

#### **CHAPTER 2: Last Mile Distribution logistic operations and impacts**

#### **UNIT 3: Operational trends for all operators**

Capsule 2.3.4

### **Technology trends**



### To be done <u>prior</u> to this capsule:

1.1.1, 1.1.2

#### **Capsule linked with:**

Capsule 2.1.1, 2.1.2, 2.1.3, 2.3.2, 2.3.3, 2.3.5, 3.2.1, 3.2.2, 3.4.5

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## Objectives of the Capsule

The objective of the capsule is to offer students a basic overview of main technological trends (the so-called 4.0 logistics) that shape current and future LMD business.

Category	Document, source	EQF		
		4	5	6
			X	X

Exercises included	NOT

Effort for the capsule	Content 2 Min.	Exercises - Min.	Extra material 7 Min.



# Content of the capsule

- New technologies in LMD
  Impact of technology solutions in LMD



## Instructions for the Capsule

You will find attached to this Capsule two main sources of information and two video links:

- 1. The first source, web site article, will introduce you top five technology trends in LMD. On the same list there are also two links to short YouTube videos. The first video is a use case that shows how augmented reality works. The second one shows how will Amazon delivery drones work in future.
- 2. The second source focuses on the impact that new technology solutions have on the last mile delivery process. Key technologies and their effects are described.

By reading through those sources you should get a basic overview of the main technology trends and their impact on LMD. Besides that, the following pages of the capsule bring a brief summarization of the source's content most relevant to the topic. Two videos attached show the implementation of named technologies in practice.



## The top five trends in LMD

Through this article you will be acquainted with the top five technologies which are leading Last Mile Delivery carriers adopting to stand out in a competitive market.

Those top five technologies are:

- Mobile Data Capture and "BYOD"
- 1. Augmented Reality
- 2. Blockchain
- Drones
- 4. Al and Machine Learning



Source (web site in EN): Anyline.com. (2021, April 28). The Top 5 Trends in Last Mile Delivery? <a href="https://anyline.com/news/top-5-trends-last-mile-delivery">https://anyline.com/news/top-5-trends-last-mile-delivery</a>



Video (in EN): Logistics 4.0 - Augmented Reality Use Cases.

https://youtu.be/3YqaRrzkM4c



Video (in EN): How Amazon Drone Delivery Will Work.

https://youtu.be/mzhvR4wm\_\_M



# Impact of new technologies on LMD

Implementation of new technologies will reshape Last Mile delivery process in several ways.

- New technologies (i.e BOYD) will bring new data which companies can analyze and make data-driven decisions to operate more effectively.
- ➤ Witch AI and Machine learning companies can make more effective route planning (planning software can help you to monitor traffic congestion, driver behavior, accidents on the roads).
- ➤ With additional data companies can make predictive analytics, they can identify new opportunities to improve business or forecast future demand.
- Finally, LMD companies can improve their tracking system and so offer better transparency in delivery process (blockchain, drones).

Do you have any other ideas on how new technologies will improve the LMD process?



Source (web site in EN) Axestrack.com. (2021, May 10). How New Technology Trends Are Improving The Last Mile Delivery In 2021? <a href="https://www.axestrack.com/technology-improving-last-mile-delivery/">https://www.axestrack.com/technology-improving-last-mile-delivery/</a>



### Document, Source 1

Anyline.com. (2021, April 28). The Top 5 Trends in Last Mile Delivery? <a href="https://anyline.com/news/top-5-trends-last-mile-delivery">https://anyline.com/news/top-5-trends-last-mile-delivery</a>



### Document, Source 2

Axestrack.com. (2021, May 10). How New Technology Trends Are Improving The Last Mile Delivery In 2021? <a href="https://www.axestrack.com/technology-improving-last-mile-delivery/">https://www.axestrack.com/technology-improving-last-mile-delivery/</a>