

## 4. ФУНКЦІОНАЛЬНІ КОМПЛЕКСИ ЛОГІСТИЧНИХ СИСТЕМ НА ВИРОБНИЦТВІ

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### REDUCTION OF LOGISTIC COSTS AT DISTRIBUTOR CENTERS OF THE COMPANY

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One of the methods of increasing business profit is decreasing its expenses. The optimization of inner logistics processes opens huge opportunities in this walk of life.

First of all, thrifty logistics makes great demands for the storehouse, main tandem of the company. Its optimal work provides in a lot success of other departments and in contrast, the problems with the storehouse can at all paralyze the company activity. Concerning the storehouse stock the statistics exists [1]: if «the life» of the goods is taken for 100 %, 2 % of time take their production, 13 % go for transportation, the rest 85 % of time the goods lie on the shelves of different levels and the business bears direct losses. During the process of goods moving from purchase to their realization the expenses sum for the storing (rent, electricity, load, salary for the staff) makes 3 – 12 % from the sum of all logistic costs [2].

Initial data for the organization delivery of the goods from the suppliers to the main storehouse are choice of goods, establishment of the current and perspective level of the stock, including of new production into nomenclature of goods.

In present work there are the ways of the costs reduction for the transportation and storing of distributor center by means of combinations selection of redistribution of production categories, as well as the absence of negative influence on the customer.

At this work analyzing model will be regarded on the sample of distributor centers (DC) of the company Freeway Ukraine, which has its own system of distribution and decentralized technology of the logistic DC. In Ukraine the company owns two DC: the first is in Dnepropetrovsk (own storehouse – DC1) and the other one in Kyiv (rented storehouse – DC2).

All products of Freeway in Ukraine are divided into two groups: products for home use and products for professional purpose (big packs for corporative clients – laundries, cafes, restaurants, hotels and etc.).

Choice task of the best decision concerning the variant of the work organization DC as a link of the delivery goal can be realized as multi criterion task by the following private criteria:

- private criteria A — expenses for the storing and load rework (factor is minimized);
- private criteria B — expenses for operations 3PL of services (factor is minimized);
- private criteria C — expenses for products transportation between DC and retail outlet (factor is minimized);
- private criteria D — time of order producing in hours (factor is minimized);
- private criteria E — average annual cost of stock at DC (factor is minimized).

In the network of organization «AAA» it is necessary to make decision as to the choice about optimal work organization DC within one products group, which best of all corresponds to the strategy of logistic expenditures minimization, which the company keeps to. Thereby, in the network of one model the enterprise has to make a choice as to the strategy of goods stock management and technologies of goods movement with a glance of many criteria, which essentially influence the distribution process and dividing of logistic expenses according to the kinds of operating activity.

Using statistics, data about current statement DC of company Freeway Ukraine contrastive analyses of variants of categories redistributions between DC2 in Kiev and DC1 in Dnepropetrovsk were done. The economy was calculated with incoming flows, shipping to the customers, storing and processing.

And finally in the table showing the most beneficial combinations of redistribution between DC of the company Freeway Ukraine. In our case this variant is with full movement of the categories “B&R” (Razors and Blades) in DC1 in Dnepropetrovsk.

During the work it was revealed, that key factors of the cost for shipping to the customers DC of the company Freeway Ukraine are dividing into the categories between DC and geographical location DC. In connection with these factors we are on the way of indicators improvement of trailer workload. After these factors optimization new opportunities are opened for transportation and temporary stopping to repack the order.

Table 1 – Categories redistribution (general)

Savings (-) / hurts (+)	Only BabyCare Shift	BabyCare to DC2, other categories to DC1	BabyCare to DC2, other categories to DC1 with stop in DC2	New to DC1	Only FemCare to DC1	Only B&R to DC1
Inbound	- 242	319	197	439	451	110
Customer freight	- 168	- 168	- 230	0	- 2	3
Storage	423	- 301	- 301	- 724	- 238	- 486
Handling	103	- 122	57	- 46	- 25	- 41
<b>Total</b>	<b>116</b>	<b>- 272</b>	<b>- 277</b>	<b>- 331</b>	<b>186</b>	<b>-414</b>

## References

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