Pickdelso
Picking and delivery solutions

Takeout wall benefits

compared to present systems

Takeout wall suits well with Click & Collect services and shopping bags

www.pickdelso.com

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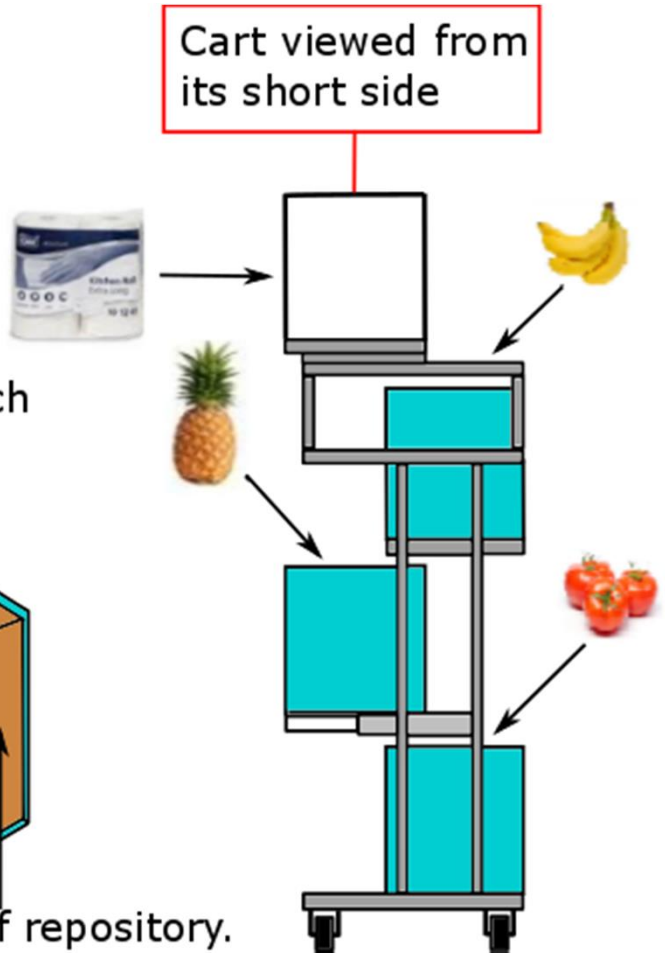
Short summary - Picking

A professional collector moves a picking cart on aisles of a store and picks products into repositories in the cart.

