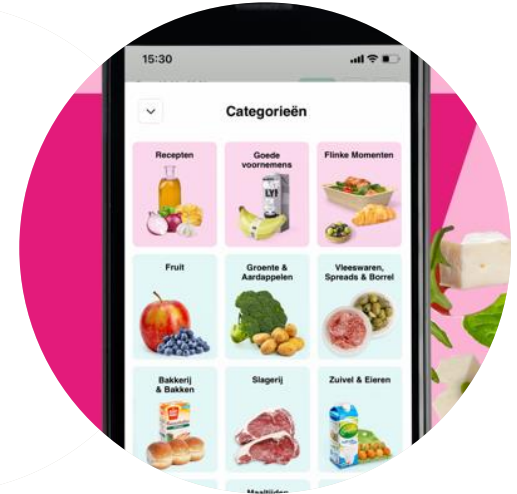
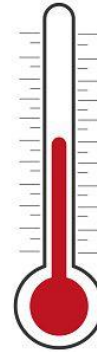


From cold store to black store

e-commerce drives paradigm shift in supply models

Cold Chain Live

8th of September 2022 – Eelke Westra – Wageningen University & Research

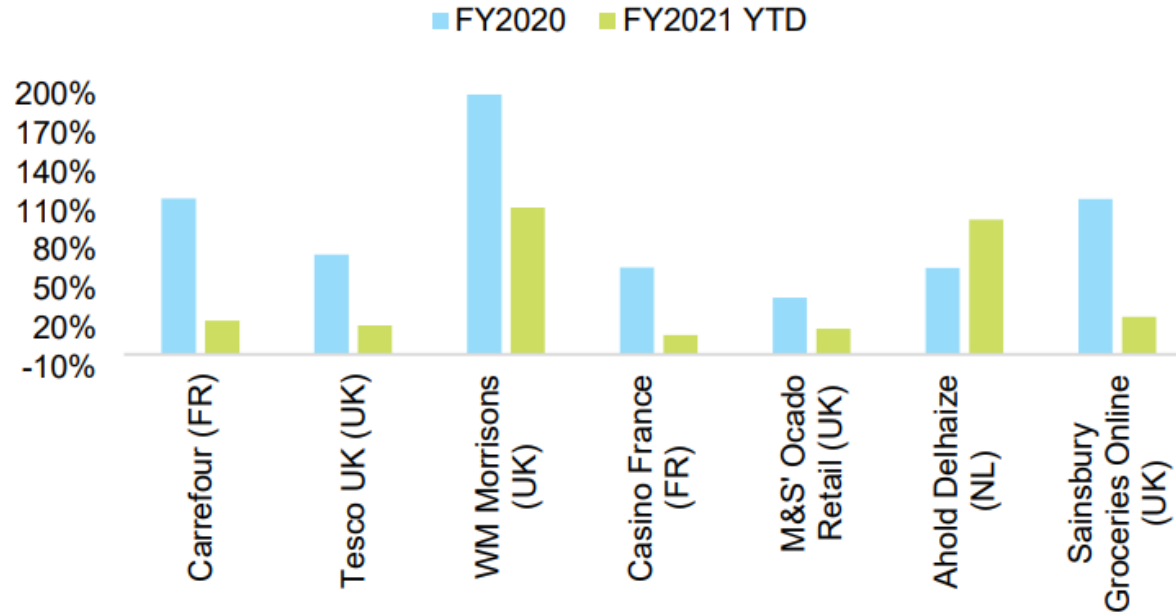


At home, making pancakes



Online grocery sales

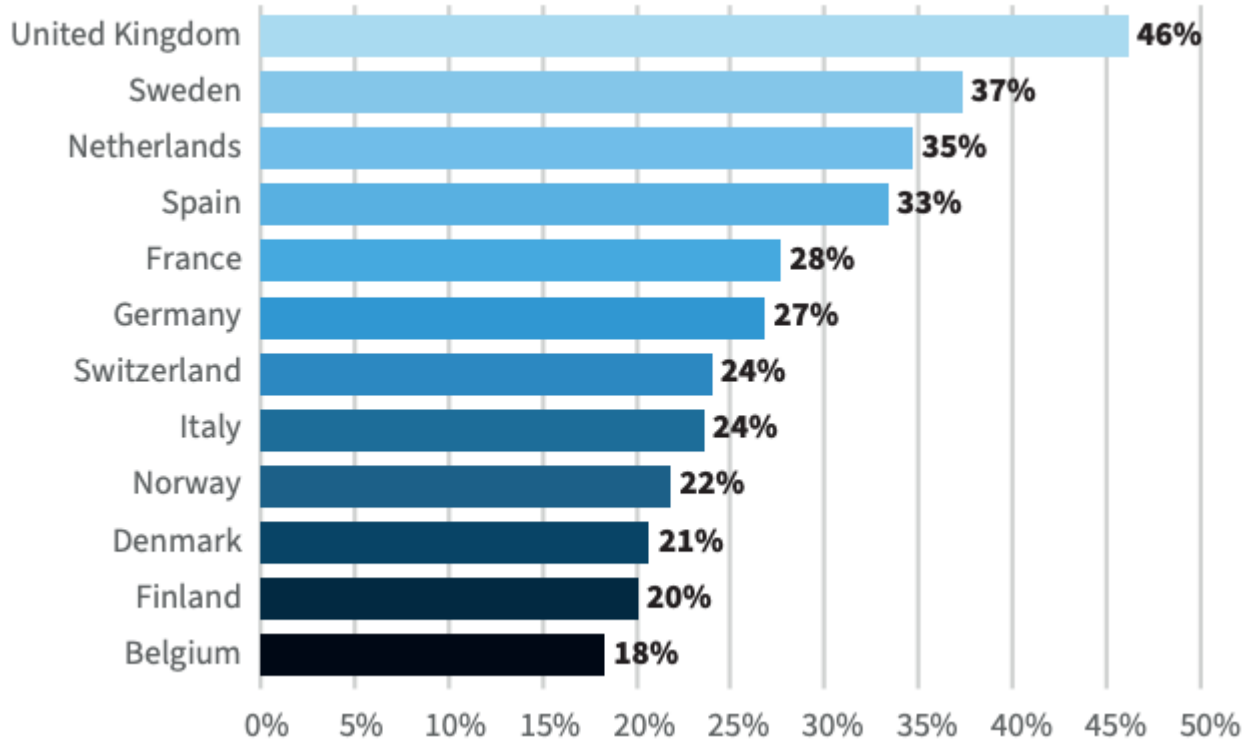
Online grocery sales growth (% change y/y)



Source:

