

## IT PRODUCT COMPARISON FOR WAREHOUSE MANAGEMENT

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**Key word:** WMS, Warehouse process optimization, IT-system comparison

Warehouse management software, or WMS, is an automated system, designated to manage the mundane operations of warehouse. Warehouse management software, also may be able to refer as warehouse management system, has built-in programs being enabled business to manage various tasks from centralized location.

Warehouse Management Software has the goal of optimization warehouse center management. Furthermore, facilitation the processes of planning, controlling and utilization of available resources to move and store finished products and materials. [1].

It is incremental to designate, Warehouse Management Software support warehouse staff in the process performance being required to handle all of the major warehouse tasks such as receiving, inspection, acceptance, put-away, internal replenishment, picking, packing assembly, documentation and shipping. Moreover, Warehouse Management System helps enormously in steps validation, recording the inventory movement and status changing to the data file. [2].

There are many essential WMS software. For comparison Qquar WMS, ABM WMS, "WMS Логістика. Управління складом" and InStock WMS have been chosen. Before the comparison analysis, it is incrementally to define these WMS have the next inner warehouse software:

– Inventory tracking. It allows data automatic identification, radio frequency identification and barcode scanners;

– Put away. It would give the opportunity to pick and allocate the goods with technology. That also would help in maintaining a proper balance of inventory;

– Shipping. This inner system software might be able to a consignment note before the shipping of the goods;

– Labour management. It would help to monitor staff performance through the usage of key performance indicators;

– Forecasting. It would provide ability to track product locations, suppliers as well as storage duration. Furthermore, products classification with a high turnover being located closer to the picking area of finished orders to speed up the selection;

– Optimization. ABC-XYZ analysis of inventory. It would help to classify inventory items according to demand variability.

– Integration. It would provide integration with the modules and software’s to enable a seamless link between order processing and logistics management in the warehouse. [2].

Now, it is important to make comparison between WMS software.

Table 1- Comparison of WMS software

Indicators	Qquar WMS	ABC WMS	WMS Логістика. Управління складом	InStock WMS
Inventory tracking	+	+	+	+
Barcode scanning	+	+	+	+
Warehouse automation	+	-	-	
Cross-docking support	+	-	-	+
Labour management	+	+	+	+
Integration	+	+	-	-
Outbound processes	-	+	+	+
Clients	Roshen Berta group Carlsberg Maspex	VDS DNIPRO M TRADE V KOSMO	BIOKON ATB	SANTA BREMOR
Cost implementation	100 800 UAH	98 687 UAH	110 700 UAH	97 900 UAH

According to this table, it is allowed to conclude that Qquar WMS is comparatively the best WMS from all. The implementation of this WMS includes the following step: project specification, adaptation, outbound integration, installation, staff training, implementation and launch into industrial operation and assistance after commissioning. [3].

In conclusion, being mindful of the importance of WMS, it should be designate that WMS is a solution to all tactical tools being used by business to satisfy the uniqueness of customer demand. Admittedly, before the implementation of WMS it is essential to conduct economic justification of its feasibility.

#### List of references

1. Womack, J., & Jones, D. (1996).- Lean Thinking: Banish Waste and Create Wealth in Your Corporation" ( edition of 2018 years).
2. Heizer, J., & Render, B. (1999). Operations management. Upper Saddle River, N.J: Prentice Hall. Chicago (Author-Date, 11th ed.).
3. Inmon, Bill (1992). Building the Data Warehouse