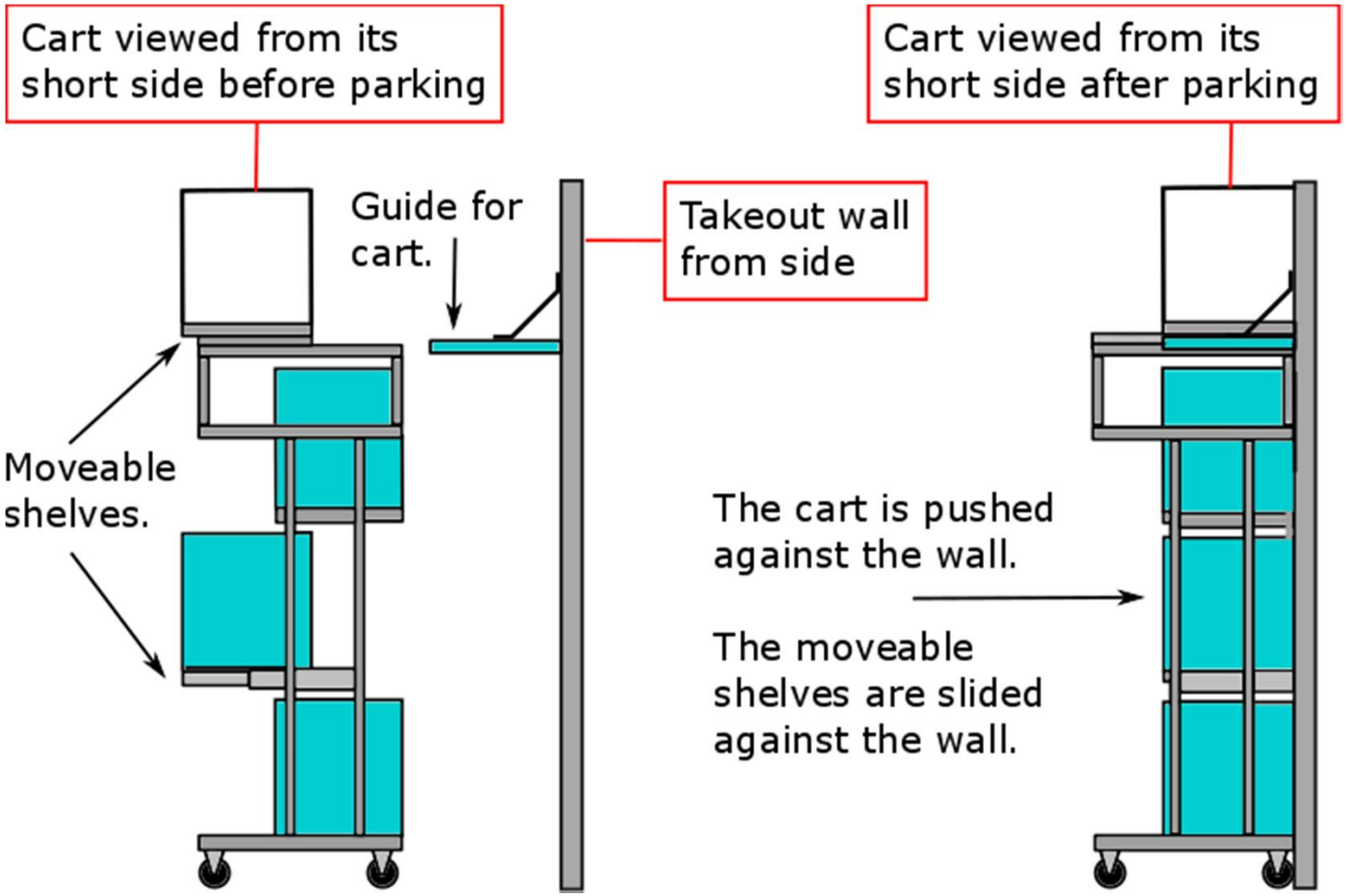
A mouth for receiving products, such as grocery products.

Perspective view of repository and shopping bag

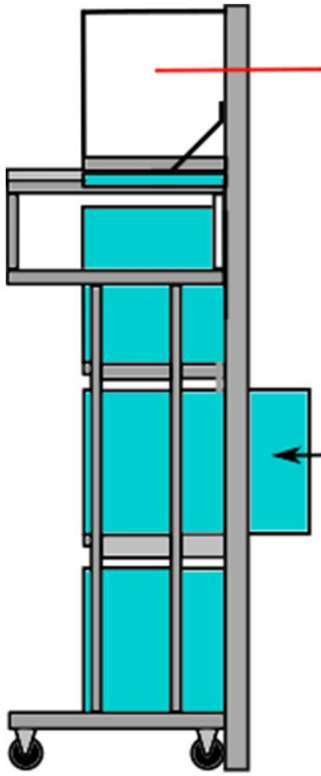
A side opening for taking bag out of repository.



Parking


Cart viewed from its short side before parking
Guide for cart.
Takeout wall from side
Moveable shelves.
Cart viewed from its short side after parking
The cart is pushed against the wall.
The moveable shelves are slided against the wall.

Takeout



Cart viewed from its short side after parking

A customer opens a locker door with a code, for example, by using a smart phone.

Locker door is open.

Customer can draw a shopping bag through the repository side opening out of Takeout wall.