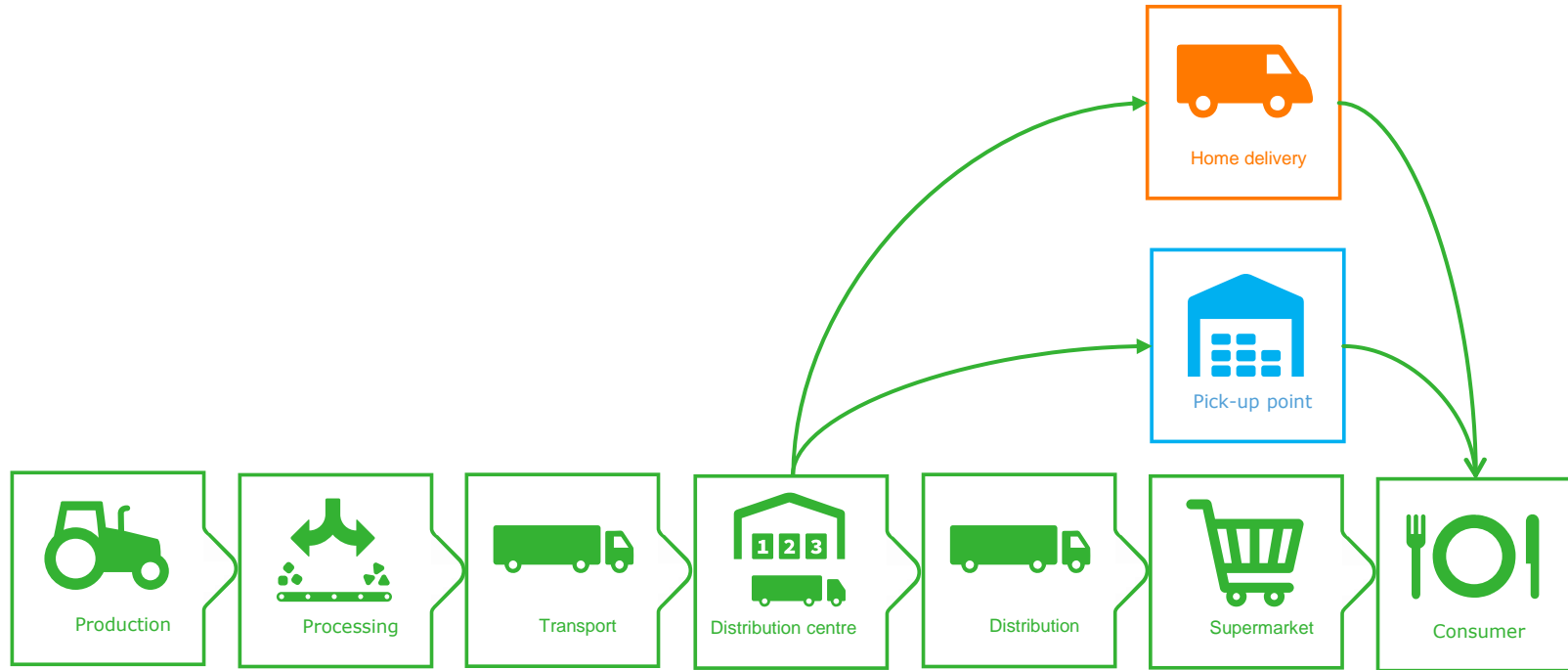
https://www.eulerhermes.com/content/dam/onemarketing/ehndbx/eulerhermes_com/en_gl/erd/publication/s/the-watch/2021_09_15European_food_retailers.pdf

