Designing Driver-Employee Relationships in Logistics Centres as Part of the Development of Modern Distribution Channels

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Abstract:

Purpose: The article aims to explore factors influencing the work of professional drivers in Poland, particularly in relation to developing driver-worker relations in logistics centers and warehouses. It addresses the challenges faced by the transport industry, such as a shortage of drivers, and emphasizes the importance of positive relationships between drivers and warehouse staff in enhancing logistics operations.

Design/Methodology/Approach: The research, conducted by the University of Łódź with Emaus-International's support, employed an online survey via the Webankieta program. Targeting drivers and managers using the Trans.eu transport exchange, the study explored logistics processes in transport companies. A pilot study in March 2022 on Emaus-International employees ensured questionnaire functionality. The main survey, conducted in September 2022, garnered 410 driver and 63 manager responses. Though not fully representative, the results offered insights into factors influencing professional drivers and the development of driver-employee relations in logistics centers.

Findings: In a survey on driver-employee relations in logistics centers, managers emphasized the positive impact of warehouse staff assistance (73.02%) and good personal relationships (80.95%) on drivers' satisfaction. Managers also acknowledged the significance of relations with logistics center management (40.32%) and well-defined procedures (51.61%) in the loading process. Drivers echoed these sentiments, highlighting the importance of warehouse support (70.03%), positive relationships (69.80%), and efficient procedures (60.51%) for job satisfaction and operational effectiveness. Improved infrastructure (72.44%) and reduced loading times (69.76%) were key drivers suggested by drivers for enhancing working conditions. Respectful and empathetic treatment from shippers and receivers was also deemed crucial.

Practical Implications: include addressing challenges in the loading and unloading process, such as lengthy delays and inadequate infrastructure, emphasizing the need for sanitary facilities and safe parking areas for drivers. To combat the shortage of professional drivers, efforts should focus on legislative improvements, infrastructural solutions, and awareness campaigns, promoting a positive perception of the profession and addressing existing problems in logistics centers.

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Originality/value: The presented article focuses on an issue that is poorly explored in the literature on the subject - building relationships between professional drivers and employees of warehouses and logistics centers. These relationships are an important aspect that translates into driver job satisfaction.

Keywords: Road transport, drivers, employee relationships, warehouse, logistics centre.

JEL classification: M51, M54.

Paper Type: Research study.

1. Introduction

The progress of road transport is intricately linked to the advancement of transportation infrastructure (Larsson et al., 2010). In this context, it is crucial to uphold a satisfactory standard concerning the technical state of roads, often requiring reconstruction or significant renovation, followed by the assurance of high standards in maintaining linear and point infrastructure components (Bekisz, Kruszyński and Saska, 2023). One of the components of this infrastructure are warehouses and logistics centres.

Effectively managing global supply chains is a significant concern for numerous companies, where the warehouse plays a pivotal role as the main connection between manufacturers and customers in the supply chain (Kudelska and Niedbal, 2020; Thalassinos et al., 2023; Kadlubek et al., 2022).

The warehouse procedures encompass more than just the physical storage of goods; they also involve tasks such as receiving, picking, issuing, and processing essential information about stored products (Borowska and Kudelska, 2020; Werner-Lewandowska, Koliński and Urbaniak, 2022).

This makes the combination of road transport and, in particular, drivers' work closely linked with work carried out in warehouses and logistics centres. In view of the above, the aim of this article is to identify the factors determining the work of professional drivers in Poland in relation to aspects of developing driver-worker relations in logistics centres and warehouses.

2. Professional Drivers' Labour Market

According to the report "Transport Market in Poland and Europe", prepared, by Trans.eu and the Polish Automotive Industry Association, there is a shortage of around 150,000 professional drivers in Poland. The average age of professional drivers in Poland is over 50 years. In Europe, one in three is five years older.
By 2026, the driver shortage in Europe could exceed 2 million people, as 30% of the workforce will retire (Losik, 2023).

It is difficult to pinpoint one main reason for the shortage of drivers on the labour market. It is linked to the demographic crisis and wider social changes. The driving profession is not seen as an attractive and future-oriented career path. Many also say that the responsibility and stress of the job is not commensurate with the pay (Konieczna, 2023). The main reasons cited for the lack of drivers in the labour market are:

- Demographic crisis.
- Significant changes in the law.
- High demands from employees and employers.
- Lack of adequate promotion of the driving profession.
- Generational change - different expectations of today's employees.
- Low prestige and attractiveness of the driving profession.
- Development of new transport sectors.
- High costs of obtaining qualifications.

The driver shortage has invariably remained at the top of the list of problems that hauliers have been facing for years, and all indications are that the next few years will be similar in this respect. According to the Inelo Report (2023), up to seven out of 10 companies have experienced a driver shortage in the labour market (Branżometr Intelo 2023; Matyjaszczyk, 2023).

