

Information Logistics in Production Process

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Abstract: The article treat of utilization information logistics in control process of production operations.

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1 Materials and Information Flows

From difference of terms information and material flows result, that data flow which is analyse in logistics system is generated material flow (figure 1).

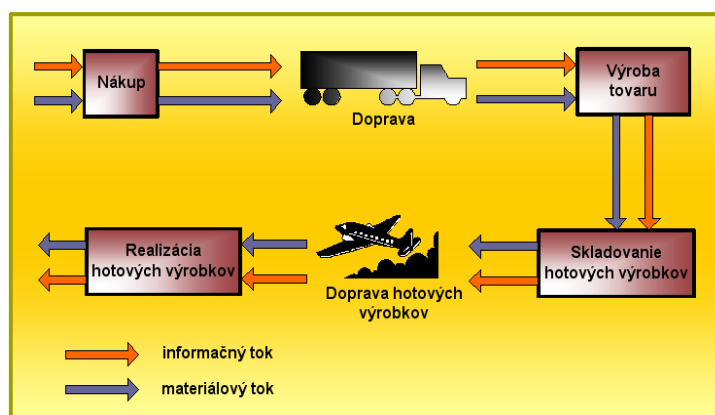


Figure 1
Material and data flow in process of operation logistics system

All management function material flow in logistics is realized by the functions, which are in final result decompose at the procedures and operation. Logistics function is the group of logistics operations which are orientated to realisation tasks which stand before logistics system.

Logistics operation is activity resist next decomposition in the examination framework, or management combination with birth, change and destruction of material flow and with these contiguous flows.

Information functions, procedures, operation are formatting on element combination which are resulting from generally accept terms decomposition of output set /functions. Information analogy are characteristics complex entries connect with specific object and especially with data flows /their organisation, coordination, collection, processing, safety and transmission/.

Any logistics system consists from element files, between which are specified specific functions, terms and connections. Element of logistics system is object resist next decomposition in the frame of estimate analyses, or structure of logistics system, filling local task, connect with specific logistics operations.

Component of information system can be automated workstation of operative personnel too, information section of organization and methods, or selected group of operative worker connected with attribute filling data functions.

In literature is used title logistics unit too - which is set elements of logistics system linear configuration in flow materials with destination analyses, or designing limitation group of logistics functions. Is clear, that unit /logistics or information/ is linear sequence output one from second specific operations. Logistics and information units are little meeting in organization and methods in ideal situation.

Logistics network is consistent set elements of logistics system each other cooperating in material flow and together contiguous flows in the generate frame, or search logistics system. Usable to term of logistics system as well as information system is possible say, that already sufficient long exist term computer networks, which can be applied to term information net.

Information net is set of computer and programming means connection uniform data environment and correspondent with human source for processing of data flow. Term information channel is different from term logistics channel is large make use and well-known too.

Logistics channel is dedicated as ordered set elements of logistics system receiver all logistics units or their logistics parts feeding material flows from supplier of material sources, necessary for production of concrete product design to his final customers.

Information channel is each other interlacing set elements of information system using to transmission information. Following by now say is possible remit, that

current practice at manufacturing-economic organisations logistics and information systems are undistributed. It is connected with implementation computing techniques and contemporary revolution technology. They invert many aspects in trading and change many traditional roads of activity systems as outside so in inside too. Logistics managers watch those most important parameters because of orders and sale. After economic budget is logistics the second area business operation, which data are editing in computer.

In present-day is quantity computer software for utilization interior-logistics functions preferred in situations when is needs operative solving problems on level customer /for example order behind help computers/. This everything unabated signification advanced presentation terminology.

2 Final Control with Logistics Data System

All organisation independent from form ownership in various grades depend from raw materials, materials and service, which their guard other organisations, and final result their activity is directly dedicated realisation of completed production.

Also for small organisation for filling its functions are necessary room, heat, light, link means and office facilities. Organisation purchase and supplies, distribution of finished product are mains in every organisation.

In these conditions biggest task fill new unconventional solutions in area of information assurance process control. It is connection therewith, that increase effectiveness production process traditional methods is finished. Present style first place input optimalization of data flow realize on base of systemic approach.

Expansion logistics management need methodical base new area emersion on edge various scientific tendency its assurance. One from this course is information logistics.

Term information logistics listed in previous need subsidiary analyses some questions, look like is final and organizational control with logistics data systems, without isn't possible next development in course of scientific knowledge.

Destination of control organisation is effective application all technical, organizational, and technological and social input for achievement best results of operation organisation.

In harmony with generally valid determination destinations of logistics functions, organisation must obtain, realize qualitative and in needful quantity, material-technical sources in needful time and on needful place from reliable supplier to reliable user with good service /in time sale also after too/ and with lucrative price.

Main destination of information logistics is optimal provide for this process necessary information. After this manner main destination of information logistics or control logistics data systems can be couch as rational control data flow in the frame all logistics networks and on all hierarchical levels (figure 2).

For achievement main destination is necessary provide for set each other interconnected of basic destinations terminative areas and total movement main destination.

Rational control supposes systemic fulfilment following typical elements of operative cycle of general for all organisations:

- Forecasting and planning
- Organization of work
- Coordination and regulation
- Activate and stimulate
- Control, calculations and analyses.

Near formation of system destinations allow fill up configuration of basic destinations and joining or separating those, if this set must be sufficient for achievement main destination of logistics operation organisation.



Figure 2

Connection main destination with basic in information logistics

In our case main destination of control with logistics data system suppose necessary realisation three basic destinations:

- 1 Organisation of effective function information flow of logistics system.

- 2 Assurance of organisation information flow with necessary sources /facilities, hardware, software, communications, personnel/.
- 3 Coordination and control of effective operation information flow.

Realisation of basic destination is organisation of effective operation information flow of logistics system and need solution next tasks, or achievement next little destinations of basic destination.

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References

- [1] Rodkina, T., A.: Informačná logistika, ISBN 5-8212-0220-5, Ekzamen Moskva 2001
- [2] Malindžák, D.: Výrobná logistika I, Vydavateľstvo Štroffek, Košice 1997