% of online shoppers who buy groceries online

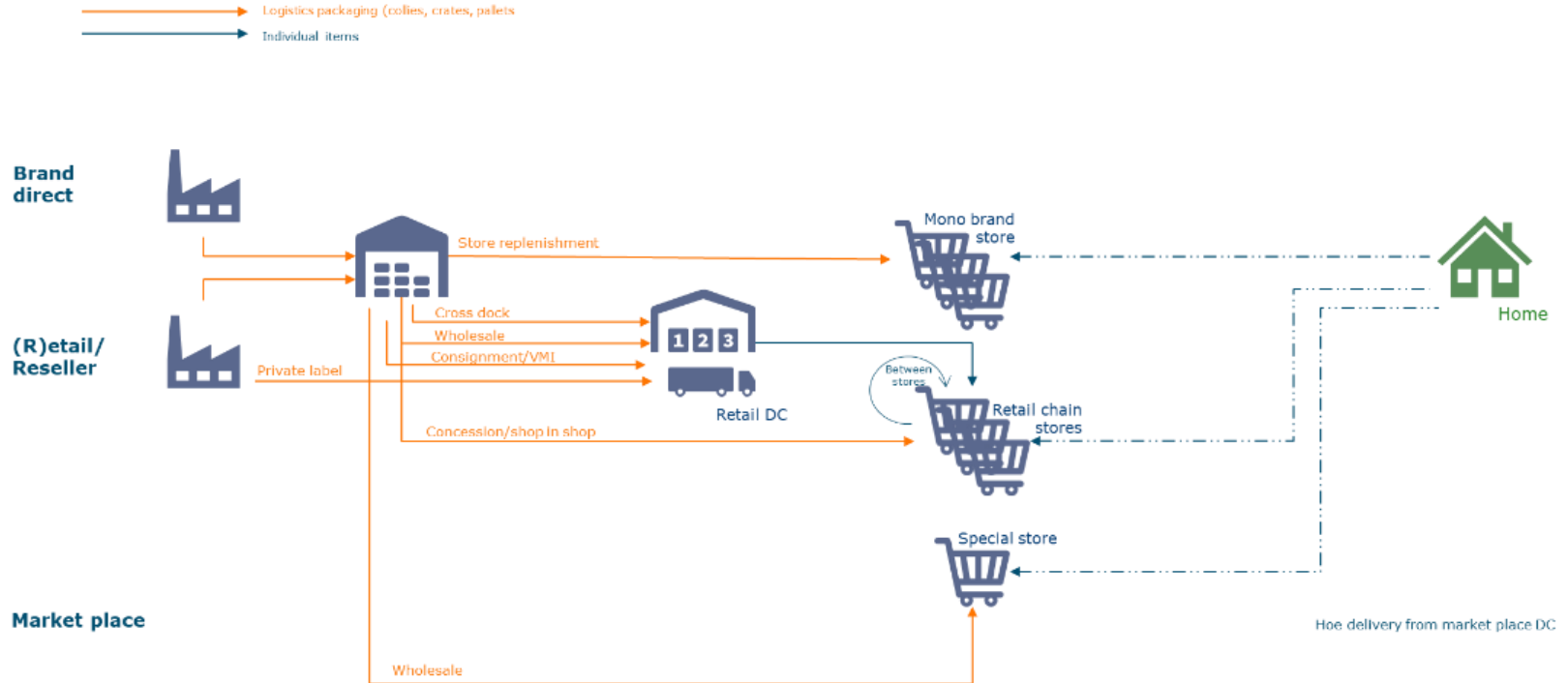


From cold store to black store
