



Findings from the CITYLAB evaluation

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Motivation

Shopping centres represent a challenge for logistic service providers

In many shopping centres drivers have to bring all items from common unloading areas to individual shops.

Motivations:

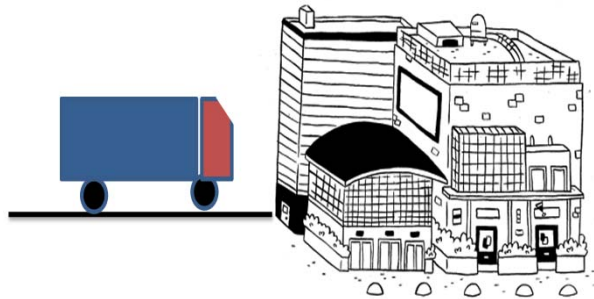
- Reduce stoppage time for delivery trucks and vans and increase efficiency of in-house logistics
- Reduce delivery times and congestion in the freight receipt area
- Reduced need for unloading area
- Establish common functions for inbound and outbound freight flows in the new Økern shopping centre



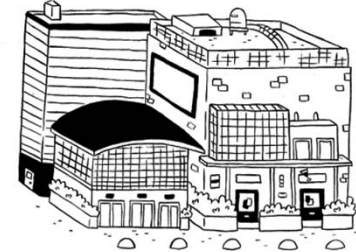


Deliveries **without** common logistics functions

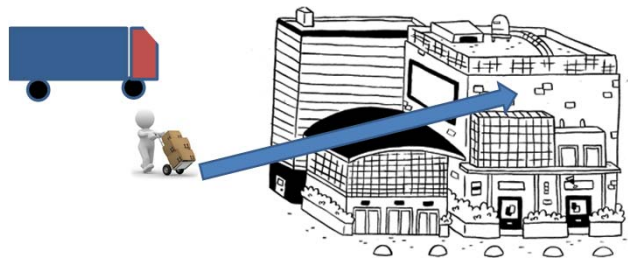
1. Truck arrive



2. Driver unloads vehicle



3. Driver delivers to individual tenant(s)



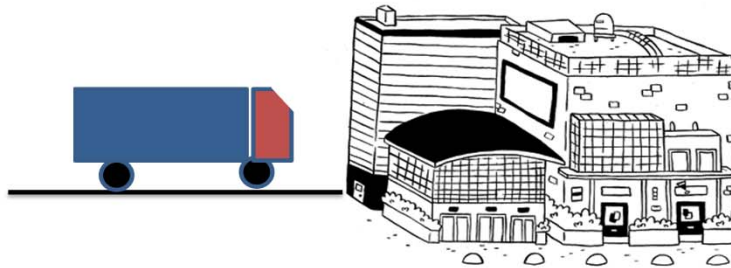
4. Truck and driver leave



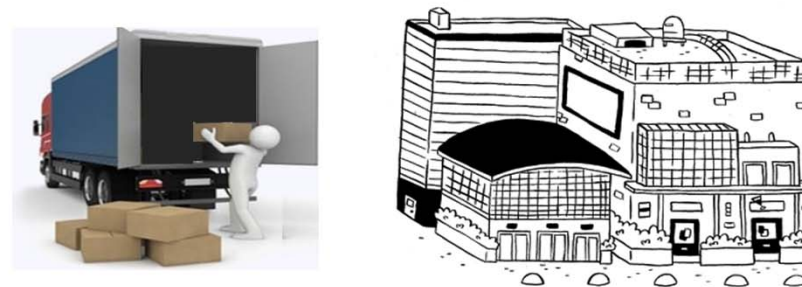


Deliveries **with** common logistics functions

1 Truck arrives



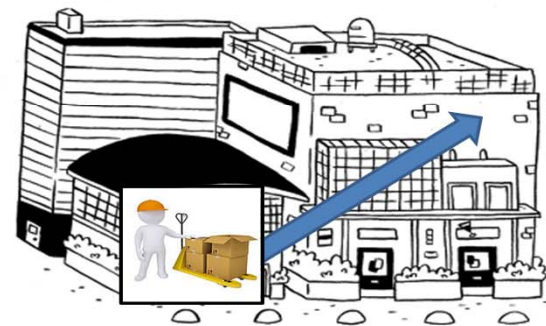
2 Driver unloads vehicle



3 Truck and driver leave



4 Local staff brings freight to tenants





The STRAIGHTSOL project

- 6-week demo in 2012 at Stovner shopping centre in Oslo – owned by Steen & Strøm AS
- Common logistics functions combined with enhanced information collection and sharing





Experiences from Stovner

- Too expensive to reconstruct an existing centre
- Increase rent to finance services



Easier in a new centre



CITYLAB: Steen & Strøm consider to establish common logistics functions for the new Økern shopping centre in Oslo.



