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## Chapter XVI

### THE ROLES AND CONDITIONS FOR THE FUNCTIONING OF LOGISTICS MANAGERS IN PRODUCTION ENTERPRISES

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#### 1. INTRODUCTION

Logistics managers form a relatively new professional group in Polish enterprises. Similarly to other logistics areas, they started to appear in large trade centers, logistics centers or other service areas.

Additionally, they have been more and more often seen in production enterprises recently, functioning at many various levels of management structure and realizing complex functions in the area of supply, production logistics and distribution. It is very often the case that special logistics sectors are created in medium and large enterprises, with Logistic Director at the top, composed of many or even a dozen of organizational cells employing about 10% of workers.

Logistics managers play vital role in modern economy. It is proved by the fact that economic analysts and companies conducting opinion economic surveys base on the assessment of such managers when they define indicators such as prosperity and recession in economy, chances for „getting out of” financial crisis, level of optimism in business or interest in investment rise.

The article presents basic tasks of logistics managers in production enterprises, forms and conditions for their functioning such as proper work organization and relevant job competencies.

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## **2. THE AREAS OF FUNCTIONING AND ROLES OF LOGISTICS MANAGERS IN PRODUCTION ENTERPRISE**

Logistics processes support main productive process in production enterprises thus playing the role of a service, but their importance is still rising. Effective production process is not possible without delivery of proper amount of raw materials, materials, equipment and information to appropriate places and in proper time. Efficient flow of company products to recipients must also be ensured. These are the tasks of logistics activity.

In literature and practical analyses, three areas of logistic activity can usually be distinguished in production enterprises. They are: delivery logistics, production logistics and distribution logistics. Delivery and distribution logistics are sometimes joined and treated as one area of the so called marketing logistics or waste disposal logistics is additionally marked out. The layout of these basic areas is presented in Exhibit 16.1.

Logistics activity can positively influence productive processes in all these areas by:

- ensuring relevant order and procurement process and delivery of raw materials, materials and components to production area,
- ensuring optimal flow of materials, production in progress and information by production worker jobs, manufacturing units and inter operational inventories,
- proper distribution of products and service including ensuring optimal customer service,
- a range of other logistics actions such as storing, packing, shipping and inventory control and waste utilization.

Wide range of issues causes that more and more people work in logistics and therefore the need to manage this area of business activity efficiently arises. It is a responsibility of logistics managers who are in charge of multi-professional teams performing logistics functions in the above mentioned areas. They are people working in head offices of enterprises (e.g. logistics directors) and those working at medium and low level of management ( e.g. heads of logistics departments or sections).

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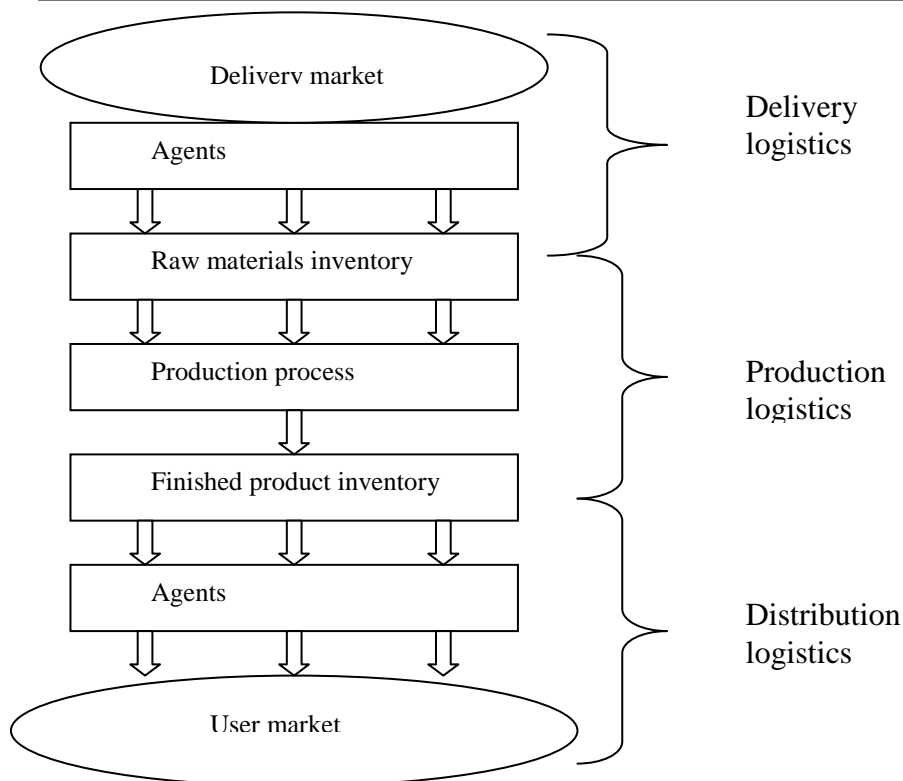


