



National Report for older senior logistic workers SPAIN



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Introduction

The Erasmus+ project "DiRECT – Digital Skills for Senior Logistic Staff" tackles a key challenge. It focuses on the digital shift in logistics. It considers its impact on older workers, specifically those over 50. Automation is growing. E-commerce booms. Digital tools are used more. Logistics firms face a task to prepare their workforces for the future, but firms do not want to lose valuable experience.

Older employees bring expertise and practical knowledge. These workers often face new demands, however. They include digital warehouse management, GPS route planning, and cloud communication tools. Research reveals this group is not inherently averse to technology. They need targeted support and suitable training.

The project aims to create digital training resources. Training formats and support are also created. These developments specifically address the needs of senior logistics professionals. Practical content is important. Digital accessibility is also important. It takes into account appropriate teaching for different ages. The project shares best practices across Europe.

With this project, DiRECT boosts digital skills in vocational education and training. It secures skilled workers in the logistics sector. It also strengthens social inclusion for older employees amidst digital change.



Spain

1. Field Research

1.1 Logistics company executive

This report introduces the data collected from a wide range of companies, associations, and educational centres in the logistics sector during the two-week period of April 2024 (1-15). The survey has been divided into 2 parts so we can get answers from two different groups of professionals:

- A. Executives in a logistics company
- B. Trainers in logistics

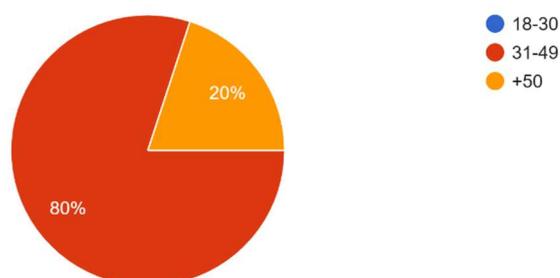
As asked on the guidelines for WP2 we have collected 10 answers from each group of people. We show the results of our survey on the following report.

Logistics company executives

How old are you?

We asked managers about their own age, we can see that the majority are professionals between 31-49 years of age, 80% of them. None of the people answering is below 30 years old, and only 2 of them are over 50. This mean we are getting our data from people with a wide professional experience but not too old as to be not aware about digitalization.

Edad
10 respuestas



Is Your company facing a shortage of logistics professionals?

The following question was on how the concern of companies about the lack of workers in the future was. There is a worry about the shortage of professionals in this sector, as 40% say they are worried about the lack of professionals, 30% confirm there is a shortage but is under control and another 30% say that the current situation is

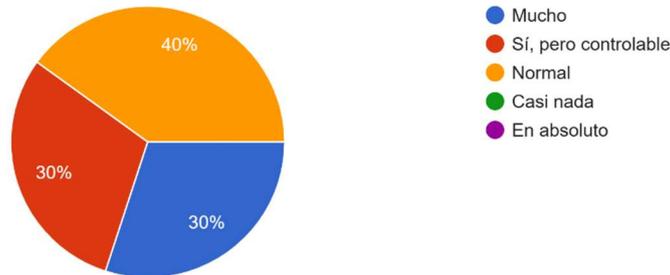


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normal. No one considered the lack of professionals as “something not to worry about”. In conclusion, this is a topic to be concern about.

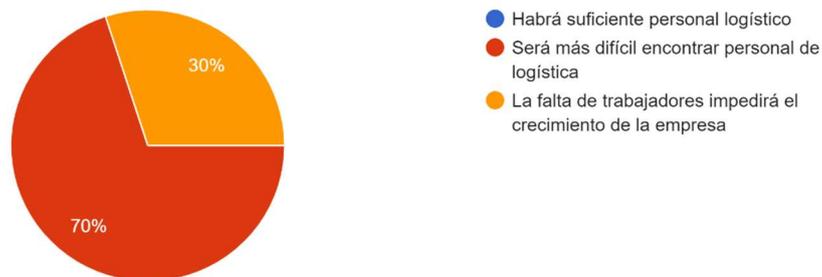
¿se enfrenta su empresa a una escasez de profesionales de la logística?
10 respuestas



How do you think the situation will evolve in terms of logistics recruitment over the next 10 years?

