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AN OVERVIEW OF THE COMPETENCIES IN LOGISTICS SECTOR IN SLOVENIA

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Aim of the research



- The **aim** of the paper is to consider the **expected competencies of a logistics experts in Slovenian companies connected to the logistic sector**.
- In the first part of the paper we discuss **theoretical issues** that include the study of definitions of competencies, their components and how competency profiles required for each job are formed.
- In the second part we elaborate the **profession of logistics experts**.
- In the end we present the **results of our qualitative research** of competencies in Slovenian logistics sector.
- The paper will present the skills, abilities and knowledge needed for successful work in logistics in Slovenia.



Defining competencies



- There are several definitions of competencies. We defined it from individual point of view.
- Kohont (5) describes competencies from workers point of view as **“a whole of interrelated skills, knowledge, motivation, self-image and values that and individual knows, wants and is able to successfully use in a given work situation.”**
- We can summarize the arguments of Majcen (6) that competencies of individual are characteristics that help individuals to carry out their tasks successfully and solve problems, encountered in their workplaces. These characteristics are: **knowledge and experience, skills and abilities and other personal characteristics** (6).



Industry 4.0. and related competencies



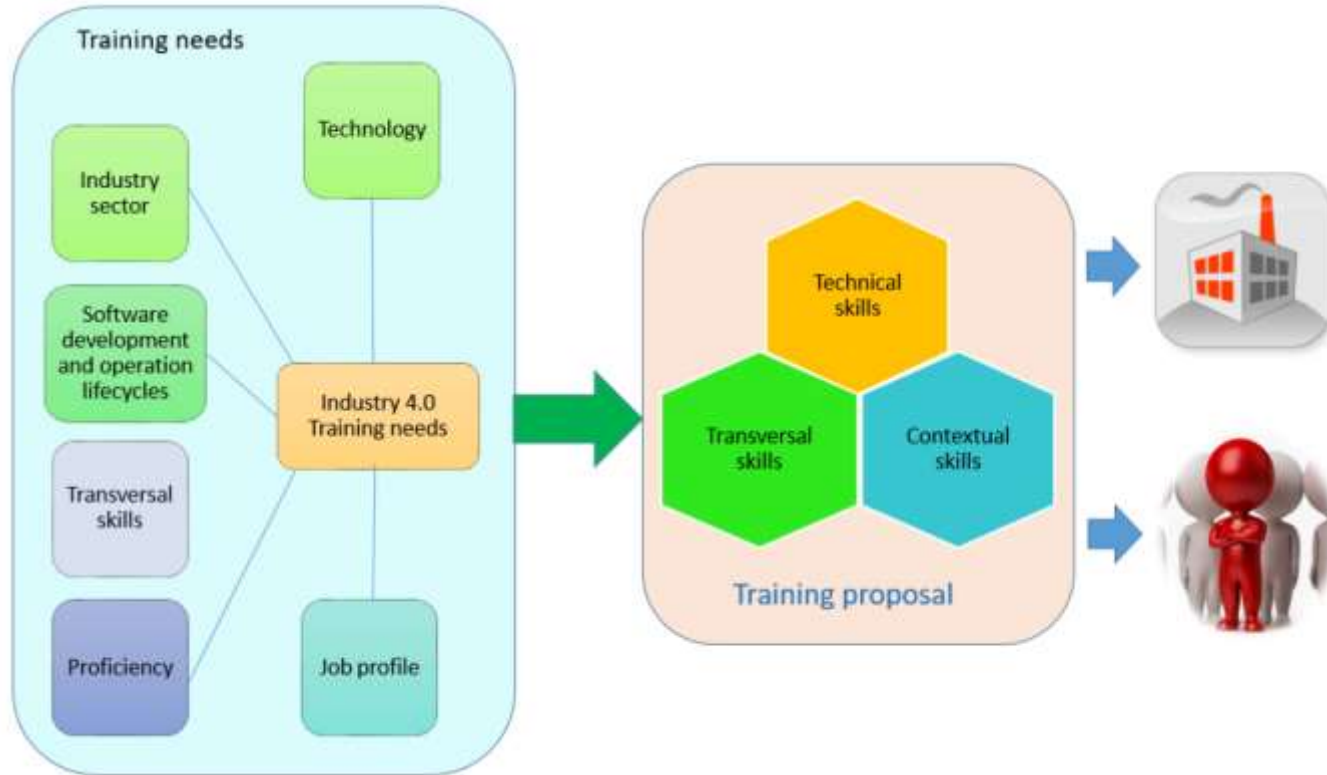
Industry 4.0 factories are:

1. **Connected**, which means data are flowing from production plane, between various subsystems or departments or from the supply chain.
2. **Optimized**, so running algorithms are optimizing every aspect of operation with minimum human intervention.
3. **Transparent**, which means extensive use of metrics allow easier control of operation and at the same time transparency in order processing within the supply chain.
4. **Proactive** either in quality aspects, or in replenishing the inventory of in preventive maintenance,
5. **Agile**, so quality enables a smart factory to implement schedule and product changes fast and with minimal intervention.