Exhibit 16.1. Three areas of logistics activity in production enterprise [ 2, p.52]

Various forms of organization of their work are discussed in further part of this article. The names of individual positions are also varied, e.g. the terms such as delivery or procurement director and manager of logistics and inventory economy, procurement or delivery and transport department, appear.

However, regardless of the type of organizational structure and level of management that logistics manager is placed at in a certain enterprise, some common tasks can be singled out. They are usually divided into two categories comprising functions related to substantive activity of logistics sectors (departments) and managerial functions related to the role of a manager.

Functions related to substantive activity include first of all:

- coordinating delivery and transfer of raw materials, materials and intermediate products to places where they are processed,
- proper choice of suppliers and maintaining partnership relations with them, consistent with the company interests,

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- controlling inventory management in order to use it optimally and ensure its proper amount and structure in all links of the logistics chain,
- coordinating the functioning of depositories of raw materials, materials and finished products,
- maintaining proper cooperation with other sectors of the enterprise, production and technical sector in particular,
- organizing proper distribution channels and enabling their efficient delivery to recipients and services,
- coordinating issues related to logistics documentation and settlements together with financial or accounting sector.

Managerial functions realized at these positions are to some extent similar to those of other managerial positions. These areas should be considered as particularly meaningful:

- accurate choice of staff for logistics sector,
- appropriate division of tasks and efficient organization as far as their performance is considered,
- ensuring effective system motivating subordinates,
- staff development and training in the scope of various innovations and procedures applied in logistics,
- organizing efficient system of planning and gathering information, e.g. about deliverers and recipients,
- monitoring logistics action as well as control and evaluation of the work of units in charge.

Proper realization of these functions requires a lot of contact, talks and negotiations with deliverers and recipients and also with external units e.g. marketing and sales department or economic sector. Therefore, the work of logistics manager very often involves frequent trips and staying outside the company. However, cooperation between logistics managers and production units is the most essential and visible for company results.

The survey conducted among 48 managers of logistics units taking part in postgraduate and weekend courses organized by Technical University of Lodz and University of Lodz in the years 2008 and 2009 shows that frequency of contacts proves the conclusion formulated above (see table 16.1).

The biggest frequency of contacts (frequent and very frequent) characterizes managers of production departments and masters, foremen and shift dispatchers, top managers are only on third position. Considering also quite a big scale of average frequent relations with executive production workers (no. 6), significant dominance of production units in the area of professional contacts of logistics managers can be observed.

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**Table 16.1.** Organizational units and job positions most often contacted by logistics managers in production enterprises

No.	Organizational units and job positions	Frequency of contacts (in %)		
		Frequent and very frequent	Average	Rare and very rare
1.	The company Board of Directors (presidents, vice-presidents and branch directors)	20,8	60,4	18,8
2.	Top management (e.g. Sales Director)	43,7	39,6	16,7
3.	Directors of Administration Department of the company (e.g. HR, accountancy departments)	31,2	43,7	25,1
4.	Directors of Production Departments and Divisions (e.g. weaving department, department producing drills)	70,8	20,8	8,4
5.	Masters, foremen, shift dispatchers and managers of production cells	62,5	25,0	12,5
6.	Production workers (e.g. mechanic, sewer, toolmaker)	18,8	39,6	41,6
7.	Other units and job positions (e.g. property protection services, solicitor, company holiday resorts)	10,4	25,0	64,6

Source: author's study

It follows from the above that cooperation between logistics managers and production sector is very important for efficient functioning of enterprises.