When asking directly about this situation in 10 years time, we can find out how worrying is the scenario as all answers confirm that the lack of workers will be a problem in the future: 70% consider that , in the future, they will have to face problems hiring professionals in the logistics field, and, what’s more 30% consider the situation as a problem for the company growth and expansion. how In this section we can see that 70% think that it will be difficult to find logistics personnel.

¿Cómo cree que evolucionará el mercado laboral en logística en los próximos 10 años?
10 respuestas

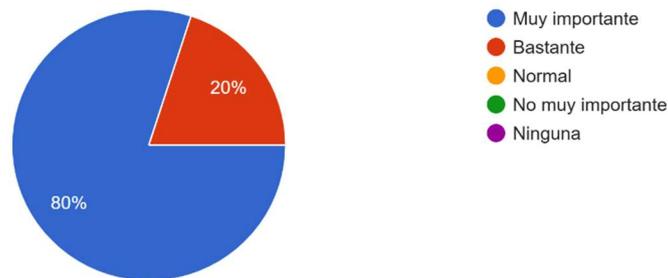


How important will digital skills be in the future?

As we may all agree, digital skills will be relevant in the future. More than that, 8 out of 10 respondents think that digital skills will be very important in the future, and an additional 20% think that they will be quite important. This means a 100% of answers ensuring that digital skills will be an important issue for the future of the company.

¿Qué importancia tendrán las competencias digitales en el futuro?

10 respuestas

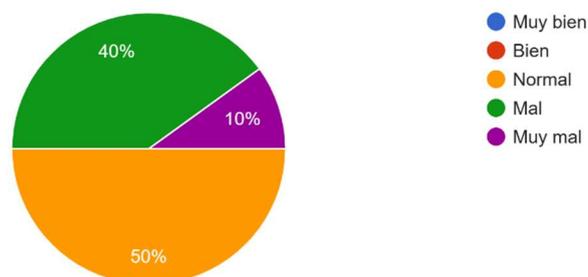


How do you assess the digital skills of your logistics staff (50+ years)?

The scenario showed by these answers show that all managers consider their staff over 50 years old not well or very well trained with digital skills. The truth is that half of them consider their knowledge “normal” and the other half bad (40% bad, 10% very bad). This result means that at least, 50% consider that the digital skills of their workers should improve at least to reach a standard or normal scenario.

¿Cómo evalúa las competencias digitales de su personal de logística (considerando a los mayores de 50 años)?

10 respuestas



How do you assess the expertise in your company in relation to new technologies in the logistics field?

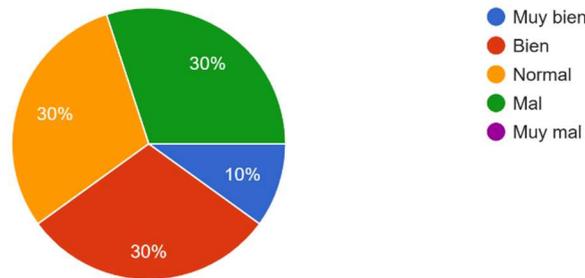
In this question there is a variety of answers since 30% say that they have a normal level of knowledge in new technologies. Another 30% say that they have a good level and 10% considered their companies with a very good level of use of new technologies. On the other hand, 30% say that their relationship with new technologies in logistics is bad.

It is important to know that we are not measuring the real level of expertise of the company in relation to new technologies, but what is the situation they think they have with new technologies. No one considers themselves as “very bad” and only one person describe the situation as “very Good”.



¿Cómo valora las habilidades de su empresa en relación con las nuevas tecnologías en la logística?