Industry 4.0 competence framework

Source: Fitsilis, P., Tsoutsas, P., Gerogiannis, V. (2018). Industry 4.0: required personnel competences. Available at: <https://stumejournals.com/journals/i4/2018/3/130.full.pdf>



Competencies in industry 4.0.



Leinweber in his study clustered the identified competencies into four main categories:

- **Technical competencies** such as state-of-the-art knowledge, process understanding, technical skills, etc.
- **Methodological competencies** including creativity, entrepreneurial thinking, problem solving, conflict solving, decision making, analytical skills, research skills, and efficiency orientation.
- **Social competencies** such as intercultural skills, language skills, communication skills, networking skills, ability to work in a team, ability to be compromising and cooperative, ability to transfer knowledge and leadership skills.
- **Personal competencies** that includes flexibility, ambiguity tolerance, motivation to learn, ability to work under pressure, sustainable mindset and compliance.



COMPETENCIES IN LOGISTICS SECTOR IN SLOVENIA



Some of the latest studies has shown that competencies needed in Slovene logistics sector are (27):

- good organizational skills,
- good analytical thinking,
- good communication skills,
- good knowledge of foreign languages (in most cases English, in many cases also German or Croatian),
- good negotiation skills,
- flexibility,
- accuracy,
- good in quick learning and willingness to learn,
- good logical thinking,
- good IT thinking,
- orientation towards innovations,
- good in analyzing big databases,
- good preparing reports,
- quick in decision making,
- good leading skills,
- good in supervision and control,
- planning skills,
- legal knowledge connected with logistics,
- autonomy,
- good knowledge of warehousing,
- good selling and consulting skills in logistics and supply chain management,
- knowledge of managing logistics costs,
- good knowledge of specific documents needed for successful work in logistics,
- knowledge and understanding of different logistics techniques and technologies,
- positive attitude,
- self-esteem,
- lifelong learning orientation,
- ability to coordinate different tasks and departments.



Methodological framework

- We made an analysis of **108 job advertisement** published in the biggest HR online portal in Slovenia in period between the beginning of January and the end of February 2020. Since Slovene economy and job market in general very small is, these are all job advertisement published in this period in Slovenia. So the sample in our case represents the population. We collected all job advertisement, listed all competencies that were included in the job advertisement. **56 different competencies** (skills, knowledge and abilities) were listed. Some competencies were stated on different way, but we united them according to the same meaning.
- And all listed competencies present the basis for our qualitative analysis, which will be presented in next chapter.

Research results



Technical competencies	Methodological competencies	Social competencies	Personal competencies
Good computer knowledge	Be able to take a professional approach	Management skills	Flexibility
Knowledge in field of EPR	Ability of systematic thinking	Good knowledge of English language	Positive attitude
Independent use of general computer application programs (word processing - advanced; spreadsheets - advanced; use of databases - advanced)	Ability to work with huge database	Good knowledge of German language	Willingness for additional training
Knowledge of specific production lines	Analytical knowledge	Excellent knowledge of Croatian language	Autonomy
Ability to acquire new technical knowledge		Active knowledge of Serbian language	Self-initiative
Good knowledge in process oriented supply chains		Ability to motivate teams and team orientation	High responsibility towards work
Finished higher education in logistics		Team work ability	Reliability
Finished higher education in economics		Positive attitude towards co-workers	Conscientiousness at work
Finished higher education in technical field		Good coordination skills	Accuracy
Material flow knowledge		Good communication skills	Precision
Experiences in warehouses and production		Good organizational skills	Proactivity
Experiences in FMCG and working experiences in field of buyers/suppliers,		Long-term cooperation orientation	Fast at work
Experiences in field of selling food and managing food supply chain,		Experience in international trade	Responsibility
Working experience in international logistics		Good negotiation skills	Independence
Working experience in the field of production planning		Positive attitude towards other stakeholders (especially buyers)	Goal-oriented attitude
Work experience in distribution		Excellent selling skills	Target oriented
Good knowledge of commodity material processes			Operability
Technical knowledge of the material assortment is an advantage			
Commercial and economical knowledge			



Conclusions

- We can sum up, that logistics is very multidisciplinary and interdisciplinary sector where wide range of skills, knowledge and attitude is needed.
- And they are in all cases mixture of **technical, methodological, social and person skills**. We are missing in our analyzed job advertisements directly some important notions of logistics 4.0, like digitalization and automatization of processes in logistics and supply chains, blockchain technology and internet of things concepts, but we think they are indirectly hidden in computer knowledge requirements and especially in personal characteristics and ability to gain quickly new knowledge.
- Namely, the logistics sector is developing so rapidly in the world that **flexibility, self-initiative, high responsibility, reliability and autonomy are urgently needed**.



Thank you for your attention.
Any questions?