Experiences we have made

- Those who invest \neq those who gain

Retailers

Shopping centre manager



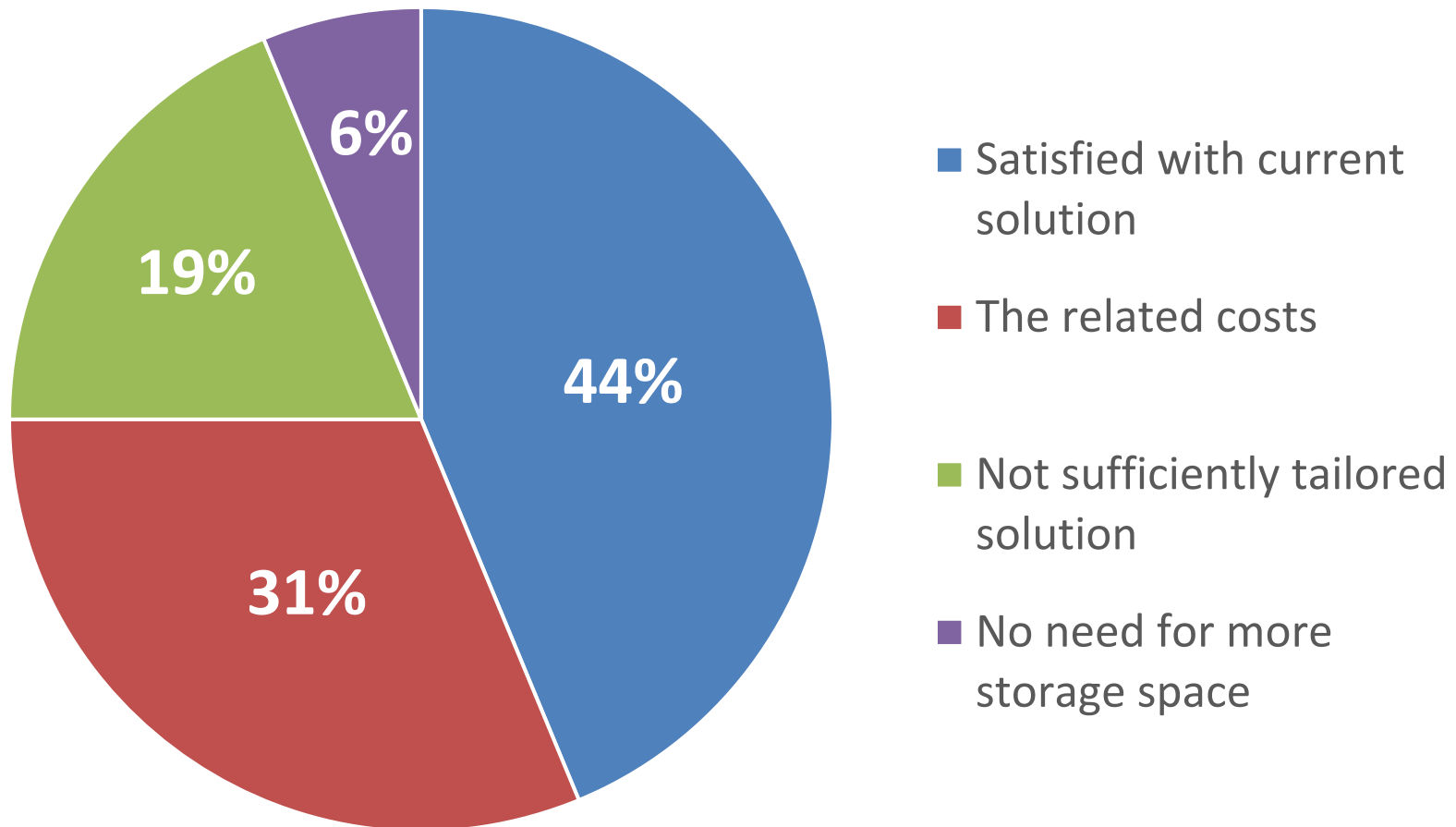
Retail chains / shippers

Logistics service providers



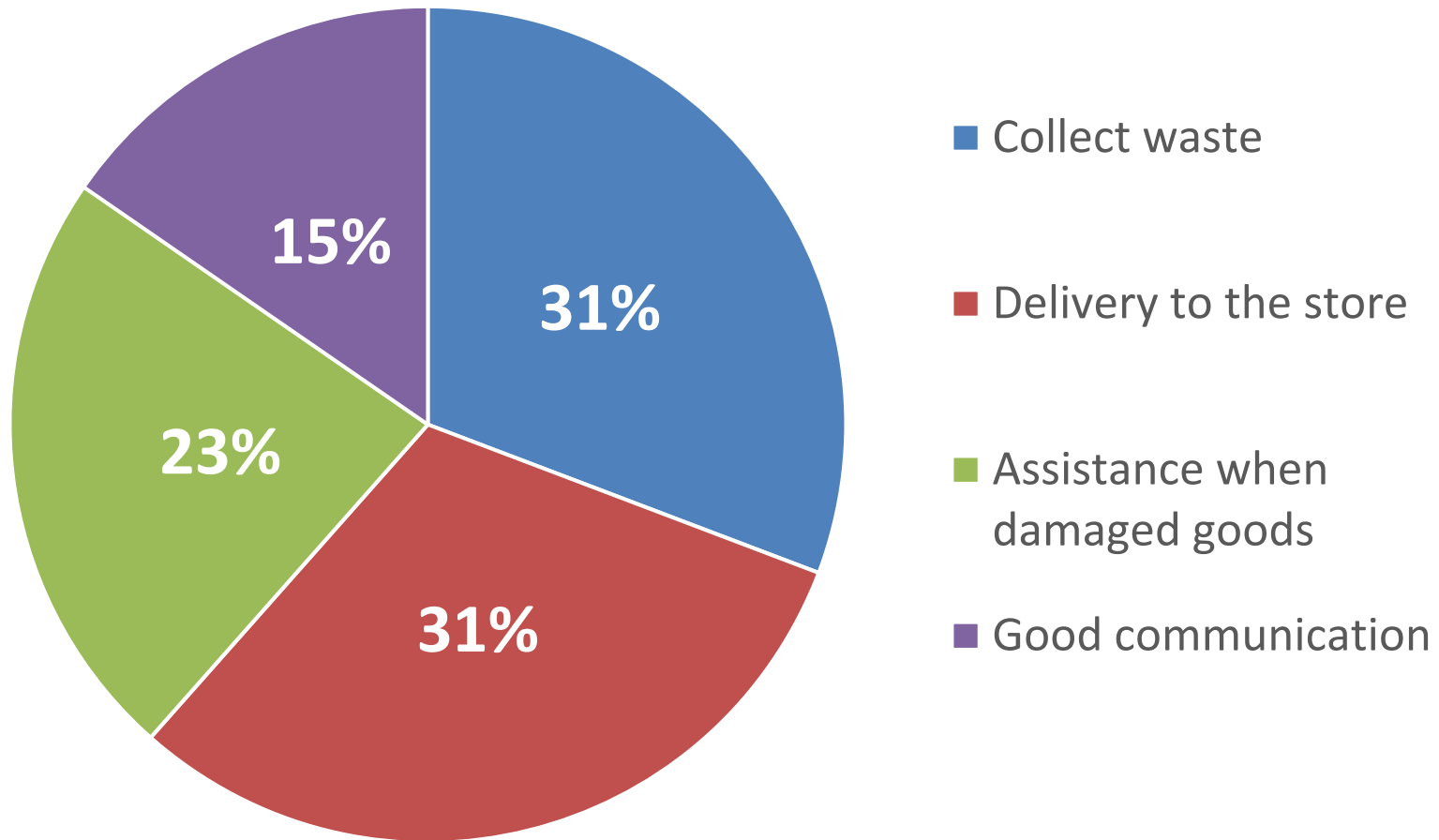


Barriers to convince retailers





Benefits with common in-house deliveries: retailers





Effects from common in-house deliveries

10-15
minutes
saved per
pallet on
delivery

Costs savings
wear and tear of
inventory and
happy
customers

77% of
stores
satisfied





Benefits: Shopping centre manager



- Safety for customers
- Better routines and control of delivery trucks
- Deal with only one actor
- Less damage on infrastructure
- Coordinated deliveries
- Reduced need for unloading docks
- Better waste management