10 respuestas

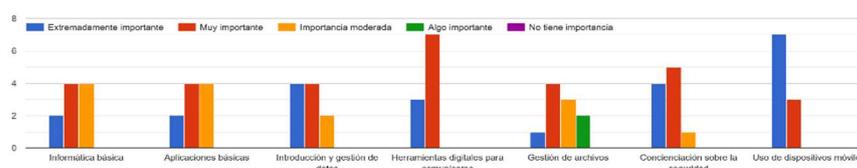


How important are the following basic skills for employees in logistics

We wanted to analyse how important they see the following skills for the future. (we show in parenthesis the ranking)

- Computer basics: All managers asked classified it as very important, somewhat important or extremely important, although it was not a top of mind but still very concern about skills on computer basics. (5)
- Basic Software: Same answers as “computer basics”. Managers consider that a basic knowledge of basic software and computers is relevant. (5)
- Data entry and management: considered either extremely important or very important to all respondents (except 2 that classified it as “important”). (4)
- Digital Communication Tools: very important to most of the managers and extremely important to a couple of them. (2)
- File management: even though this topic was ranked last, most answers choose options as very or moderate importance. (7)
- Security awareness: Very important issue, managers say, classifying it as the third topic in order of relevancy. (3)
- Mobile Device Use: Most important based on answers so dealing with mobile devices is a top of mind worry for managers. (1)

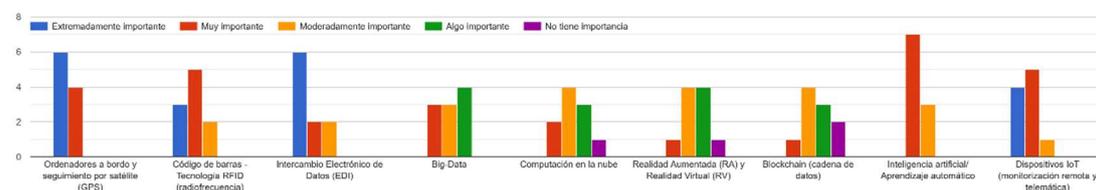
¿Qué importancia tienen las siguientes competencias básicas para los empleados de logística?



How important are the following technological skills for employees in logistics?

- On-board computers and satellite tracking: all answers mark it as extremely important and very important. This is the top of mind topic for this question. (1)
- Bar coding RFID (radio frequency) technology: the opinion of very important dominates, followed by extremely important and moderately important. (4)
- Electronic Data Interchange (EDI): the opinion of extremely important dominates, followed by very important and moderately important. This is considered 2nd in order of importance. (2)
- Big-data: the somewhat important opinion stands out, followed slightly below the normal and very important levels. (6)
- Cloud computing: highlights the moderate level of importance, followed by somewhat important and very important. Finally, we find that they are not very important for managers referring to workers, with a small percentage. (7)
- Augmented Reality (AR) and Virtual Reality (VR): moderate importance and low importance predominate when managers think about this topic and their employees. (8)
- Blockchain (9): not considered very important as to the level of employees in the logistic sector.
- Artificial Intelligence/Machine Learning: the degree of very important stands out highly and quite below moderate importance. (5)
- IoT devices (remote monitoring and telematics): the opinion of very important predominates followed by extreme importance. (3)

¿Qué importancia tienen las siguientes competencias tecnológicas para los empleados de logística?

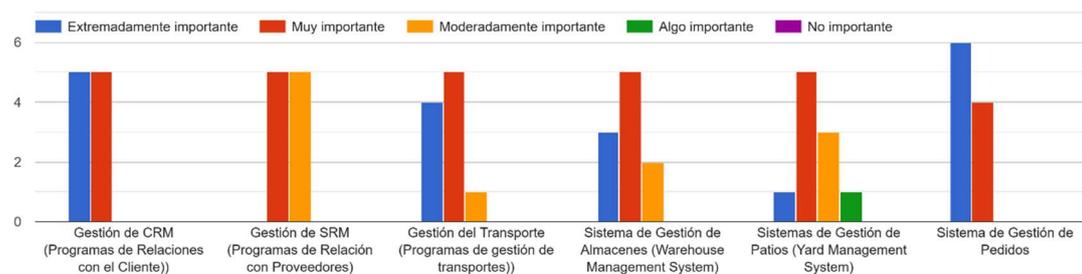


How important are the following systems skills for employees in logistics

- CRM (Customer Relationship Management): opinions are divided into very important and extremely important, and this issue is ranked 2 among all options. (2)
- SRM (Supplier Relationship Management Programs): opinions vary between some importance and moderate importance making this option 5th in the rank. (5)

- Transportation Management (Transportation Management Programs): is seen as important and ranked 3 as most respondents mark it as extremely or very important and 1 person ranked it as some importance. (3)
- Warehouse Management System (WMS): the opinion of very important is predominant followed by extremely important and finally 2 people chose it as moderate. (4)
- Yard Management System: has not been seen as important compared to all other options as this skill ranked last among all options. (6)
- Order Management System: leading the importance given by respondents, order Management system is seen as a skill extremely important for employees by half of managers while the other half see it as very important. (1)

¿Qué importancia tienen las siguientes programas digitales para los empleados de logística?