### **3. ORGANIZING LOGISTICS ACTIVITY IN PRODUCTION ENTERPRISES**

Proper organization of logistics activity in an enterprise is an important factor as far as efficient work of logistics managers and their subordinates is considered. It allows to realize functions presented above.

Two issues should be basically considered here:

- firstly, should logistics activity function individually within the enterprise or should it be outsourced as the so called Logistics Service Outsourcing? It concerns mainly small and medium production enterprises;
- secondly, when logistics activity operates within enterprises structure, should it be organized in the form of centralized logistics service at top management level or in decentralized form in which logistics cells will be placed in individual plants or production sectors? The issue is particularly important for large enterprises.

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Taking into consideration the first question, it should be stated that outsourcing certain services and productive processes is the solution that has been applied in the area of production activity for a long time. It also concerns logistics sphere to a great extent. J. Dembińska – Cyran presents the results of American research from the second half of the twentieth century which prove that the biggest number of services offered by outsourcers were in [1]:

- storing (inventory)– 98%
- planning shipping track– 92%
- overpacking – 90%
- managing inventory – 89%
- dealing with returns of products – 83%
- logistics counselling – 55%

Although outsourcing often includes services such as possessions protection, accounting, IT or repair services, it most of all relates to logistics ventures.

The research conducted by the consulting company Ernst and Young and Georgia Institute of Technology shows that West European enterprises allocate 51% of logistics budget to outsourcing, in the USA its share equals 43%. 90% of the researched stated that logistics determinates their competitive advantage. [6, p. 201].

Outsourcing logistics services has a lot of good points being the results of typical outsourcing advantages (lower costs, professional service, outsourced company focusing on productive processes), and it additionally helps to avoid high costs resulting from costly transport, inventory and IT investments.

When this option is chosen, it often happens that logistics activity in production enterprise can be dealt with by one person (e.g. coordinator or intermediary with logistics operator) or a small team cooperating with outsourcing companies (e.g. sector dealing with contracts).

Creating independent logistics unit in an enterprise structure (department or logistics sector) is a contradictory solution. The logistics departments (sectors) take over most of matters „scattered” in various enterprise units before (supply department, inventory and transport economics).

The process of creating logistics sector in enterprises usually takes place in two options: evolutionary or creating from scratch. Evolutionary option assumes slow isolation of logistics sector as a result of development of previous organizational units dealing with logistics activity in various part of the company and their integration into related organizational system.

The option where logistics sector is created from scratch consists in designing full scope of logistics functions at the moment of arising, transforming (restructuring) or development of an enterprise.

When choosing a definite option of building organizational form of logistics sector one can take into account various choice assumptions (concepts). They are [4]:

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- one way approach, stating that integration of all logistics tasks within one section directly subordinate to a member of the Board is the most reasonable solution,
  - life-cycle approach, stating that logistics organizational structure in enterprise is formed by stages in different periods but with increasing degree of concentration,
  - contingency approach, stating that detailed solutions concerning logistics organization in enterprise structure depend on internal and external conditions and situations.

Irrespective of accepted detailed solutions, it should be stated that leading logistics activity individually within enterprise structure has also many advantages particularly in large industrial enterprises. It mainly ensures greater independence from outsourcers, it allows to develop logistics competencies inside the company and influences the prices of logistics services to a greater extent.

Another important organizational issue as far as realizing logistics activity within enterprise is considered is extent to which management of this activity is centralized. Taking into account contradictory solutions, centralized and decentralized model of managing logistics in production enterprises can be distinguished.

Centralized model can be characterized mainly by the fact that managing logistics activity is focused in one place (in one position), where course of logistics processes is coordinated in a way to ensure homogeneity of policy and procedures in this area. Organization of logistics sector in one of coal companies is an example of such solution. (Exhibit 16.2).

