

Delivery trailer

A moveable locker system

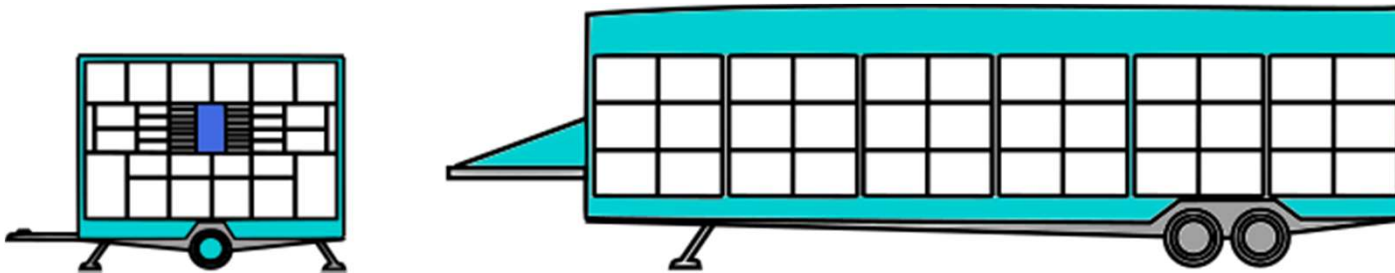
Innovative concepts

www.pickdelso.com

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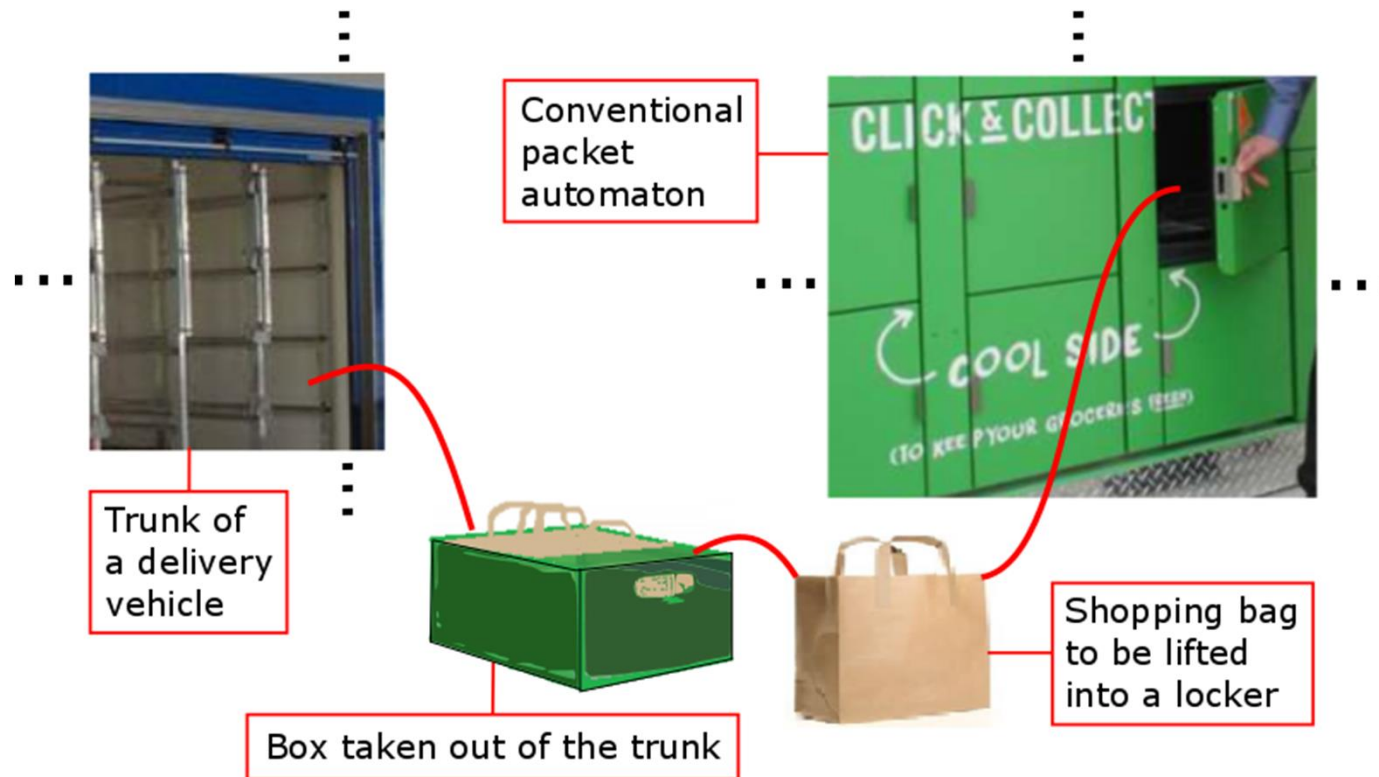
What kind of trailer?

