



FUNCTIONING AND RESULT OF THE WAREHOUSE SYSTEM OF ELECTRONIC TRADING PLATFORMS

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Abstract: *This article examines the features of warehouse systems functioning on electronic trading platforms (ETP), their structure, management technologies and key performance indicators. Modern approaches to warehouse automation that affect the efficiency of logistics in e-commerce are analyzed. Particular attention is paid to the role of warehouse logistics in ensuring the competitiveness of ETP and customer satisfaction. The article presents comparative data and diagrams illustrating the level of automation and efficiency of various models of warehouse systems.*

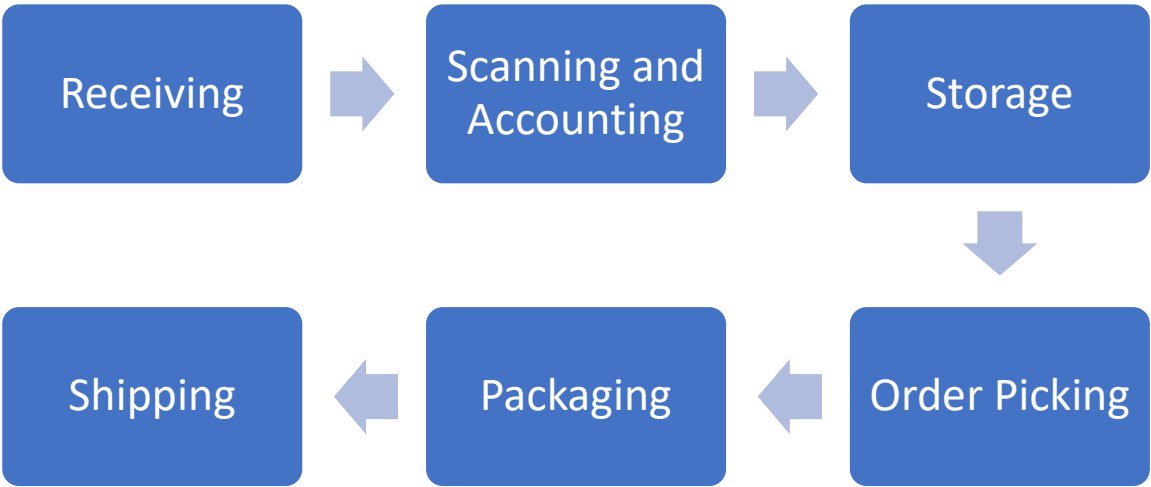
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With the development of e-commerce, warehouse systems have become key to ensuring the efficient and smooth functioning of electronic trading platforms. ETPs such as Amazon, Alibaba, Wildberries and Ozon, Uzum market depend on highly organized warehouses that ensure fast delivery and accurate accounting of goods [1]. Modern warehouses are not just storage places, but integrated technological nodes operating in real time.

Structure of the warehouse system of the electronic trading platform

The ETP warehouse system includes the following key components:

- Centers for receiving and sorting goods;
- Storage areas divided into categories;
- Packaging and preparation for shipment areas;
- Information and management system (WMS);
- Robotic and automated units [2].



Scheme 1. Typical structure of the ETP warehouse

Tab.1

Warehouse Management Technologies

Technology	Description
WMS	Warehouse management system, tracks product flows in real time
RFID	Radio Frequency Identification Technology to Speed Up Accounting
IoT	Connected devices for monitoring temperature, location, etc.
AMR (robots)	Autonomous mobile robots for moving goods around the warehouse

Tab.2

Warehouse System Performance Indicators

Indicator	Designation	Optimal value
Order processing time	Order Processing Time	< 2 hours
Inventory accuracy level	Inventory Accuracy	> 99%
Inventory turnover	Inventory Turnover	12-20 times a year
Delays in shipping	Delay Rate	< 1%

Results of the implementation of modern warehouse systems

Let us consider, using the example of the conditional ETP “EcomTrade”, how the introduction of automation affected the results [3-4]:

Tab.3

Indicator	Before automation	After automation
Average shipping time	6 hours	1.5 hours
Number of returns	3.2%	1.1%
Personnel costs	100%	65%
Customer Satisfaction	78%	94%

Problems and development prospects

Despite the achievements, there are a number of challenges [5]:

- High cost of implementing automated systems;
- The need for staff training;
- Integration with other IT services of the electronic trading platform.

Prospects include greater use of AI, predictive analytics and digital warehouse twins.

Conclusion

The warehouse system plays a vital role in the functioning of electronic trading platforms. Its efficiency directly affects logistics indicators, customer satisfaction level and the company's financial results. The implementation of WMS, robotics and IoT technologies contributes to a significant increase in the efficiency

of warehouse logistics. In the future, development will occur in the direction of intellectualization and complete digitalization of processes.

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