Logistics Director has large scope of competencies and responsibilities for supplying the mine with production materials and spare parts, supervising material and inventory economics as well as marketing actions and public procurements. All these processes are concentrated in one sector that controls particular logistics ventures for the whole enterprise.

Solution based on centralization of logistics activity is applied in compact enterprises functioning in one isolated place (e.g. on the area of one town) and characterized by functional or linear-staff organizational structure.

Advantages of such organizational model include very easy control and efficiency of coordinating logistics processes. Controlling these processes from one place and avoiding „duplicating” some works and expenditure (e.g. by better use of means of transport and inventory) as well as possibility to group professional logistics staff in one strong sector, which allows to work out certain solutions and make decisions faster, are also main advantages of this type of solution.

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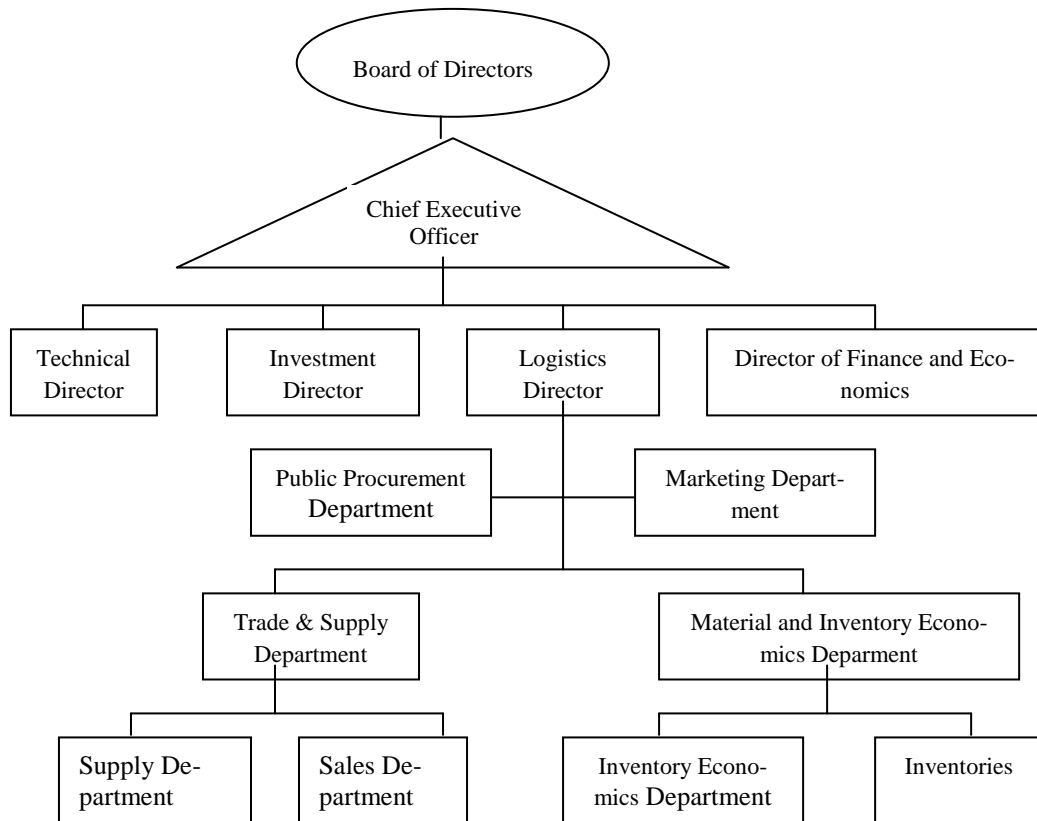


Exhibit 16.2. Organization of logistics sector in selected coal company.

Source: author's study.

Decentralized model of organizing logistics in production enterprise is characterized by the fact that logistics actions and cells are placed at medium and lower management levels. In company head office there are only coordinating units that ensure cooperation between these cells. This solution is most often applied in holdings or divisional structures in which isolated logistics cells occur within particular divisions or regions (areas) of company activity [8, p. 187-188]. The example of such model of organizing logistics applied in fruit processing plant is presented in Exhibit 16.3.