How would you assess education and training in "new technologies in logistics" in your country?

Managers consider that the contents of the education system in Spain, related to "new technologies in logistic" are bad (70%) or normal (30%). This data is something that we should be worried about as the contents the companies need for their workers has not been taught to students in logistics. This means we should review this content.

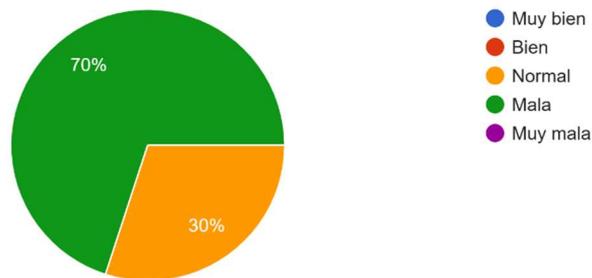


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¿Cómo evaluaría la educación y formación en "nuevas tecnologías en logística" en su país?

10 respuestas

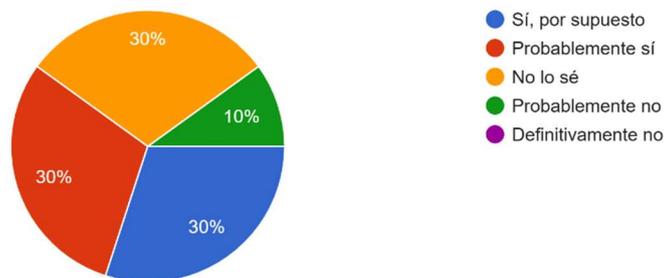


Do your customers require the use of sustainable and new technology services and if you had them would it be a competitive advantage for your company in the future?

There is a high percentage of managers that do not consider that new technologies or sustainability is something that makes them be more competitive. Probably this question has to be Split into to ask about new technologies and sustainability separately. Still, 60% of them believe that both concepts will be important for their companies in the future. 30% do not know and 10% think it will not be important.

¿Sus clientes requieren que cumplan criterios de sostenibilidad o nuevas tecnologías? Y si ya los tiene integrados ¿considera que serán una ventaja de su compañía para el futuro?

10 respuestas



Would you be interested in training your employees over 50 in new technologies in the sector?

All respondents are interested being 80% of them “yes of course” and 20% “probably yes” so this means there is a high demand for training in employees over 50 in the sector of logistics.

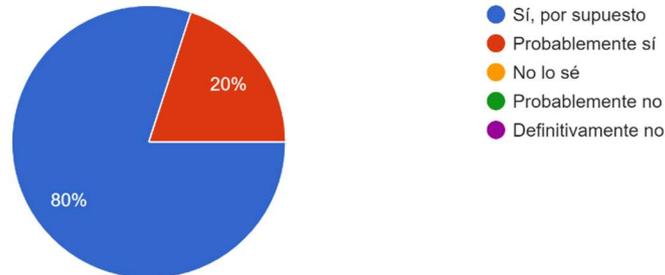


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¿Le resultaría interesante formar a sus empleados mayores de 50 años sobre nuevas tecnologías del sector?

10 respuestas



1.2 Trainer

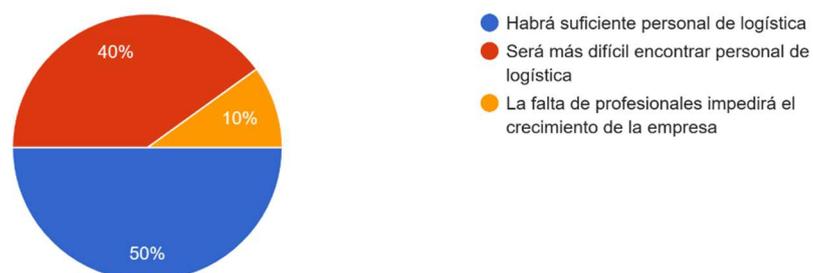
In this section we will report the results after collecting the answers from 10 trainers at the logistics sector.

