SUSMILE Synthesis note

Capsule 3.4.1 - Source 1

Optimisation, a logistic approach “by nature”

As for any other logistics activity and domain of operations, last mile delivery makes no exception to this objective of optimisation. Even before the very thought of making it sustainable, companies need to secure profitable operations, make the most of their resources and absorb increasing demands every year, especially due to the significant growth of e-commerce activity.

And as for any other logistics field of expertise, data is at the centre of everything.

The attached documents and links for this capsule are meant to reflect that specific target of logistics optimisation. Though the environment is way more complex than any other due to the numerous factors and stakeholders involved in the urban environment, there are now solutions and service providers in support of logistics experts. New technologies, all related to better data management (data capitalisation, consolidation, analysis, etc.), can now provide significant help to individuals that are working on organisation models, exception management and cost control.

Most if not all optimisation models base their effort on better data management to then develop a revised organisation model, evaluate how and where to better perform in terms of environmental impact, social considerations, etc.

As a first step of building up an efficient corporate social responsibility, economic efficiency is essential, and this is why it starts with accurate data to make accurate decisions.

Capsule focus

The third unit of this last chapter is related to all the trends that companies are focusing on in recent years (especially transport and logistics companies): corporate social responsibility. In a constantly changing and challenging environment, logisticians need to better master their tools and equipment to offer better services and meet the growing demands of customers.

To do this, and before even thinking about technology choices or environmental friendliness (except when starting a business from scratch), understanding existing operations is necessary to focus efforts on what will sustain the company's business model. This cost control allows for a gradual transition of the necessary changes, without jeopardising the business model of the companies involved (as the supply chain closely links the partners in it).

Thanks to the previous Capsules, a better understanding of the content of CSR as well as the constraints of the urban environment, we hope that this topic will provide you with the basis for the last mile delivery logistics of tomorrow.

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Capsule questions

Suggested questions to check the acquisition of knowledge provided by the content of this capsule:

EQF level 4

1. S2 What is the tool or method suggested to improve last mile delivery efficiency?

2. S4 What functionality unlocks all the visibility aspects for both customers and supervisors in such a routing software solution?

EQF level 5

1. S2 Why do you think a route management software is more efficient and useful to an experienced operations manager or scheduler?

2. S3 Can you explain what a deep learning methodology is?

3. S4 What are the key benefits of having an automated software to overview the routing of last mile operations?

EQF level 6

1. S2 Among the different recommendations made to improve last mile deliveries, which is the one left unanswered by the route management software (first link)? Can you explain why, from your point of view?

2. S2 Why do you think that customer visibility and engagement is important to optimising operations and performance of the delivery?

3. S3 Considering all the content you have read so far in the SUSMILE MOOC, what kind of recommendations or solutions could be implemented based on the results provided in this deep learning methodology?

4. S4 What are the key benefits of having an automated software to overview the routing of last mile operations?

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