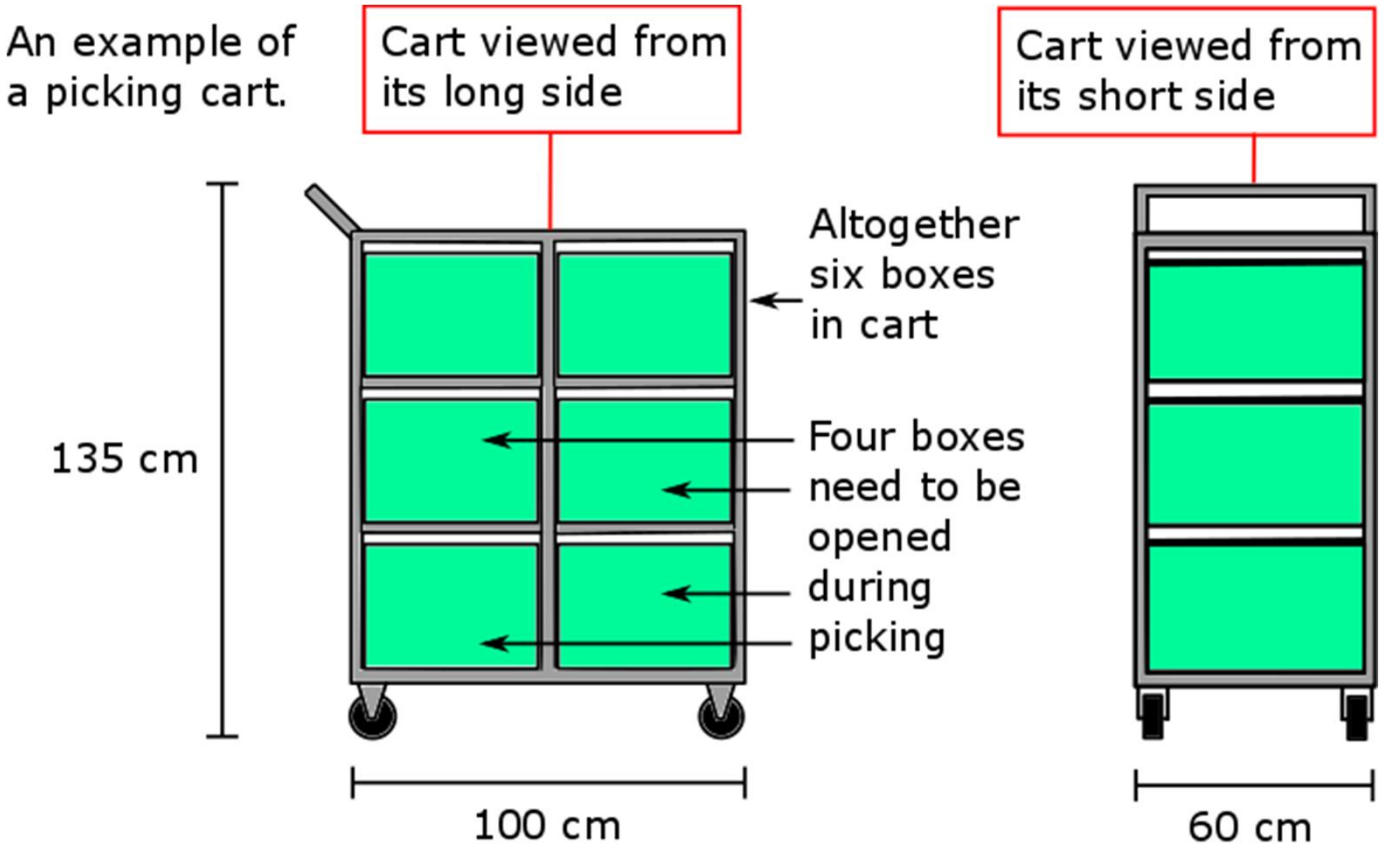
Why to choose Takeout wall?

- Present systems suit for packets
- Takeout wall suits for shopping bags
- Choose Takeout wall, if you deliver small-sized products in shopping bags
- It enhances the work productivity
- And saves money in a Click & Collect service