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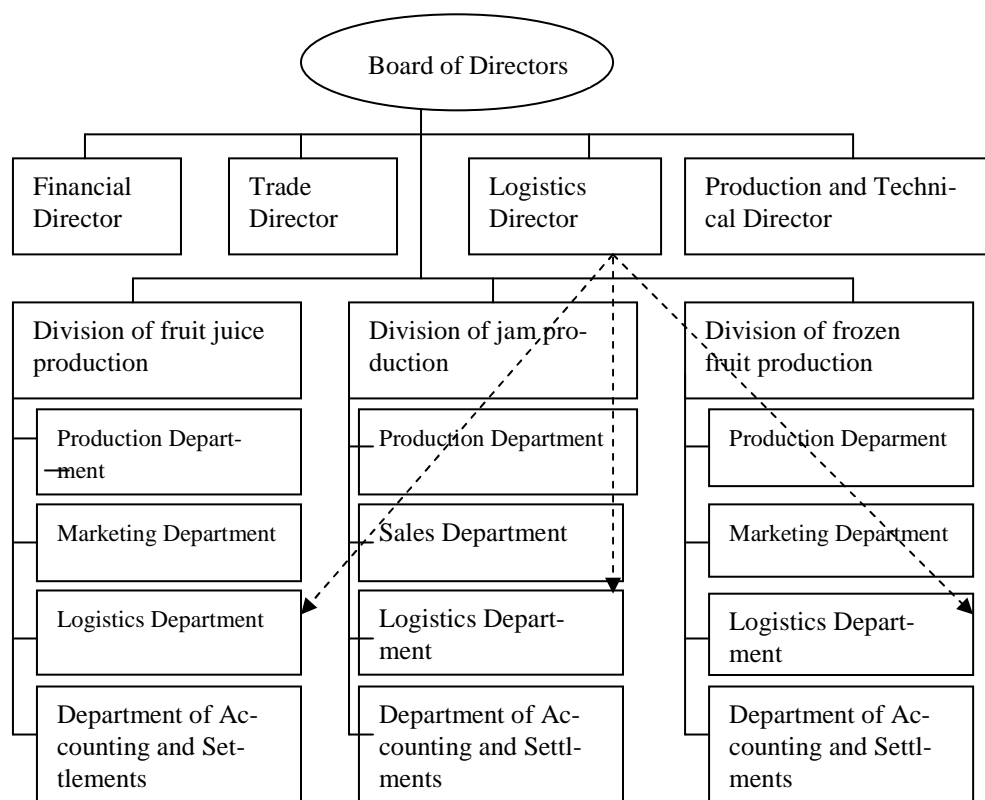


Exhibit 16.3. Decentralized organization of logistics in selected fruit processing plant.

Source: author's study

Advantages of decentralized model of organizing logistics include:

- better adaptation of logistics service to the needs of individual divisions and their clients (faster reaction to the needs of recipients),
- bringing the place of making decisions closer to information sources which enables faster action in logistics sphere,
- making it possible for managerial level (e.g. Logistics Director) to concentrate on strategic and coordinating matters and relieving them from peripheral or secondary decisions),
- creating broader possibilities of action for logistics managers and their subordinates employed in individual divisions (regions), which allows to use their competencies better and enhance motivation for development and training,
- lowering costs of managing logistics activity by means of lowering the number of managerial and administrative staff at the level of company head office.

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This option is more appropriate for large production enterprises with multiplant structure and functioning on a few markets, particularly for international and global companies. It is often applied in matrix, hybrid or process structures in which logistics must be decentralized due to its functional character and necessity to adjust to scattered organization of production processes.

The choice of a particular model or version of detailed organization of logistics activity in an enterprise defines essentially the nature of the work of logistics managers as well as the level of efficiency of realization of individual functions.

In the case of outsourcing of logistics services, it is „rudimentary” activity within enterprise and realization of logistics service within a company leads to rise in the meaning and areas of functioning of logistics managers. Centralized system of organizing logistics is conducive to concentration of logistics managers’ activity in one sector and therefore it enables passing on knowledge and experience within the same workgroup. It is particularly advisable in the initial phase of creating and developing logistics sector of an enterprise. Decentralized system, provides, in turn, broad possibilities of action for logistics managers and is conducive to development of competencies because of greater independence in making decisions and direct verification of their consequences.

