

ERP SYSTEMS

students Bystrimovich A.D. and Lysy P.V.
scientific supervisor – lecturer Samusevich A.S.
Belarusian National University of Technology
Minsk, Belarus

An Enterprise Resource Planning (ERP) – system is software that helps enterprises automate and manage core business processes to achieve optimal performance. The ERP system coordinates the data flow between corporate business processes, provides a single source of reliable data and optimizes business processes throughout the enterprise.

When implementing ready-made ERP systems, 53% of companies experience serious difficulties that require changes in business processes and organizational approaches, and 44% of companies face significant technical problems.

The concept of an ERP system came from the USA and literally translates as Enterprise Resource Planning. Academically, it looks like this: "ERP is an organizational strategy for integrating production and operations, human resources management, financial management and asset management, focused on continuous balancing and optimization of enterprise resources through a specialized integrated application software package that provides a common data and process model for all areas of activity."

Each supplier can understand the system developed by him in his own way, based on its orientation and the tasks to be solved. For example, one ERP system is more suitable for retail, but not suitable for an oil refinery.

An ERP system is a product that a company purchases at its own expense. Its implementation is considered as an investment that should bring profit. No ERP system manufacturer guarantees that it will bring revenue growth to the company. And this applies not only to ERP systems, but also to any IT

solutions. However, all the advantages of the implementation indirectly affect the profit:

1. Instead of spending resources on several disparate systems, each of which needs specialized support, infrastructure, licenses, you can focus all costs on one ERP platform.

2. If an ERP system is developed from scratch for the needs of a specific company, it can include third-party systems and services that will be convenient for business partners, suppliers, customers and other counterparties to work with.

3. ERP provides management with full access to every business process of any department 24/7. For example, you can track inventory on a daily basis, which makes it possible to control working capital more accurately.

However, in practice, the company has to make a difficult choice: either it takes a long and expensive time to configure and refine the ERP system to the standards of the enterprise, or painfully configure its own business processes to the standards of the ERP system.

Regardless of whether you are expanding your customer base, entering new markets, introducing new processes, or scaling your business, with the right choice of supplier, the ERP platform adapts to changes.

Since the ERP system is implemented in all company processes, the list of advantages may increase depending on the specifics. Dozens and hundreds of ready-made solutions have been developed on the market that drive buyers into the framework of subscriptions, the speed of updates and support, closed functionality and architecture - into the framework of a single supplier. Only the development of our own ERP system gives maximum opportunities without any restrictions.