How do you think the situation will evolve in terms of logistics recruitment over the next 10 years?

Trainers are more optimistic with recruitment in the following 10 years than managers as half of them believe there will be enough workers. Still, 50% of teachers think that it will be more difficult to find professionals in logistics and, what more, 10% of them believe that this will be a problem for companies growth in the future.

¿Cómo cree que evolucionará el mercado laboral en logística en los próximos 10 años?

10 respuestas



How important will digital skills be in the future?

All the teachers asked agree that digital skills will be very important in the future.

¿Qué importancia tendrán las competencias digitales en el futuro?

10 respuestas

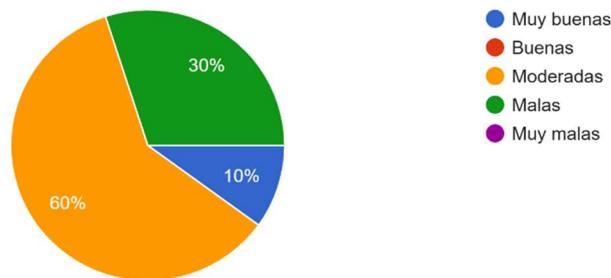


How would you assess education and training on "new technologies in logistics" in your country?

When asked about contents in education, teachers believe this is something that is not bad (60%) but it should improve (30% think they are bad, 10% think they are very Good).

¿Cómo evaluaría la educación y la formación sobre "nuevas tecnologías en logística" en su país?

10 respuestas



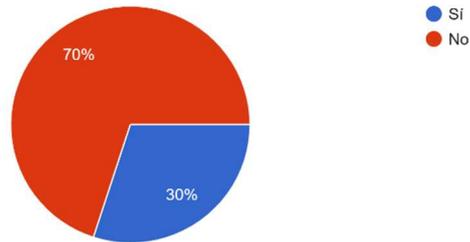
Do you have trainees over 50 years old?

Most students are below 50 but still there is a high percentage of teachers that have had in class at least a student over 50. We can't ensure the age of students, but we can determine that, even though they are experienced workers, some skills have to be taught at training schools even for those with work experience.



¿Tiene alumnos mayores de 50 años?

10 respuestas

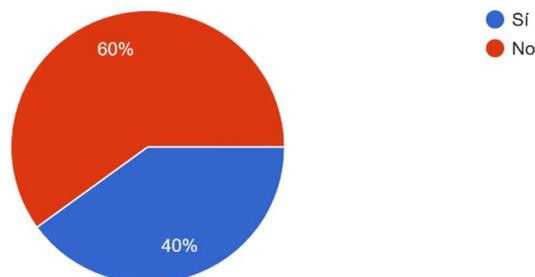


Do you incorporate in your training programmes the new technologies applied in the logistics sector?

Majority of respondents said No (60%) while the rest of them said Yes. As a result, this may lead to think about the importance of using new technologies at the teaching centre, labs or as a tool when talking about remote learning.

¿Se incluyen en vuestros programas formativos las nuevas tecnologías aplicadas en el sector logístico?

10 respuestas



Have you attended specific training on recent developments in the logistics sector?

Most teachers (70%) have not attended any training to incorporate new technologies or new working methods to their content. There is a short percentage that answer Yes but still this is just 30%.

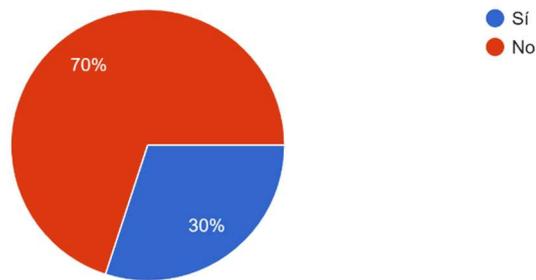


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¿Has asistido a una formación específica sobre los últimos avances en el sector logístico?