The persistence or expansion of the scale of the driver shortage could also threaten serious disruption to logistics, trade, construction and selected industries that are particularly dependent on the smooth operation of road transport (Kurasz, 2016).

The International Road Transport Union (IRU) believes that the opportunity for the road transport industry lies with women. In Europe, female unemployment is 7 per cent, a percentage point higher than that of men. The IRU calculates that women make up just over 3 per cent of European drivers.

In the USA, the figure is 7.8 per cent, and in China it is 4.9 per cent. At the same time, women account for 22 per cent of the company's workforce in the transport industry in Europe, while the proportion of women among all employees is 49 per cent.

According to I. Blecharczyk, the shortage of women drivers is not a problem. Blecharczyk, the shortage of drivers is not only a question of wages. She cites as remedial measures not only the improvement of sanitary standards - which are more favourable for women - but also, among other things, an increase in the efficiency of loading and unloading processes (Przybylski, 2022).
As a whole, the main reasons (that discourage applicants from participating in recruitment) are, inter alia, working conditions, long business trips, travel abroad, duties such as ensuring loading and unloading, language barrier when travelling to another country, after training there is a low pass rate in the exams to practice the profession, instability of the sector - the need for workers depends on the financial and economic situation of the national market (Manager+, 2023).

An insufficient number of drivers will also lead to an increase in the industry's wage costs and may result in higher freight rates. The deployment of autonomous vehicles will not fill this shortage in the short term due to the lack of mature solutions in this area (PwC, 2019). Therefore, one way to reverse the trend of a driver shortage may be the relationship-building aspect of the driver-employee relationship between warehouses and logistics centres.

3. Research Methodology

The research project "Logistics processes in the marketing activity of transport companies" was carried out by the University of Łódź (UŁ) with the support of the transport company Emaus-International.

The research was carried out in the form of an online survey using a questionnaire generated in the Webankieta programme, among two groups of employees of transport companies, drivers and managers, who are also users of an instant messaging service operating as part of Poland's most popular electronic transport exchange (EGT) Trans.eu. The exchange brings together around 25,000 hauliers and the professional drivers working for them.

The pilot study was carried out in March 2022 on employees of the transport company Emaus-International. Its purpose was to check the correct functioning of the electronic survey questionnaire and to verify the assumed time needed to complete the questionnaire correctly. The aforementioned entity was chosen due to the availability and possibility of participation of all employees identified as survey addressees.

The survey proper was carried out in September 2022. Information about the survey being carried out, together with a link to the questionnaire, was sent to the co-operators of Emmaus-International. 410 correctly completed questionnaires were received from drivers and 63 from transport company executives.

In view of the volumes obtained, it must be considered that the survey is not representative, but an illustration of the phenomenon under study among the respondents. Nevertheless, based on the information obtained, some generalisations can be made in the final conclusions.
The results of the study provided information from 3 areas, making up the study as a whole:

1. factors conditioning the work of professional drivers in Poland;
2. shaping driver-employee relations in logistics centres and warehouses as an element of distribution channel development;
3. the formation of driver-employer relations in the dimension of internal public relations activities with the use of electronic tools; 4. the formation of driver-employee relations in the dimension of internal public relations activities with the use of electronic tools.

Due to the limited volume of the publication, it focuses on presenting selected results of the study in the second area.

4. Research Results and Discussion

The results of a survey of transport company managers on the impact of various issues on driver-employee relations in logistics centres and warehouses show that they have, for the most part, a fairly clear position. The vast majority of respondents (73.02%) answered that assistance with unloading/loading from a warehouseman in a logistics centre has a great impact on the positive perception of cooperation. This suggests that, according to the drivers' superiors, they appreciate the support from the warehousemen during loading and unloading operations. Slightly more respondents (80.95%) stated that the assistance of warehousemen influences drivers' overall satisfaction. Similarly, the majority of managers interviewed (73.02%) recognise that good personal relationships with loading and unloading staff influence positive perceptions of logistics centres and warehouses. This highlights the importance of interpersonal relationships in logistics processes.

Table 1. Relationships between drivers and employees in warehouses and logistics centres - A transport company managers' perspective

<table>
<thead>
<tr>
<th>Please assess the impact of the different issues on the development of driver-employee relationships of logistics centres and warehouses.</th>
<th>No impact</th>
<th>Low impact</th>
<th>Medium impact</th>
<th>High impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Does assistance with unloading/loading by the warehouseman in the logistics centre and warehouse influences the positive perception of cooperation?</td>
<td>1,59%</td>
<td>6,35%</td>
<td>19,05%</td>
<td>73,02%</td>
</tr>
<tr>
<td>2) Does assistance with unloading/loading by the warehouseman in the logistics centre and warehouse has an impact on driver satisfaction?</td>
<td>0,00%</td>
<td>3,17%</td>
<td>15,87%</td>
<td>80,95%</td>
</tr>
</tbody>
</table>
3) Does a good personal relationship with the person directly responsible for the unloading/loading of goods influence the positive perception of the logistics centre and warehouse?  