Experience from transporters and LSP's



Advantages:

- Predictability
- Reduced number of conflict points
- Control of inbound goods flow
- Reduced time for deliveries
- Better waste management

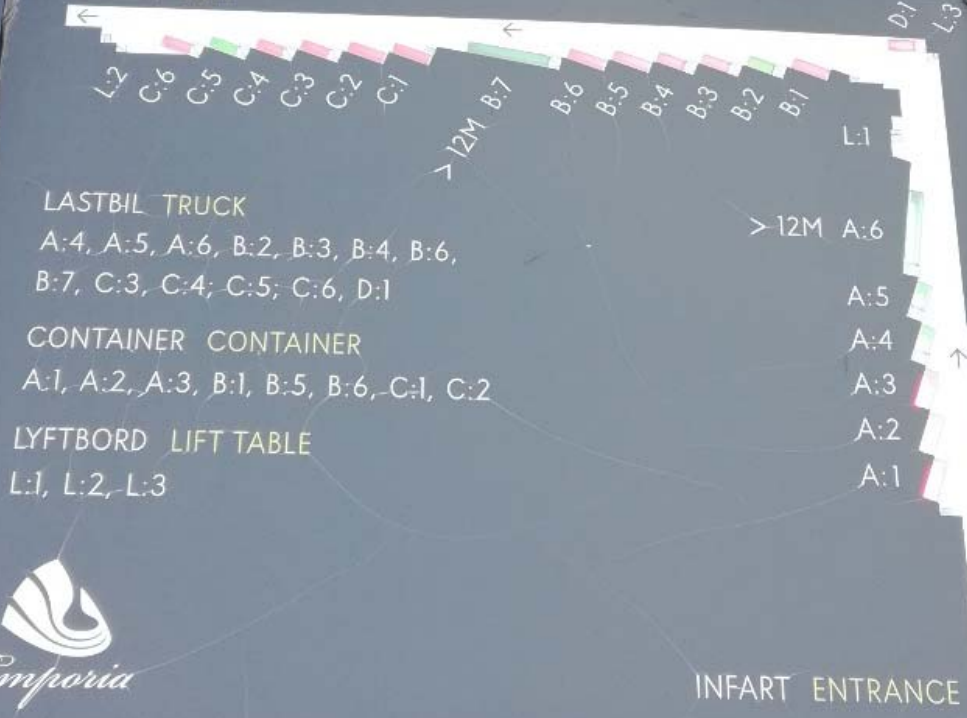
Disadvantages:

- Problems to have accept among retailers for delivery to common in-house services
- Vulnerable to delays



LEDIGA LASTKAJER VACANT LOADING DOCKS

UTFART EXIT ←



LASTBIL TRUCK

A:4, A:5, A:6, B:2, B:3, B:4, B:6,
B:7, C:3, C:4, C:5, C:6, D:1

CONTAINER CONTAINER

A:1, A:2, A:3, B:1, B:5, B:6, C:1, C:2

LYFTBORD LIFT TABLE

L:1, L:2, L:3



INFART ENTRANCE ↑



Draft estimation on average costs per delivery

Average costs for in house deliveries:

- € 5.15 per delivery
- € 1803 per shop per year

Assumptions:

Fixed costs:

- Buffer storage of 400 m²
- 200 shops to be serviced
- One delivery per shop/day. Approximately 350 deliveries a year.
- 4 scanners
- 5 pallet jacks
- 5 roll containers

Variable costs:

- Wages for personnel, 4 man-years





Critical success factors

Engagement of stakeholders

- Workshops
- Design of freight receipt area

Involvement from the management

- Trial projects
- Contracts with clear cost structure

Learn from others

- Infrastructure needs
- How to organise logistics





Further perspectives

- Cold and warm engine
- Better use of vehicles
- Off hour deliveries
- Consolidation before reaching the centre
- Waste / recycling – source of revenue?
- A role in increasing attention to freight early in the planning and involving new stakeholders





Thank you!

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