10 respuestas

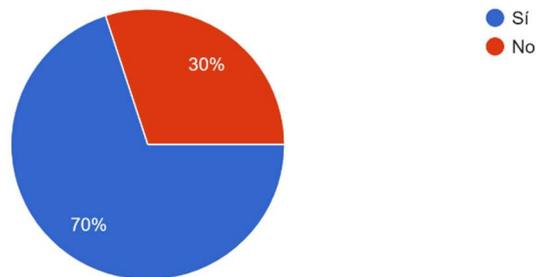


Do you adapt your teaching method according to the needs of logistics learners?

Teachers tend to adapt their content to the needs of logistic learners (70%) but still there is a 30% that do not do it.

¿Adaptas tu método de enseñanza a las necesidades de los alumnos de logística?

10 respuestas



Do you consider that continuous training as essential for the development of logistics workers?

In this question, 100% of the votes were in favour. This mean that further education will be essential for the future.

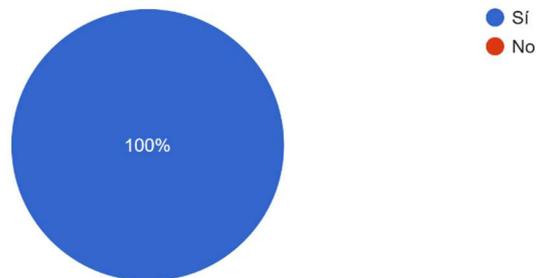


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¿Considera que la formación continua es fundamental para el desarrollo de los trabajadores logísticos?

10 respuestas

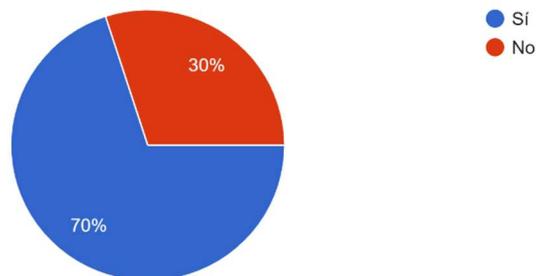


Do you offer practical training or laboratory experience to trainees?

In this question 70% said yes to offering practical training in the classroom or work placements to apprentices. On the other hand, 30% say no. It is a good value to offer practical training but we should reach a higher percentage.

¿Ofrecen formación práctica en el aula o prácticas de trabajo los aprendices?

10 respuestas



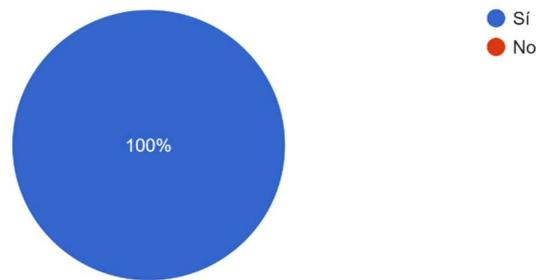
Do you evaluate the performance of trainees during and after the training programmes?

In this question, 100% of respondents said yes to the evaluation of trainees during and after the training programmes.



¿Evalúan a los alumnos durante los programas de formación y al terminar los mismos?

10 respuestas



1.3 Summary

Logistics executives (all participants) consider there will be a lack of professionals in the future and also needs for training their employees. All answers indicated that digital skills are a must for the future and their companies although they considered half of their workers over 50 are bad at assessing digital skills.

When asked about specific skills or technologies:

- Mobile device used, digital communication tools, security awareness and data entry and management are basic skills.
- When asked about specific technologies executives considered on board computers and Satellite tracking, Electronic Data Interchange, IoT Devices and BarCode/RFID Technologies as the most important.
- When asked about System Skills: Order management Systems, CRM, Transportation Management and Warehouse Management where ranked on top of mind.

Most executives consider there are high needs for education and training in new technologies as new technology services and sustainability are an important issue for their companies.

Among trainers there is the belief that recruiting professionals will be a problem in the future and digital skills will be crucial, but 60% of trainers still do not incorporate new technologies into their training programs, highlighting the need to improve teaching about tech tools. 70% already include raining or lab experience, but there are still trainers that do not. All teachers that participated in the study consider continuous training essential for development but only 30% of them could attend training on logistics for themselves.