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Percentage</th>
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<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,00%</td>
<td>4,76%</td>
<td>22,22%</td>
<td>73,02%</td>
</tr>
</tbody>
</table>

4) Do good personal relationship with a logistics centre and warehouse employee affect the process of unloading/loading goods?  

<table>
<thead>
<tr>
<th>Percentage</th>
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<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>3,17%</td>
<td>6,35%</td>
<td>25,40%</td>
<td>65,08%</td>
</tr>
</tbody>
</table>

5) Do good personal relationships with management logistics centre and warehouse management influence the process of unloading/loading goods?  

<table>
<thead>
<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>9,68%</td>
<td>16,13%</td>
<td>33,87%</td>
<td>40,32%</td>
</tr>
</tbody>
</table>

6) Are the procedures and rules (regarding registration, unloading, loading) within the logistics centre and warehouse logistic centre and warehouse have an impact on the process of unloading/loading of goods?  

<table>
<thead>
<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>0,00%</td>
<td>12,90%</td>
<td>35,48%</td>
<td>51,61%</td>
</tr>
</tbody>
</table>

7) Does the vehicle advancement system (time windows) in the the logistics centre and warehouse influence the efficiency of the unloading/loading process?  

<table>
<thead>
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<th>Percentage</th>
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<tbody>
<tr>
<td>4,76%</td>
<td>14,29%</td>
<td>38,10%</td>
<td>42,86%</td>
</tr>
</tbody>
</table>

8) Does the respect for the driving profession in the centres of logistics centres and warehouses has an impact on a driver’s motivation to work?  

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Percentage</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>7,94%</td>
<td>4,76%</td>
<td>28,57%</td>
<td>58,73%</td>
</tr>
</tbody>
</table>

Source: Own elaboration based on the authors’ research.

There was slightly more variation in the responses regarding the relationship between drivers and logistics centre management, but still the majority (40.32%) recognise that a good relationship with management has an impact on the loading and unloading process. Similarly, the majority of managers (51.61%) recognise that procedures and policies in the logistics centre and warehouse strongly influence the process of loading and unloading goods, suggesting that well-defined and effective procedures can improve efficiency.

Also, the majority of respondents (42.86%) recognise that the advisory system has an impact on the efficiency of the process of loading and unloading goods. This shows that properly managed time windows can help to better plan and organise logistics operations. The majority (58.73%) of respondents also recognise that the respect for the driving profession shown by logistics centre employees has an impact on work motivation.

This may indicate the need to recognise the importance and difficulty of the driving profession and to ensure proper working conditions and respect from both employers and co-operators.
In summary, the data collected suggest that relationships with logistics centre and warehouse staff, support from warehouse keepers, good interpersonal relationships and well-defined logistics procedures have a key impact on drivers' positive perceptions of cooperation and loading/unloading processes. Respect for the driver's profession and attention to their work motivation are also important for the efficiency of logistics operations.

Table 2. Relationships between drivers and employees in warehouses and logistics centres - the perspective of professional drivers

<table>
<thead>
<tr>
<th>Please assess the impact of the different issues on the development of driver-employee relationships of logistics centres and warehouses.</th>
<th>No impact</th>
<th>Low impact</th>
<th>Medium impact</th>
<th>High impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Does unloading/loading assistance from a warehouseman in a logistics centre and warehouse have an impact on driver satisfaction?</td>
<td>3.78%</td>
<td>7.05%</td>
<td>19.14%</td>
<td>70.03%</td>
</tr>
<tr>
<td>2) Do good personal relationships with a logistics centre and warehouse employee affect the process of unloading/loading goods?</td>
<td>2.28%</td>
<td>5.58%</td>
<td>22.34%</td>
<td>69.80%</td>
</tr>
<tr>
<td>3) Do the procedures and rules (regarding registration, unloading, loading) in place at the logistics centre and warehouse affect the process of unloading/loading goods?</td>
<td>2.28%</td>
<td>8.10%</td>
<td>29.11%</td>
<td>60.51%</td>
</tr>
<tr>
<td>4) Does the vehicle advancement system (time windows) in the logistics centre and warehouse affect the efficiency of the unloading/loading process?</td>
<td>5.33%</td>
<td>17.01%</td>
<td>32.23%</td>
<td>45.43%</td>
</tr>
<tr>
<td>5) Does the respect for the driving profession in logistics centres and warehouses affect the driver's motivation to work?</td>
<td>5.91%</td>
<td>7.64%</td>
<td>19.70%</td>
<td>66.75%</td>
</tr>
</tbody>
</table>

Source: Own elaboration based on the authors' research.

