

# THE STUDY ON THE DEMAND FOR PRODUCTION AND LOGISTICS SPECIALISTS: THE CASE OF SIAULIAI REGION

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## Annotation

*Labour market forecasting and the goals set for it have transformed along with social and economic challenges. Due to rapid technological changes in the markets, restructuring of economy and transformation of the requirements for the labour market the standard human resources planning model is no longer sufficient. The issue of compatibility between the labour market demand and supply in the qualitative aspect of the content of qualifications becomes particularly important. It is very important to analyze and project what qualification (competence, knowledge and skills) will ensure specialists' successful participation in the labour market. This dimension of research and forecasting is one of the constituents ensuring quality of education and vocational training. Quality is ensured by formulating appropriate training and study programmes and teaching methods that comply with current and future labour market challenges. Considering the projected labour market demand, training and study programmes can have specialisations. The article presents the study on the demand for production and logistics specialists presenting the example of Siauliai region.*

**Key words:** production, logistics, specialist, the demand for specialists, the study on the demand.

## Introduction

Labour market analysis is aimed at the assessment of the current situation and forecasting of the possible future scenario. This enhances the policy of planning human resources, enables a more efficient use of the labour market assessment systems, and creates preconditions for better compatibility between the demand and supply of the labour market. The results of the specialists' demand analysis also contribute to reduction of the mismatch of information in education and labour market sectors. Spontaneous distribution of labour resources in the labour market has many drawbacks. The multifaceted nature of the labour market and predetermined rigidity factors may lead to large-scale long-term mismatch both in the demand and supply of the labour market (i.e. the mismatch between what employers need and what the labour market offers). Such situation is described by high unemployment level of persons with certain education, and on the other hand, difficulties faced by companies looking for employees with necessary qualifications.

*The research problem.* In order to survive in the market, enterprises constantly have to keep track of the market, continuously search for improvement opportunities and improve staff competence, because highly skilled specialists determine the image of the enterprise, its financial situation, increasing competitiveness of the enterprise, and most importantly, the future of the enterprise. Qualified staff who meets the needs of today's market is the key to longevity of the enterprise. It should also be noted that there is a lack of research on the demand for different types of specialists and specificity of their identification in various types of enterprises. For this reason, the *problem* analysed in the article is related to the insufficient analysis of the need for specialists in enterprises and to the endeavour to improve it.

*The research subject:* the demand for production and logistics specialists in Siauliai region.

*The research aim:* to identify the demand for production and logistics specialists and knowledge, abilities and competencies, required for production and logistics specialists.

*Research objectives:*

1. To identify the demand for production and logistics specialists;
2. To analyze competencies required for the production and logistics specialist.

## Research Methodology

*A rationale for the study and implementation procedures.* The demand for production and logistics specialists is grounded on the theoretical and practical discourse analysis: the analysis of supply and demand, forecast and trends of Lithuanian labour market, the analysis of strategic documents of the Republic of Lithuania and Siauliai region, the analysis of employment possibilities in Lithuanian and the EU market, etc.

*The research instruments.* The content analysis of documents. This analysis has allowed to distinguish the key priorities of production business development in Siauliai region; to identify the key activity areas of production management specialists, functions as well as knowledge, abilities and competencies what are necessary to carry them out.

*Research methods.* The analysis of scientific literature sources; document analysis, data processing. The data are analyzed on the basis of the criteria of words, context, frequency and extensity, intensity of comments, accuracy of answers.

### Research Results

Summarising the study data on the demand for production and logistics specialists, it can be stated that as to the competencies that are relevant for the production and logistics specialist in today's market conditions, it is important that such specialist understands production and production logistics processes (i.e., *has knowledge and abilities of both production management and production logistics*) as well as the interrelationship between these two processes (i.e., production and logistics). As stated by the majority of cases, the latter ability often determines not only the manager's successful activities but also success of the very business in the broad sense. According to experts (Zinkeviciute, Vasiliauskas, 2013), specialists working in a modern production enterprise must be responsible not only for the very production process within the enterprise but also for other aspects that are important for its activities: supply of basic and auxiliary materials, raw materials, semi-finished products, spare parts, direction of semi-finished and finished products to outlet stores, distribution of finished products, etc. Although traditionally these activities are attributed to logistics, achievement of effective solutions, successful and profitable production and meeting the customers' needs require to closely coordinate both production activities and storage, packaging, transportation, information and inventory management (i.e., traditionally attributed to logistics) activities. Therefore, enterprises increasingly need specialists who know and able to manage not only production but also production logistics processes. In addition, according to the heads of enterprises, knowledge and abilities of logistics are highly required in order to ensure the production of large, complex products within the very enterprise too (The Forecast of the Labour Market 2017).

The demand for production and logistics specialists is grounded on the analysis of the data provided by Lithuanian Labour Exchange. Based on the said analysis, it can be stated that the demand for specialists in industry, transport and storage economic activities has remained relatively high for several years. Among ten most marketable specialities in 2016, transport (logistics) managers took the second place after information technology specialists, while in the first half of 2016, storage service employees had the best employment prospects. As of 1 January, 2017, the third place among the most marketable professions is occupied by production managers (The Forecast of the Labour Market 2017).