#### 4. COMPETENCIES OF LOGISTICS MANAGERS

Bearing in mind functions and spheres of functioning of logistics managers discussed above, it should be considered what kind of competencies the manager of this type should have in order to function effectively in production enterprise. The question is also essential because of the fact that more and more directions of studies and specializations arise that prepare for such positions. Numerous courses and post-graduate studies in this field are also organized. They are formed in various universities due to their character and tradition, which can prove great popularity of this field (logistics, logistics management). On the other hand, though, lack of common framework can cause some difficulties in the process of professionalization of logistics managers as a workgroup. Table 16.2 presents universities teaching logistics in Poland.

Table 16.2. Profile of public universities teaching logistics

No	University profile	Number
1.	Technical	10
2.	Economic	9
3.	Humanistic	2
<b>4.</b>	<b>All</b>	<b>21</b>

Source: [3]

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It can be well seen that the role of technical and economic universities is significant but efforts to teach such directions are also made by humanistic universities. Moreover, variety of faculties offering these studies is seen within particular universities. They are most often faculties of management, IT and transport but other types such as e.g. Faculty of Mathematics and Applied Physics also appear.

Among non-public universities, the Poznań School of Logistics and International School of Logistics and Transport in Wrocław influence greatly training of logistics workers in Poland.

The question of defining competencies for particular job category is quite complicated. There are numerous references on how to understand the term 'competencies' [see 5, 7]. Following many authors that take the issue broadly, it should be stated that competencies of logistics manager include a collection of acquired knowledge and practical professional skills as well as possessed personal, social features and motivation, which altogether ensure effective performance of roles and functions that this position requires.

In many analyses and practical solutions concerning the so called competence profiles or standards, there is a division into soft (behavioral) competencies, related to emotional and social sphere and hard (functional) competencies, related to the nature of the work performed. In relation to managerial positions, they are often divided into personal (psychological) competencies, social (e.g. empathy, leadership or cooperation) and praxeological (technical, proficiency) competencies.

Taking into account these considerations and basing on the specificity of the work of logistics managers, a division is suggested into three categories of competencies essential in this position. They are:

- general competencies, concerning work at a particular level in production enterprise,
- managerial competencies, useful in the work of manager of logistics sector (department),
- technical (hard) competencies, related to the nature of logistics activity in the company.

The first category includes mostly:

- capability to gain and analyze information,
- representing interests of the company outside,
- creativity and entrepreneurship while realizing these tasks,
- reliability and punctuality in the process of work,
- client orientation,
- knowledge from the field of law, marketing and company finance,
- knowledge of market and branch,
- IT competencies,
- motivation for development and constant improvement of qualifications.

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Managerial competencies are to a great extent the same for all managerial positions but in the case of logistics managers, attention should be paid particularly to:

- features and capabilities of communicating with the company environment and inside the enterprise,
- leadership forces that are essential due to interdisciplinary nature of logistics teams, including ability to manage a few tasks at the same time,
- capability to negotiate with deliverers, subcontractors and recipients as well as production departments,
- ability to cooperate and soften conflicts and tensions that often arise in this type of organizational cells,
- knowledge and capabilities in the sphere of managing changes, including convincing the staff and creating bonds in team,
- ability to motivate subordinates and supervise,
- efficiency and ability to manage time.

Technical competencies constitute a range of knowledge, capabilities, and predispositions ensuing from the specificity of working in logistics. The most important are:

- knowledge about deliverers and clients,
- knowledge in the field of transport techniques, inventory and material economics,
- knowledge of good practices and effective logistics procedures,
- ability to manage the flow of materials and auditing at various points of supply chain,
- ability to plan and optimize transport services,
- ability to evaluate technical usefulness and quality of supplies of raw materials, materials and services as well as the choice of deliverers,
- knowledge of new methods of inventory management (e.g. Just in Time and other),
- knowledge about effective solutions as far as packaging, shipping and waste disposal are considered.