Referring to the second part of the survey, conducted among professional drivers, it should be noted that the opinion on the influence of various issues on the formation of driver-worker relations in logistics centres and warehouses is quite clear, and the determined strength of influence of individual issues mostly coincides with the opinions of managers.

The vast majority of drivers (70.03%) state that the assistance of warehouse workers during loading and unloading has a strong impact on their overall job satisfaction. This indicates the importance of cooperation between warehouse staff and drivers and the benefits of this support for drivers' job satisfaction.

As in the previous question, the majority of respondents (69.80%) believe that a good relationship with warehouse staff has an impact on a more efficient loading
and unloading process. This suggests that positive relationships between drivers and warehouse staff are crucial to the efficiency of logistics operations.

Also, the majority of drivers (60.51%) believe that procedures and rules in the logistics centre and warehouse have an impact on the process of loading and unloading goods. Appropriate and well-managed procedures can influence the efficiency and organisation of logistics operations.

On the other hand, 45.43% of the respondents believe that the vehicle avation system influences the efficiency of the loading and unloading process of goods. This indicates the importance of proper planning of loading and unloading times, which can improve efficiency. Similarly, the majority of respondents (66.75%) believe that respect for the driving profession has an impact on work motivation.

This indicates the importance of valuing the role of drivers and providing appropriate working conditions, which can positively influence drivers' commitment to their duties. In summary, the data show that various aspects of the relationship between drivers and staff at logistics centres and warehouses have a key impact on the efficiency and quality of logistics operations.

Cooperation, good personal relations, appropriate procedures and respect for the driving profession are important factors that can significantly improve the working atmosphere and logistics results.

Further into the survey, drivers responded to suggestions on how shippers and receivers could improve working conditions in the driving profession. The majority of respondents (72.44%) believe that improved infrastructure such as car parks, toilets and other facilities for drivers is a key element that could significantly improve working conditions in the profession.

This indicates a strong demand for better and more suitable parking spaces and facilities for drivers in logistics centres and on transport routes. The second most frequent answer (69.76%) suggests that reducing loading and unloading times is very important for drivers. Longer waiting times for loading or unloading can result in lost time, which can have a negative impact on driver efficiency.

Among other aspects that could improve drivers' working conditions, the interests themselves mentioned most frequently: the need for places where drivers could have a meal, a hot drink or a rest, as well as support in securing the load.

Another important issue is respect and empathy on the part of shippers and receivers towards drivers, which can have a positive impact on the working atmosphere and relations between these groups.
5. Conclusions, Proposals, Recommendations

The loading and unloading sphere is one area that poses a number of challenges to the driver. This makes it clear that, although to the layman, this profession may seem like a simple job of transporting loads, in reality it involves many other activities, requiring, for example, knowledge of the regulations in different countries, and also requires resilience to stress and reacting quickly to unforeseen events (Majowicz, 2020).

The transport and warehousing industries in Poland have developed dynamically over recent years, forecasting further significant growth in road freight transport and the use of logistics centres in the coming years. However, they are facing numerous problems, observed both in Poland and in the rest of Europe.

Thus, the demand for labour is growing much faster than the supply of workers and a significant phenomenon in this respect is the progressive shortage of professional drivers in relation to needs, as well as the fact that this occupational group represents an ageing group in terms of the age of those working in the industry (Raport: Diagnoza warunków…, 2023). Problems are identified in accessing basic infrastructure for drivers in logistics centres.

Loading and unloading at logistics depots is a lengthy process, often subject to delays and postponements, requiring drivers to spend up to several tens of hours in one place - hence the importance of aiming for access to sanitary facilities and safe parking areas. Drivers participating in the survey also drew attention to problems related to the poor treatment of drivers in logistics centres, the overloading of their duties and a lack of understanding of their needs. Both Polish and European legislation do not explicitly regulate the working conditions of professional drivers to the extent indicated above.

There are infrastructural solutions available on the market that can address the identified shortcomings, particularly given the problem of space availability in existing logistics centres. In order to initiate change, it is also necessary to continue with information/promotional activities/information campaigns to change attitudes towards the work of a professional driver.

It is also recommended to carry out "soft" activities aimed at increasing knowledge and understanding of the scale of existing problems. Information and promotional activities should be implemented by NGOs (including associations and foundations).

They should be based on experience resulting from already implemented campaigns and information materials, an example of which is the series of film materials "Stereotypes: truth or myths?" carried out by the Truckers Life Foundation (Raport: Diagnoza warunków…, 2023).
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