According to the data of Lithuanian Labour Exchange, analyzing the forecasts of the demand for manpower in Lithuania in 2017, it is predicted that employers will register 3-4 percent more job offers than in 2016. In the industrial sector it is planned to register 19 percent vacancies, mostly in the enterprises engaged in the production of mattresses, furniture, meat, cheese and poultry products, dairy operations, outerwear sewing. Because it is expected that skilled workforce will be allocated 75 percent of all job offers; i.e., by 1 percent more than in 2016, it is likely that the industry sector will need a larger number of both skilled workers and specialists (the production manager and production logistics specialist would be attributed to the latter).

The survey of Lithuanian Labour Exchange demonstrates that as much as 60 percent of enterprises operating in the industrial sector lack skilled manpower. The demand for specialists is particularly felt in the sectors of textile, furniture production, wood and metal processing and food processing industries.

The forecast of employment prospects provided by Lithuanian Labour Exchange for year 2017 (see Table 1) shows the potential demand for specialists in Siauliai region and the Republic of Lithuania (The Forecast of the Labour Market 2017).

Table 1

The Forecasts of the Barometer on Employment Possibilities of Lithuanian Labour Exchange for year 2017

Locality	Big employment possibilities	Average employment possibilities
In Siauliai region	Production foremen and team leaders Heads of production enterprises Storage service employees	Wood specialists Transport employees
In Lithuania	Storage service employees	Wood specialists Production foremen and team leaders Management and organization analysts Transport employees

According to the data of the Barometer of Lithuanian Labour Exchange, the demand for production foremen, storage service employees in Siauliai region is high.

In addition, in "The Profession Map" production foremen are among the groups of the most marketable professions in Siauliai region (there is a considerable lack of production foremen in the municipalities of Kelme district, Siauliai city and district, the lack of production foremen is also felt in all other districts of Siauliai region); the situation with storage service employees is also similar (there is a considerable demand for such employees in Akmene, Joniskis, Radviliskis, Siauliai districts; Kelme, Pakruojis district municipalities also lack such employees).

The demand for production and logistics specialists is also grounded on the forecast of the labour market in Siauliai region in 2017, which is prepared on the basis of the analysis of manpower supply and demand indicators, employers' answers to questions about business activity prospects, job creation and liquidation in enterprises, and on relevant information about projected changes in the labour market, which is available in public space. For example, analysing job possibilities for year 2017, in October-November 2016, using a stratified random sampling method, Siauliai Territorial Labour Exchange conducted *The Employers Survey*, attended by 606 employers of Siauliai region who employ over 42,9 thousand employees in their enterprises. The survey was attended by 75 employers in Akmene district municipality, 79 in Joniskis district, 78 in Kelme district, 76 in Pakruojis district, 88 in Radviliškis district, and 210 in Siauliai city and district. All companies that employ more than 100 employees were surveyed. Among the respondents, 55,4 percent were enterprises representing the services sector; 21 percent, industry; 15,7 percent, agriculture; and 7,9 percent, construction sector. The majority (94,5 percent) of surveyed enterprises represented small and medium businesses. The conducted employers' survey demonstrated that the majority of respondents quite positively assessed the prospects of the activities of enterprises. Every fifth enterprise planned the increase in the number of employees. The most considerable increase of employees is foreseen in transport and storage, manufacturing production, wholesale and retail trade, human health care and social work, agriculture, construction, real estate, water supply, wastewater treatment, waste management and remediation enterprises. Production managers, production foremen and team leaders also fall into the list of jobs the number of which is projected to be the largest in Siauliai region (<https://www.ldb.lt/Informacija>).

Production and logistics specialists will be able to work in enterprises differing in size and legal status, in institutions engaged in production, storage and transportation, wholesale and retail trade, etc. The statistics of this kind of enterprises and institutions operating in Siauliai region as well as the statistics of the demand for prospective specialists is presented in Table 2 ([www.ldb.lt/Informacija](http://www.ldb.lt/Informacija))

Table 2

Number of Enterprises, Institutions in Siauliai Region

Type of activity	Municipal enterprises	Private limited liability companies (UAB)	Public limited liability companies (AB)	Sole proprietorships
Manufacturing production	0	426	12	157
Transport and storage	1	345	1	161
Wholesale and retail trade	1	978	1	587
In total:	2	1749	14	2654

*Having evaluated the results of the employers' survey and labour market trends, it is predicted that in 2017, the situation in Siauliai region will be improving: it is expected to register 24,7 thousand new job offers. The demand for the manpower will be rising by 2 percent. More than half of job offers will be in the services sector; every fifth vacancy, in industry; about 7 percent, in construction and agriculture.*

The importance of manufacturing production for the region is also supported by the results of the study conducted by "Mosta" (Research and Higher Education Monitoring and Analysis Centre): manufacturing production attracts most of foreign investments in Siauliai region (in 2015, 98 million Euros, 55 percent of total investments).