e-commerce drives paradigm shift in supply models

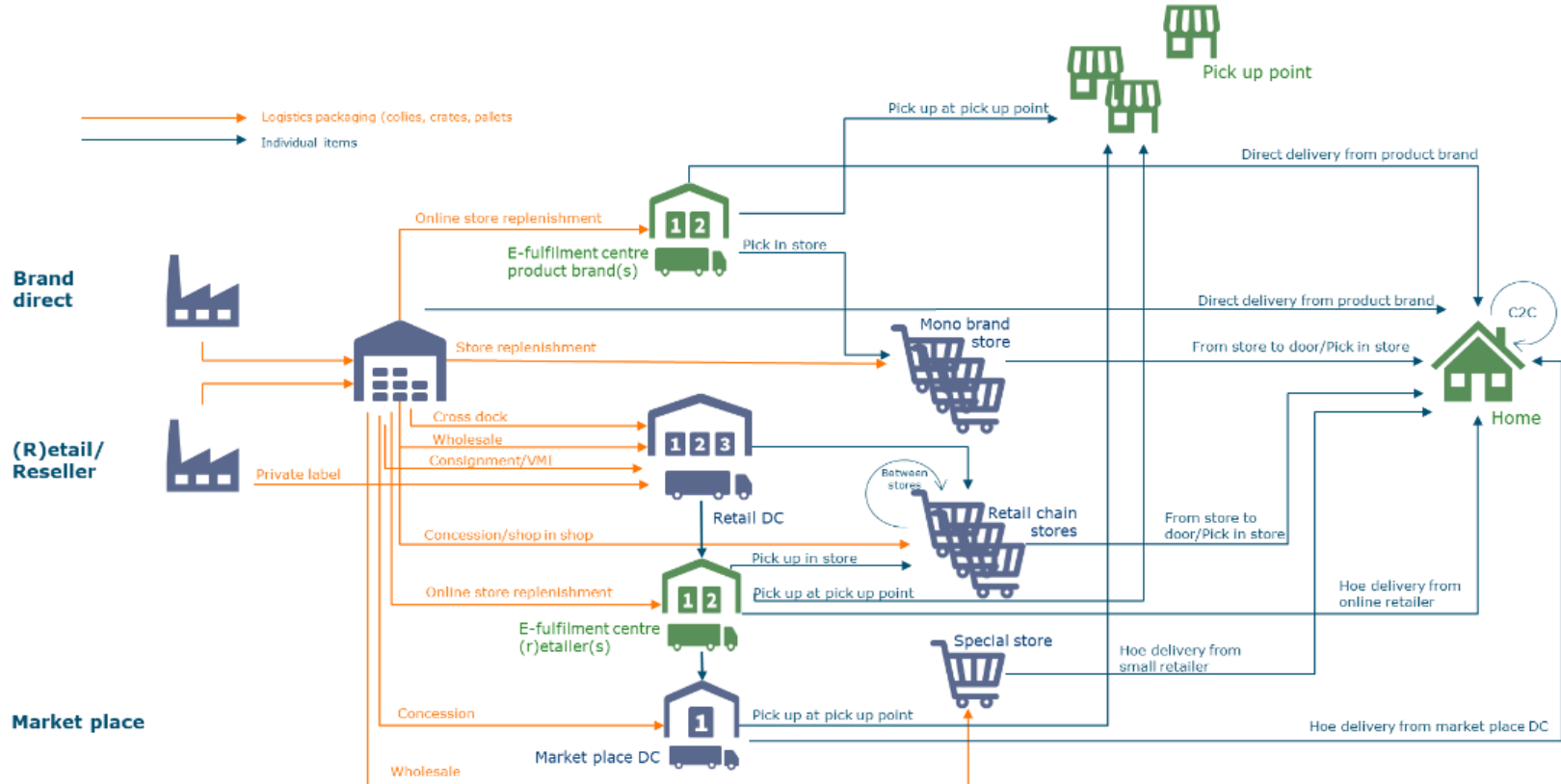
Is it just adding two types of 'outlets'?