The importance and usefulness of individual competencies depend on the size and phase of company development, branch and nature of recipient market, technical level of the company and management level a logistics manager functions at. The last relationship is presented in Exhibit 16.4.

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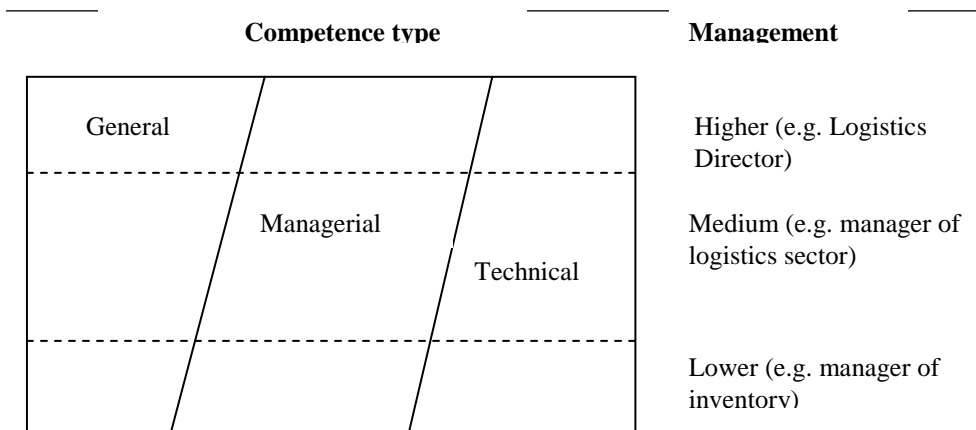


Exhibit 16.4. Relationships of competencies of logistics managers to management level

Source: author's study

The group of 48 participants of weekend and post-graduate studies on logistics management were also asked about the meaning of individual competencies for the efficiency of the work on the position of logistics manager. Synthetic results of the answers (each respondent pointed to four most important features) are presented in table 16.3.

Table 16.3. Competencies particularly useful in the work of logistics manager

No.	Competence type	% of answers	Position
1.	Ability to gain and analyze information	5,4	IX – X
2.	Client orientation	8,5	VI
3.	Knowledge of market and branch	6,5	VIII
4.	Leadership forces	15,0	II
5.	Ability to negotiate	18,2	I
6.	Ability to cooperate and soften conflicts	8,0	VII
7.	Efficiency and ability to manage time	5,4	IX – X
8.	Knowledge about deliverers and recipients	11,3	IV
9.	Knowledge of good practices and logistics procedures	12,5	III
10.	Ability to assess raw materials, materials and half-products and choice of deliverers	9,1	V
11.	<b>Total</b>	<b>100,0</b>	

Source: author's study

Among the chosen competencies, there are features and capabilities belonging to all of the categories discussed above. However, managerial competencies (ability to negotiate and be the leader) were put on the first two positions (the biggest number of answers). Technical competencies were also considered as very important (positions

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III – V). From among general competencies, the biggest number of answers was given to the following features: client orientation and knowledge of the market and branch. Two last positions were taken by competencies which, as opinions of the respondents show, are necessary and essential for working in this position (efficiency and ability to gain and analyze information).

Although the conducted survey is fragmentary and is not representative of the whole of logistics managers, it still shows great importance of competencies mentioned above for efficient performance of the function of logistics manager. Forming and development of these competencies, particularly managerial and technical ones, are to be treated as important for all schools and centers training staff responsible for managing logistics sphere in production enterprises.

## 5. CONCLUSION

Logistics managers realize very important functions in production enterprises. They essentially influence the efficiency of enterprise work by ensuring proper organization of procurement and supply of raw materials and services for production processes as well as efficient shipping system and system of delivery of finished products to recipients.

Basic factors conditioning the efficiency of the work of the managers have been also presented in the article. On the basis of survey research of the author of the article and other authors, attention has been paid to two essentials conditions. They are proper organization of logistics activity in production enterprises and proper system of forming competencies of logistic managers.

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