2. Desk Research



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2.1 Impact of Covid in digital logistic sector transformation in Europe

The strategy of the Spanish Government is a commitment to digitalization. Their proposals are based on a series of programmes in coordination with the European Union and the regional governments to develop a digitalisation strategy on multiple ways.

The “Plan Nacional de Competencias Digitales” (National Digital Skills Plan) include different lines of action, specifically 7, which summarise the entire digitisation strategy implemented. Of these 7 lines of work, there is an important concern for digital skills during working life, development of digital skills in SMEs, promotion of ICT specialists and digitisation in the education sector, which shows the important weight that digitisation has for the productive sector in general.

Specifically, for the logistics sector, there are a series of proposals and plans that are included in the Observatory of Transport and Logistics in Spain, an entity created specifically to understand the needs of this sector, which is considered strategic. Among others, this observatory highlights the following factors affecting the logistics sector after COVID.

In 2019, the "Observatorio del Transporte y la Logística en España" published the document "La Transformación Digital del Transporte" (Digital transformation of transport) which establishes the general lines of work in this regard, lays the foundations on what the current situation is and represents the beginning of a series of actions which, however, a year later would be affected by the COVID.

This document establishes the challenges on which to work based on the current scenarios, and the following ideas can be extracted from its reading.

- Although it is not the object of study in this project, energy in general and fuel in particular is a determining factor for the logistics sector, as in the current scenario of price instability, it ends up directly affecting logistics. Therefore, there is a commitment to energy self-sufficiency in Europe to make us less dependent on external energy sources.
- The leading role of distance learning, accelerated development, and implementation of different programs for distance education.
- Increase of online services and products (purchases, exchanges between individuals, consultants, banking, etc.), which will reduce the number of people travelling, but will increase logistics.
- Remote work: a shift away from city centres will be observed as a pattern: transport will need to cover a more dispersed population.
- New last mile solutions: pick-up points, automatic openings of homes or cars, ...



- Need for comprehensive, real-time data collection to identify trends and act accordingly.

Based on the references consulted, the new technologies sector will play a fundamental role in the future of logistics and many other sectors in general, which will lead, if appropriate measures are not taken, to a lack of qualified professionals, as the needs of the logistics sector in terms of digitalisation will be similar in other sectors.

Software programmers, digital application developers, automation and robotics technicians, industrial designers and similar professions will be in high demand in the future.

Specific trainers' profiles, especially those related to the afore mentioned professions, will also be essential. Another profile of trainers that plays an important role in this digital transformation will be that of teachers who enable the re-training of active workers, so that their work experience can be combined with the learning of new digital skills.

The role of executives and companies is essential, as the future of the sector and more specifically of the companies they work for will depend on their conclusions, strategies, and leadership. Innovation and the development of new applications will be considered fundamental to gain competitive advantages.

Finally, the different administrations must promote specific training programmes for these sectors and keep continuous training throughout working life of workers in logistics.

2.2 Opinions and problems this change occurred in logistics workers over 50 years old in Europe

COVID pandemic, in general, has resulted in an acceleration towards digitalisation: processes that were underway to make a technological and digital transition have been abruptly accelerated by the needs of a pandemic context. The result: there is a strong implementation of digital solutions to various problems that were already present, and companies were working on, but this transition has been done too fast. Therefore, the main conclusion is that the number of digitisation processes, the number of devices and programmes that employees have to work on has increased, and this has led to a need for rapid and sometimes incomplete training, given the rush to implement them.

Based on studies and statistics used for this report we can conclude that majority of Spaniards over the age of 50 use new technologies (smartphones, internet, ...). The National Institute of Statistics has published data stating that more than 90% of



citizens between 55 and 64 years of age use the internet frequently. This figure rises to 97% in the population between 45 and 55.

Therefore, the general population is used to interacting with new technologies, but more in a personal context than in a professional one. Data obtained in the questionnaires together with some articles make us think on the use of new technologies in the workplace, which is lower. There is a need for training in some specific skills within the sector.