Problems in present systems

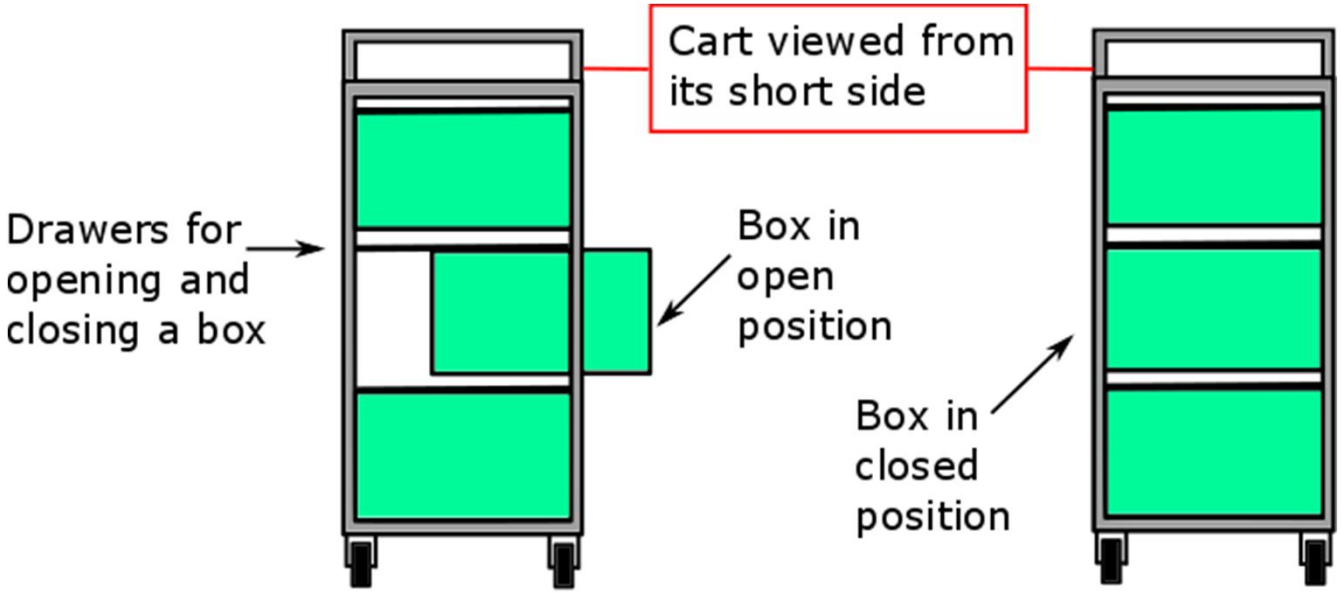
What should be done better?

Conventional cart



Promlem in picking

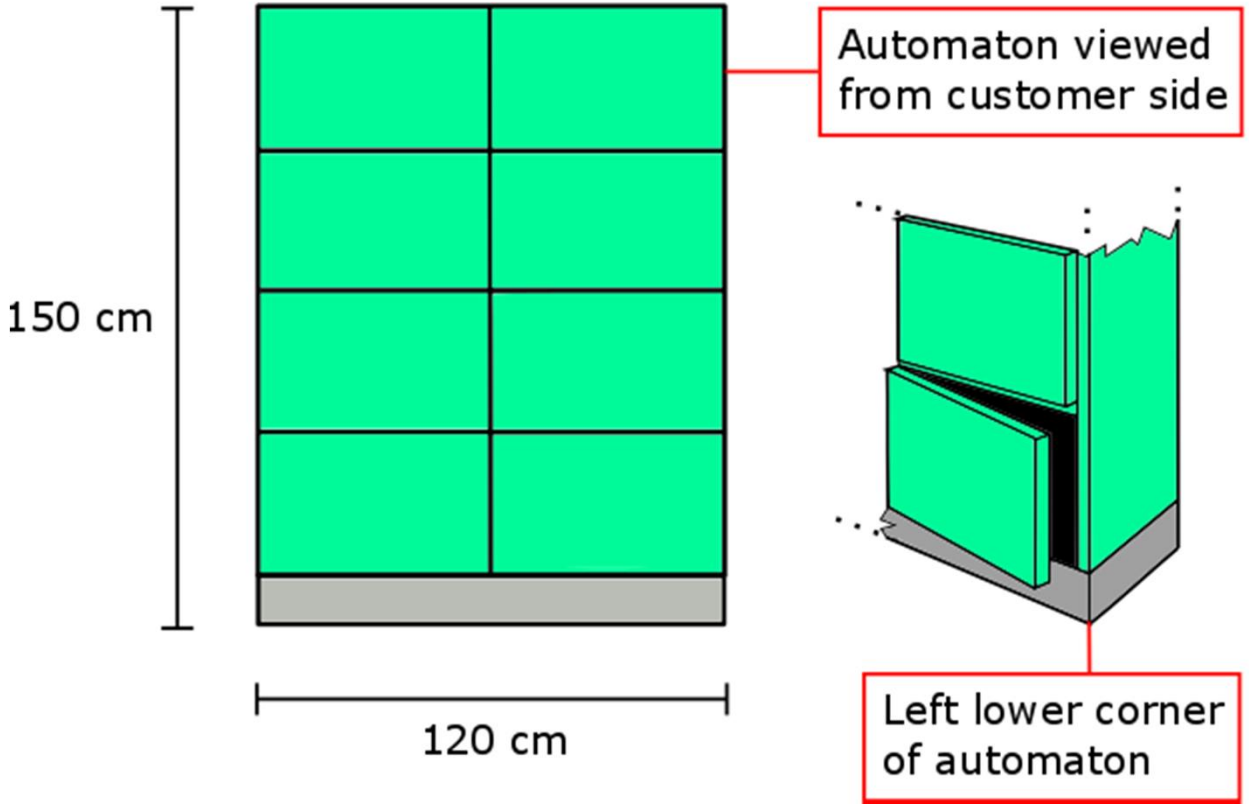
- Problem concerns the cart model shown in the below