The validity and necessity of the demand for production and logistics specialists for the labour market are also disclosed by the conducted analysis of recruitment advertisements ([www.ldb.lt](http://www.ldb.lt), [www.cv.lt](http://www.cv.lt), [www.cvmarket.lt](http://www.cvmarket.lt), [www.cvonline.lt](http://www.cvonline.lt), [www.cvbankas.lt](http://www.cvbankas.lt), [www.pvsistemas.lt](http://www.pvsistemas.lt), [www.Dirbu.laikas.lt](http://www.Dirbu.laikas.lt), [www.Dirba.lt](http://www.Dirba.lt), [www.ldb.lt/TDB/Siauliai](http://www.ldb.lt/TDB/Siauliai), etc.). It is found that at present there is a lack of production and logistics professionals (manufacturers, forwarding agents, managers, storage service specialists) in Lithuania, who are able to manage production and logistics processes, foresee threats and opportunities, in a timely manner and qualitatively organize the

production of a product, its movement from a producer to a customer, etc. It is emphasized that these specialists' work is agile and responsible; they have to solve a lot of organizational matters, constantly collaborate with carriers, suppliers and customers, which in turn justifies the demand for special managerial knowledge and abilities necessary for management of these processes.

In a certain sense, the demand for the specialists being analysed is also confirmed by the analysis of strategic documents of the Republic of Lithuania, which clearly name the need to develop deeper entrepreneurial skills (in production and logistics activities), developing business in national and international markets. For example, VI priority "Smart Economy" defined in the National Progress Strategy "Lithuania 2030" emphasises "economy that is flexible and able to compete globally [openness], generating high added value, based on knowledge, innovations, entrepreneurship [creativity] and social responsibility as well as "green" growth [responsibility]".

The strategic aim of the strategic activity plan of The Ministry of Economy of the Republic of Lithuania 2016-2018 is to promote the development of Lithuanian economy and increase competitiveness. For example, describing one of the priorities "I. Improvement of Business and Investment Environment" (direction 1.1 "The Increase of Competitiveness of Lithuanian Economy, Ensuring a High Level of Investment"; direction 1.3 "The Increase of Employment, the Reduction of Poverty and Social Exclusion, etc. of I priority "Sustainable Economic Growth" ), the focus is on the need of promoting social entrepreneurship and youth employment, the increase of Lithuania's integration into the global market, the development of creative and innovative society, the development of multiple innovations and implementation of a systematic approach to them; smooth integration into the EU market; the increase of cost-effectiveness of business enterprises and their ability to adapt to the domestic and foreign market conditions<sup>6</sup>.

Strategic development plans of Siauliai region municipalities 2014-2020 indicate development trends related to the development of economic activities or businesses. For example, priority 2 of the strategic plan of Siauliai District "Development of Business Environment and Entrepreneurship", priority 1 of the strategic development plan of Siauliai City "Competitive Business Environment" emphasize the importance of innovative engineering industry and logistics services generating high added value and attracting local and foreign investments.

It should be noted that development of industry and logistics services is foreseen in the development plan of Siauliai region 2014-2020 (see Table 1). The Parliament of the Republic of Lithuania adopted laws on the basis of which Akmene and Siauliai Free Economic Zones were established in Siauliai region, aiming to increase industrial attractiveness of Akmene and Siauliai and create more favourable conditions for attraction of investments, high-technology development and creation of new jobs. In addition, the number of operating economic entities tends to increase in the region: compared to 2008, it increased by 1,8 percent. The activities of industrial, transport, commercial and services enterprises, generating the highest gross added value, have also intensified in the region. In addition, most of the foreign investments in Siauliai region are attracted by manufacturing production (in 2013, the amount of direct foreign investments in Siauliai region was 79,1 million Euros; in 2014, 87,1 million Euros; and in 2015, 98,1 million Euros) ([www.esinvesticijos.lt/lt/dokumentai/siauliu-regiono-2014-2020-metu-pletros-planas-nauja-redakcija-2015-10-15](http://www.esinvesticijos.lt/lt/dokumentai/siauliu-regiono-2014-2020-metu-pletros-planas-nauja-redakcija-2015-10-15) ). These factors will enable the establishment of new businesses and creation of new jobs for production managers and logistics specialists because in Siauliai region the majority of business sector employees work in industry (about 30 percent) (The analysis of the current state of Siauliai city. The report of stage II).

## Conclusions

The conducted research leads to the assumption that production and logistics specialists will be in demand in the labour market. The empirical research results enabled to reach the research aim and formulate the following key aspects of the demand for production and logistics specialists:

- the key priorities of the development of production business in Siauliai region were distinguished (set out in random order): *development of the number of employees with appropriate qualifications and competencies; development of leaders' competencies; implementation of information technologies; improvement of work with customers and communication; development of new products using new technologies;*
- the key production management specialists' activity areas, functions as well as knowledge, abilities and competencies in order to carry them out were identified (for example, *orientation to make changes; creativity; endeavour for excellence; the ability to ensure*

*teamwork; to speak more than one foreign language; to be good at working with various business management software; to solve problems; etc.)*

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