Traditional distribution model

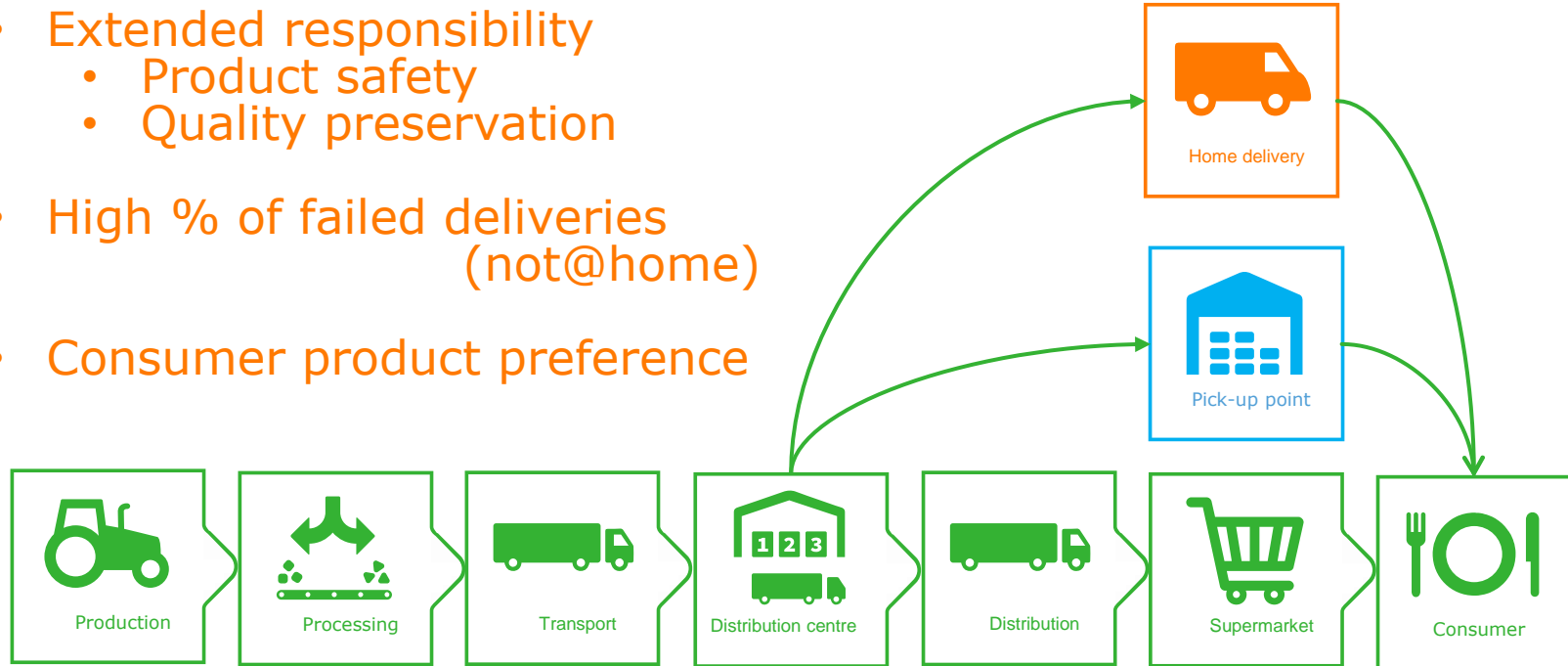


Multi-channel distribution model



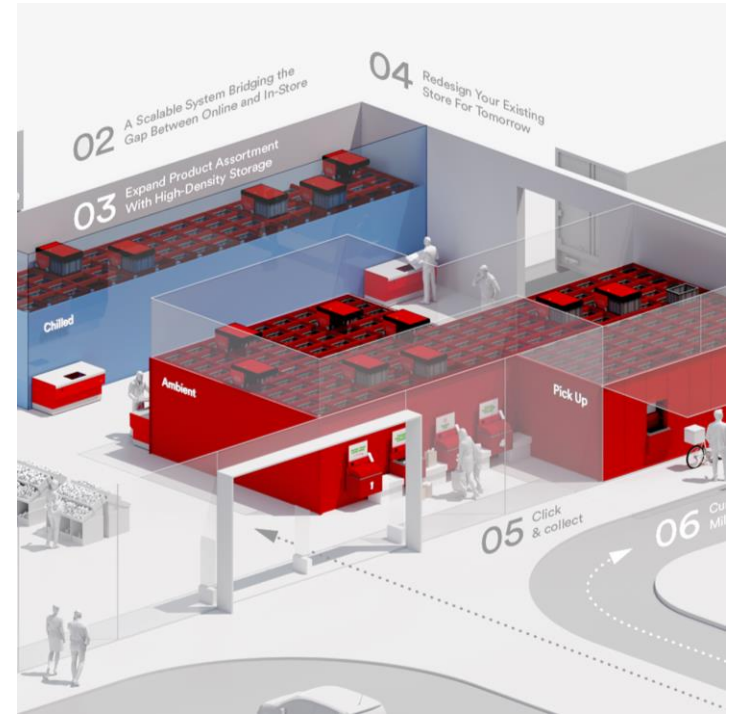
Particular e-fresh & urban challenges

- Extended responsibility
 - Product safety
 - Quality preservation
- High % of failed deliveries (not@home)
- Consumer product preference



How to design urban & E-commerce cold chains?

