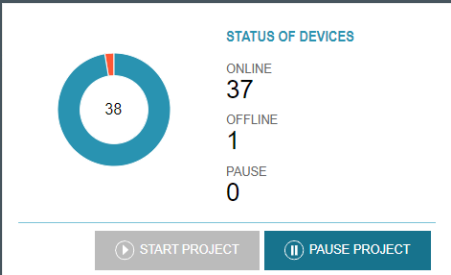
We provide a full range of services from the initial analysis of your requirements and pre-project assessment to the installation of equipment at your enterprise. Thanks to after sales support, you will always havea access to the latest version of our software products, which are constantly being improved to meet the changing requiremetns of the market.

We are working to optimize every component of the system to reduce infrastructure maintenance costs. The use of our technologies helps to implement Lean manufacturing methodology and improve the ecological efficiency of your production.
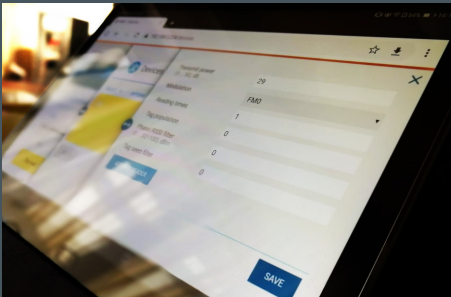
Acceleration of the production cycle by 30-40% is confirmed by the companies, that used our services.

Multi-level system for controlling the working hours of devices allows you to manage the equipment manually or automatically, which allows you to significantly save energy.

The system supports various modes of grouping tracking objects, which allows you to reduce the number of RFID tags used and reuse RFID tags, while maintaining the required monitoring level.

A large number of settings allows you to optimize the operation of devices connected to the system at maximum.
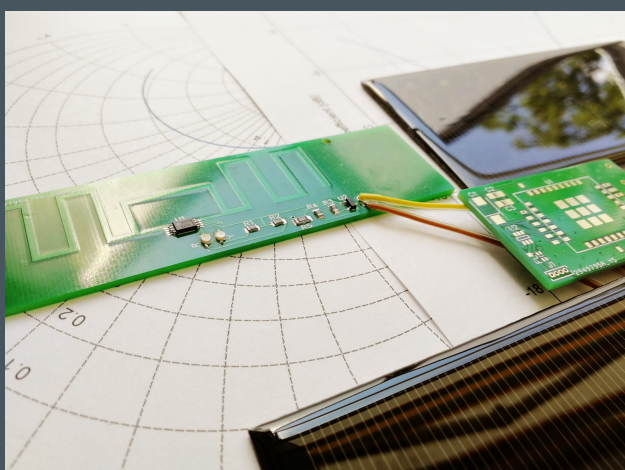
The use of a fully-functional workstation in a mobile format allows companies to increase the speed of decision-making and data processing in places where the use of stationary devices is limited.

«VISU4.0» - A mobile RFID tag reader with an integrated near-field UHF antenna and WiFi module provides quick product identification functions at the point of sale. With the size of the device comparable to the size of a smartphone, it is controlled by a built-in microcomputer and can be integrated into any environment and adapted to any task.

In our projects, we also use mobile devices with far-field antennas from the world's leading manufacturers. Combining the mobility of such RFID readers and smartphone applications allows the technology to be implemented in large or enclosed spaces (warehouses, safe rooms, etc.).

RFID tags with light indication (controlled via software), RIFD reader 3 x 5 cm, mini UHF near-field antennas, solutions for RFID readers to work in connection with tablets or smartphones and much more is being developed in INBO to implement any technical requirements of the project.

We are also developing a project for the implementation of Augmented reality in an industrial environment for visual display of detailed information about the production process at the work place. The technology helps to reduce the number of errors associated with the human factor and increases the accuracy of work tasks, which generally leads to an increase in labor productivity.

Look into the future today with INBO.

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