- A concept – none is yet manufactured
- Delivery trailer is transported with a road vehicle from a picking site to a delivery site
- A customer opens a locker door with a code to collect product(s) from the locker
- Various sizes of Delivery trailers:



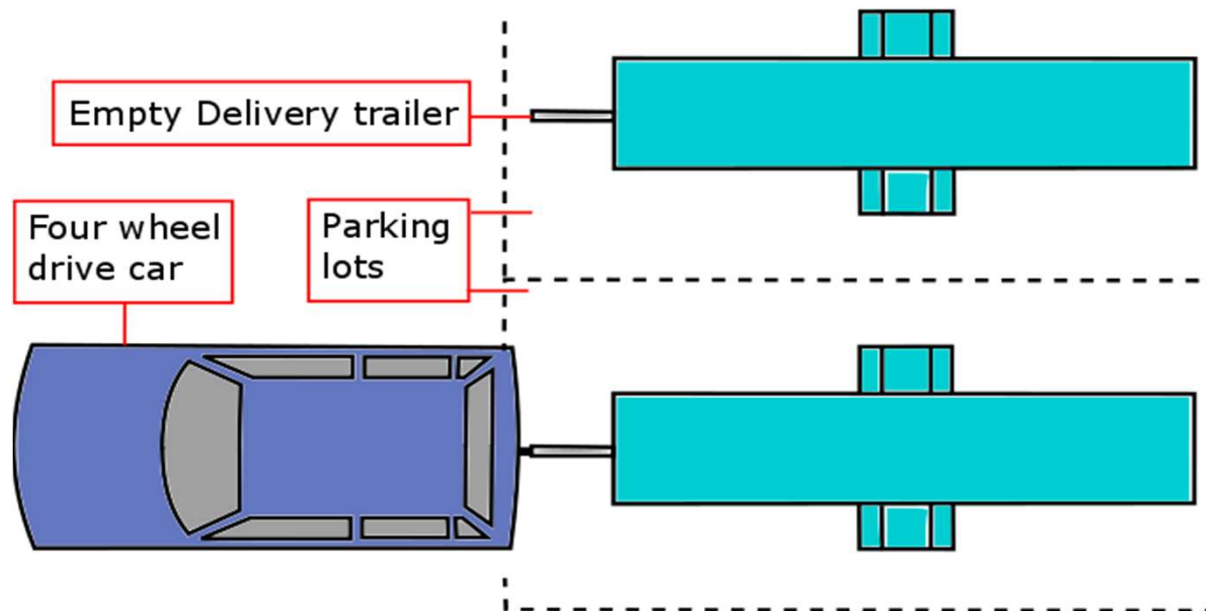
Problem in filling of automaton

- At a delivery site the automaton is manually filled with shopping bags:



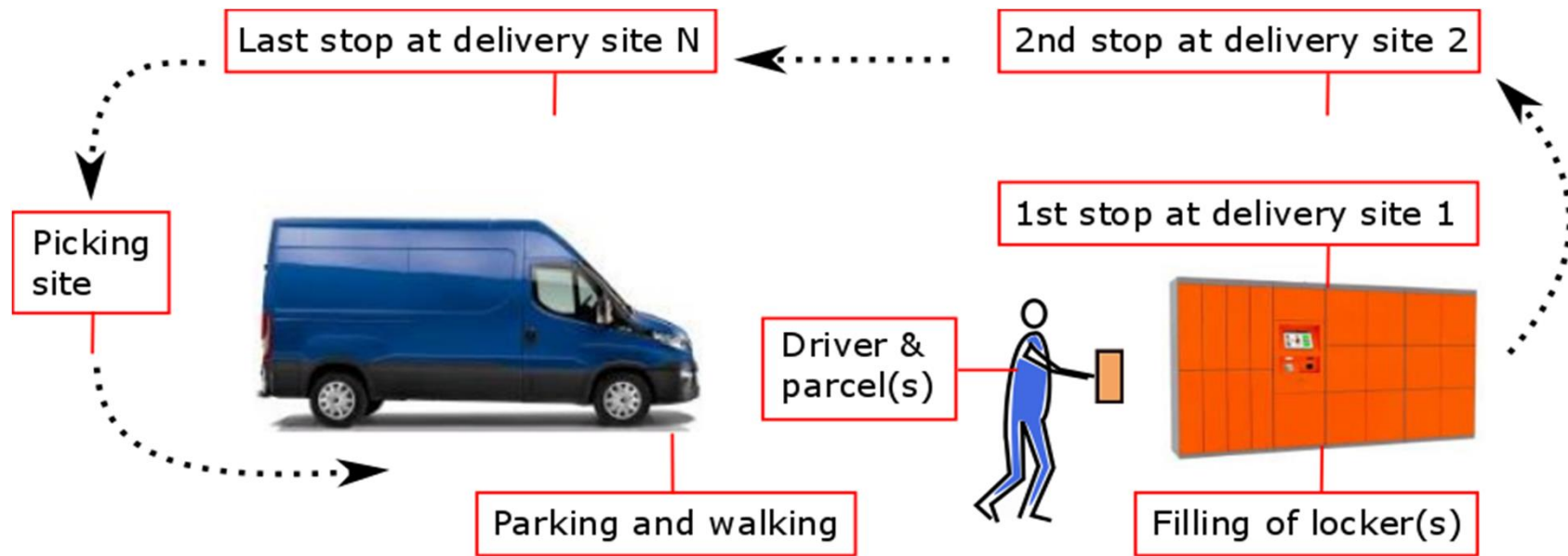
Solution to filling problem

- Delivery trailer is already filled in the picking site and a driver just parks the trailer at the delivery site
- Bird's perspective:



Problem in number of stops

- Delivery circle includes many stops, especially when delivery time windows are long
- Each stop consumes time:



Solution to problem of stops

- Delivery time window is ended at which time:
 - an empty trailer is replaced with a loaded trailer
 - the empty trailer is transported to a picking site to be loaded there again
- When using Delivery trailer a delivery circle includes only one stop, which saves time:

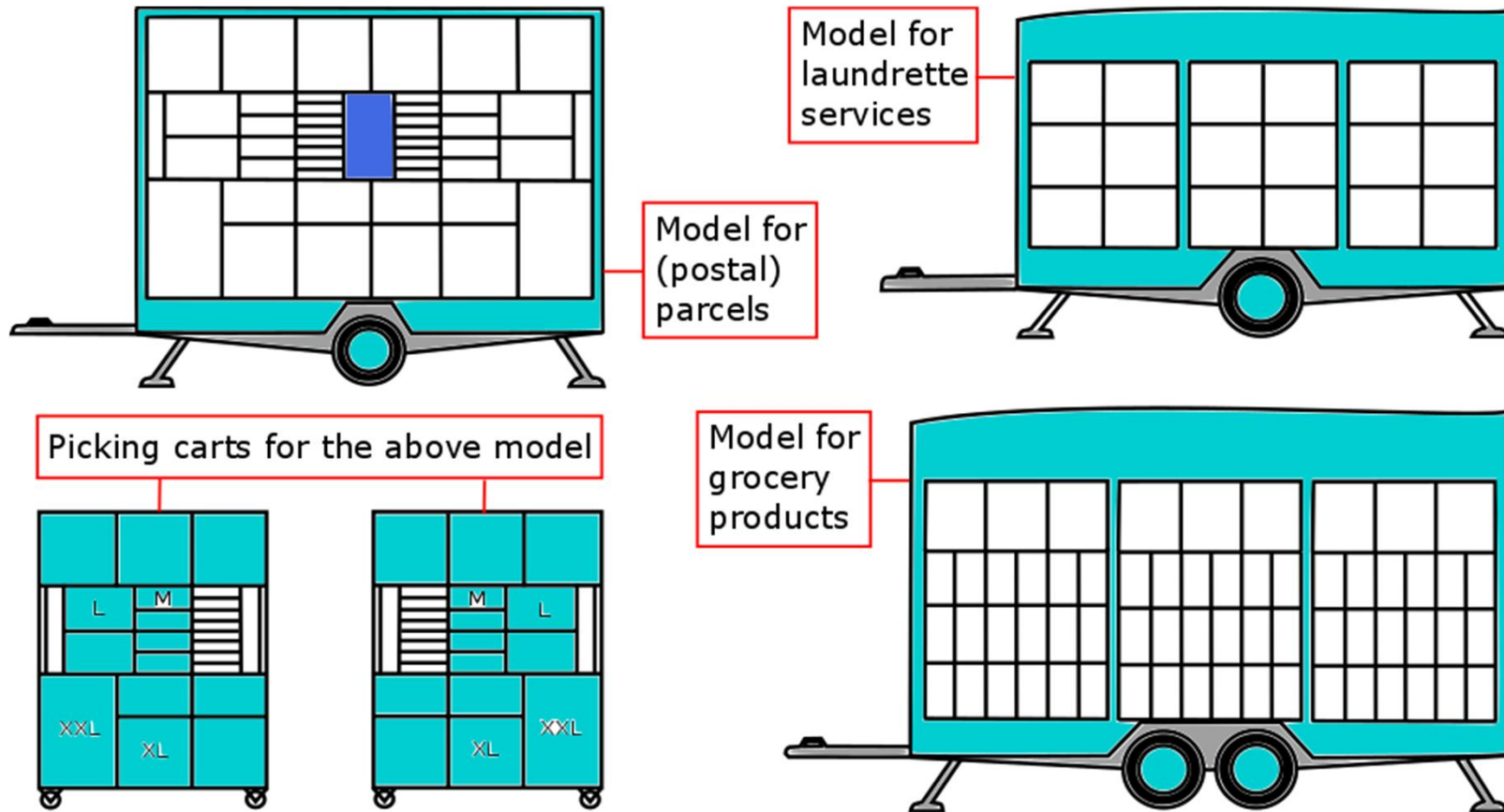


Benefits

- Delivery trailer increases:
 - work productivity
 - reliability of delivery
 - scalability of service
- The fourth benefit is **versatility** – Delivery trailer can be utilized, for example, with
 - grocery products
 - (postal) parcels
 - laundrette service

Versatility

- Some Delivery trailer models:

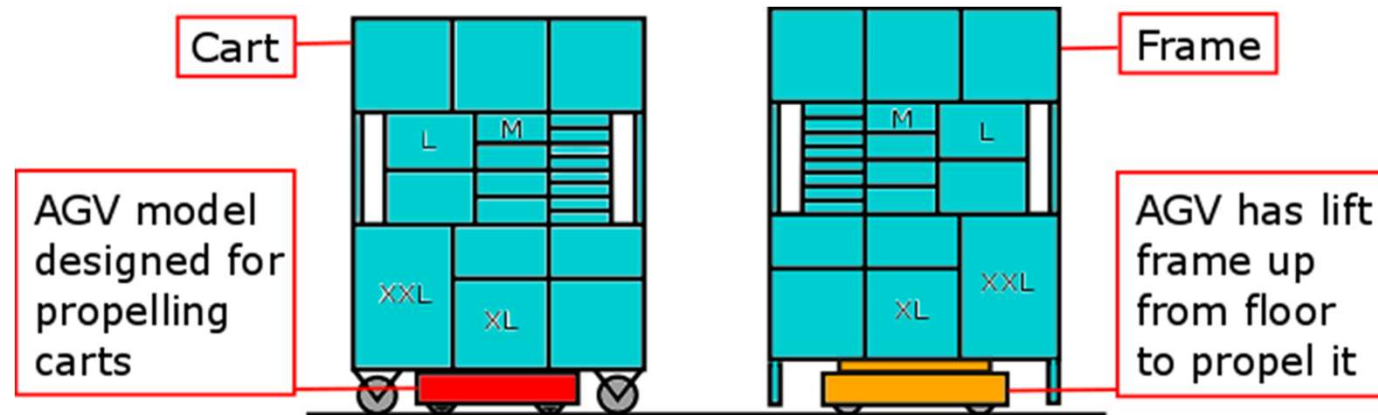


Other Pickdelso concepts

- Shopping bag cart is intended for (home) delivery services
- Takeout wall is intended for click & collect services when a picking site and a delivery site are the same site and thus transportation is not needed
- It is not necessary to move carts or frames manually
- Work productivity can be increased by moving carts or frames, and products in them, by automated guided vehicles (AGVs)

AGV models

- AGV can attach itself to the bottom of a cart or a frame for propelling it on a floor
- Some known manufacturers: Amazon Robotics (previously Kiva Systems), Swisslog (CarryPick), PEK3
- Examples:





Company

- Pickdelso Oy is established in November 2015 and is owned by its founders, Mr. Tapio Saviranta owns 99%
- One employee, CEO (Tapio Saviranta)
- Business executive, Mr. Hannu Manninen
- Team has experience in research & development, patenting & IPR, and international business
- In addition to Delivery Trailer, Pickdelso has two other concepts, Shopping bag cart and Takeout wall
- www.pickdelso.com

Traction

- IPR protected concepts:
 - Delivery Trailer, PCT patent application
 - Takeout wall, pat. pending in USA, China, and UK
 - Shopping bag cart, pat. pending in EU and UK
- A prototype of Shopping bag cart
- Positive feedback about concepts:
 - benefits are believable
 - scientific research is not needed and therefore manufacturing is quickly possible

Business plan

- Concept business is expected to start in 2017-2018
- Pickdelso will use a contract manufacturer to manufacture picking carts for sale
- Pickdelso is reaching incomes:
 - by selling Shopping bag carts to trade companies
 - by selling other carts, frames, and/or licences to locker system manufacturers
- Pickdelso may sell IPR for such markets and countries in which Pickdelso doesn't operate itself

Markets

- On 2016 online grocery sale was \$48 billions of which \$12 billions from USA
- Let us assume selling price of picking cart is \$500
- If 2% of the online grocery products in USA will be delivered by using Pickdelso's carts/frames, the need is about 2000 carts/frames, which means \$1m income
- Lisence fees may results in another \$1m income
- Pickdelso concepts have globally a lot of potential in various purposes

Finance and funding

- No revenue within two years from the foundation
- CEO/owner has funded Pickdelso 30000€
- Pickdelso has got 8600€ governmental support for developing Shopping bag cart and Takeout wall
- Pickdelso is looking for 12500-75000€ first round investment for 5-30% of its equity
- Pickdelso will apply governmental support (Tekes Tempo, max 50000€) after Slush Helsinki
- Investment(s) and the governmental support will be mostly used for the picking cart business

Future view

- Pickdelso concepts follow LEAN thinking, they eliminate waste in a picking and delivery process
- The concepts will replace old-fashioned logistics
- Pickdelso owns the IPR related to the concepts and takes a portion of the global logistics business