Development of storage systems for dark stores

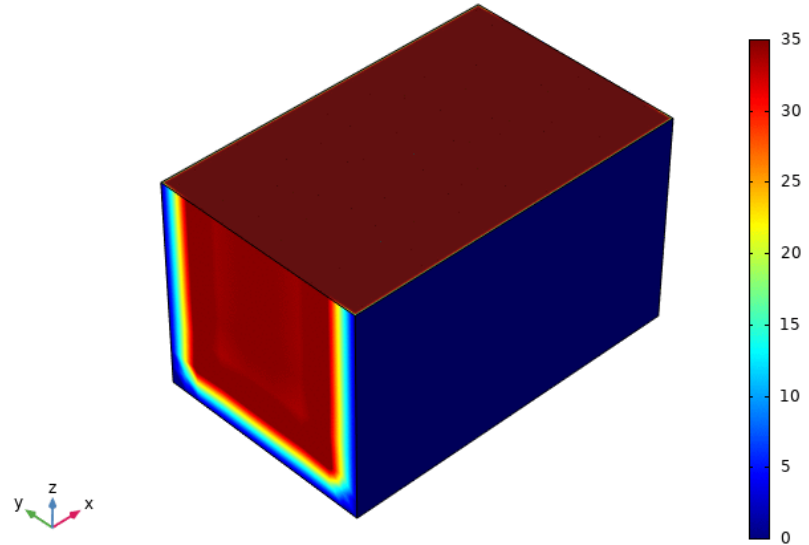


Novel temperature controlled packaging solutions

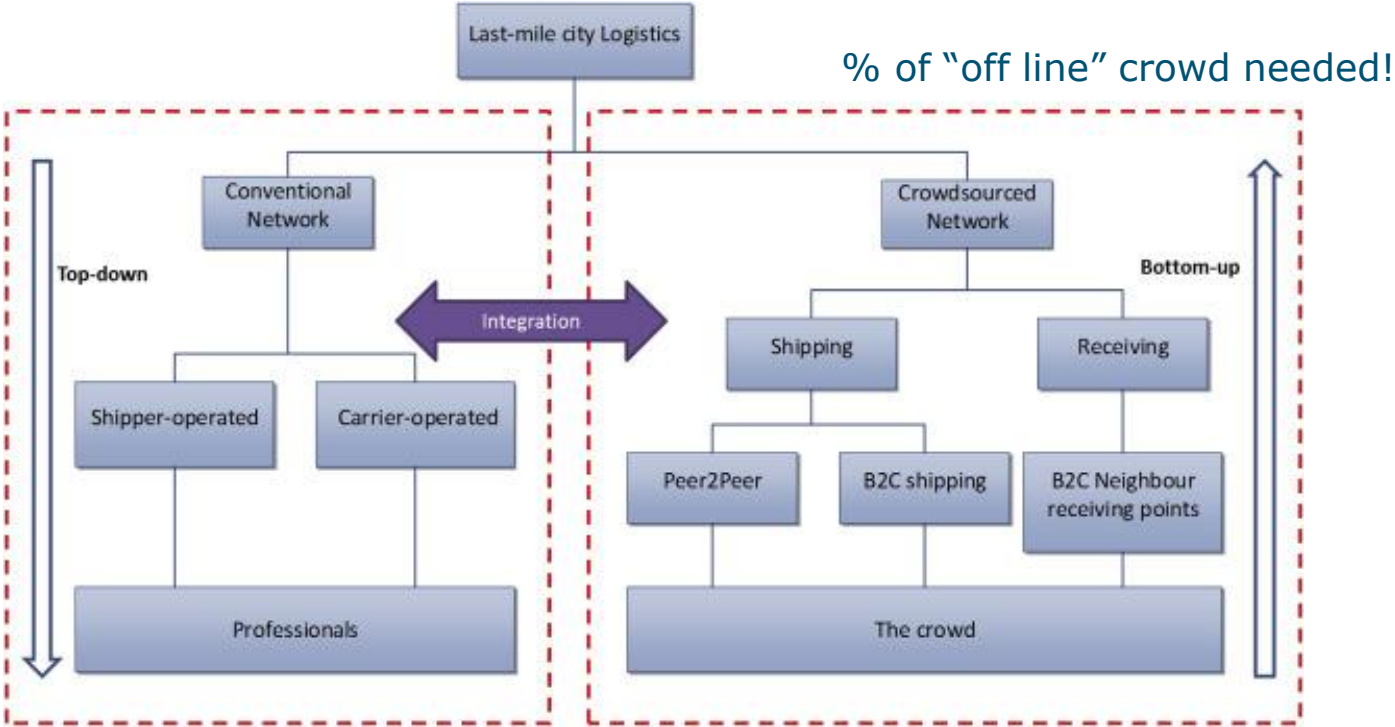


Time=0 s

Surface: Temperature (degC)



Crowd sourced last mile delivery



Question to you

How to you intend to service an urban market
and maintain product quality?

Thanks for your attention

Eelke Westra

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www.freshknowledge.eu