Different statistics show that, although the majority of Spaniards have digital skills, these are "low, reduced or limited". The figures are worrying if we refer only to the unemployed (40% say they have low or no digital skills). Among employees, the figure is 25%. Among paid workers, 28% say they have basic skills and 46% have advanced skills. There is a general need for digitalization among unemployed population.

In conclusion, although workers may be familiar with certain digital skills (internet, email, ...), there are other skills that need to be fostered to ensure a workforce that is able to reach the needs of digitization.

COVID meant a compulsory adaptation to new digital skills, these needs have been particularly important for workers. Certain work processes have changed radically since the pandemic. An example of this be contactless delivery: the collection of signatures has sometimes been replaced by a simple photo of the delivered parcel, and the need to go to the customer's door has been replaced by delivery points or specific delivery instructions).

These new processes, which need a greater dependence on new technologies, have been implemented in a rapid and dizzying way, without giving trainers time to prepare their contents, nor employees time to receive adequate instructions and training.

It is necessary to highlight on what the most relevant competences are, to focus on them, to develop content that is acceptable to workers over 50 and to implement it. While most workers may have basic digital skills, training needs to focus on sector-specific digital skills.

Cybersecurity is an very important challenge as phishing, malware, viruses, Trojans, ransomware, hacking, ... are challenges that many workers, especially those who are not digital natives, may have to face and do not have the necessary skills to distinguish them.

There are specific training needs for digital skills related to the needs of the logistics sector for the incorporation of future professionals. In this sense, it is necessary to increase digital training in the classrooms of vocational training schools.

It is an objective of this study, there is a need for retraining in professional skills for workers in the logistics sector, which increases with the age of the workers. These training needs are becoming important given the possibility that there is a lack of



logistics professionals, one of the solutions being to extend the active years of those employees already working in the sector.

Conclusions chapter will specify in which fields of knowledge are most interesting to address based on the study carried among the logistic sectors.

2.3 Summary and Intermediate Conclusions

Incorporation of a greater number of professionals with programming and technological knowledge into the logistics sector. AI and the automation of processes are in advance thanks to the sector's commitment to reducing working times and costs and being more sustainable. This may lead us to think that not so many workers will be needed, but we must not forget other factors.

E-commerce is reached its peak during the COVID pandemic, when travel constraints forced us to increase logistical needs. Among the needs caused by the pandemic we also find the rapid (and forced) digitalization of companies (increase of teleworking, promotion of online meetings, automation of processes, contactless pick-up/deliveries, ...) and citizens (increase of online transactions, reduction of the use of cash, delocalisation of suppliers, ...).

Therefore, while a number of processes can be automated and developed by artificial intelligence, others require a greater number of professionals who, in turn, need to have knowledge of new technologies and digitalisation, as their work will be closely related. This need for workers will force companies to require profiles that are also needed in other sectors. Continuous training is expected to be essential to ensure that workers have the knowledge, skills and competences needed in their jobs.

On the other hand, new needs are created in companies, which need to incorporate workers with knowledge of programming, digitalisation, robotics, ... most of these being newly created positions (it will be difficult to fill them with existing staff, and more complicated for these positions to be filled by people over 50 years of age).

With regard to the specific contents that need to be reinforced in order to achieve a better digital competence in the logistics sector, these would be:

- Cybersecurity: phishing, hacking, malware, ransomware, spyware, ...
- Management and data entry in management programs (customers, suppliers, transport, ...).
- Use of localization technologies (GPS, tracking, ...).
- Use of data exchange technologies (QR, barcode, RFID...),
- IoT devices that allow the exchange of data and whose activity can be programmed, monitored, ...

In a prominent place in the conclusions, we must also consider Artificial Intelligence, which although it is considered a basic competence for any worker (knowledge of the tools, their possibilities and how to consider them as sources of help or knowledge), more emphasis is placed on more technical profiles.

Being equally worrying, although not as relevant for digital skills in the over 50s, we could consider other aspects.

- Cloud computing, BigData, Blockchain, VR, AR, which are important technologies and need to be developed, but are not considered core competences when thinking about the target group, the over 50s. However, managers and executives in the logistics sector do consider these technologies to be key to the development, not of the future, but of the present of the sector, and are committed to investing in these technologies.



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3. Focus group

N/A



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