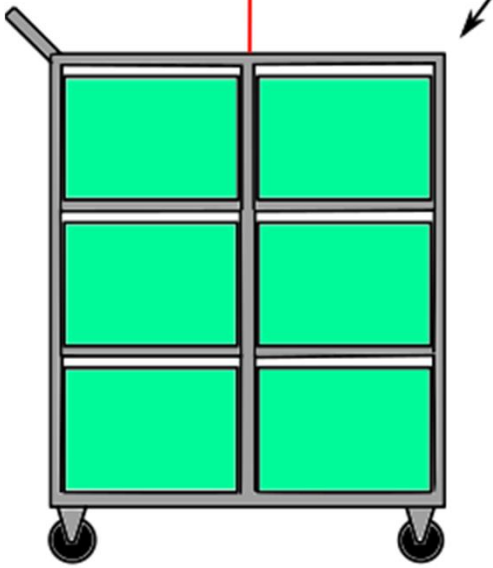
Problem 1: Opening and closing of boxes takes quite much time when tens of products are to be picked.

Conventional automaton

Example: Conventional packet automaton with eight fixed lockers.

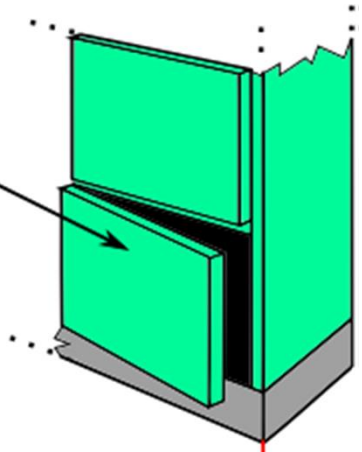


Problems in delivery



Shopping bags are located in a cart in six boxes.

A locker door opened for filling the locker.



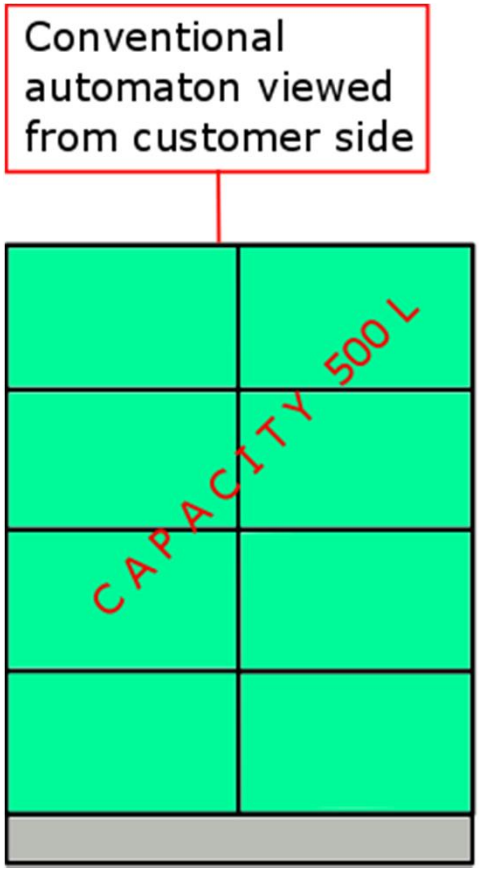
Left lower corner of automaton

Problem 2: Handling of boxes and lifting of shopping bags one by one into the lockers takes a lot of time.

Problem 3: A bag may end into a wrong locker.

Problem 4: Filling of the lockers is burdensom task.

Problems in capacity



Order sizes vary. Sometimes a locker is full and sometimes it includes waste space.

For example, if a locker can receive three shopping bags, an order of one bag means 66% waste space in the locker. Correspondingly, an order of four bags means 66% waste space in one locker.

Problem 5: The maximum capasity is rarely in use because of the waste space.

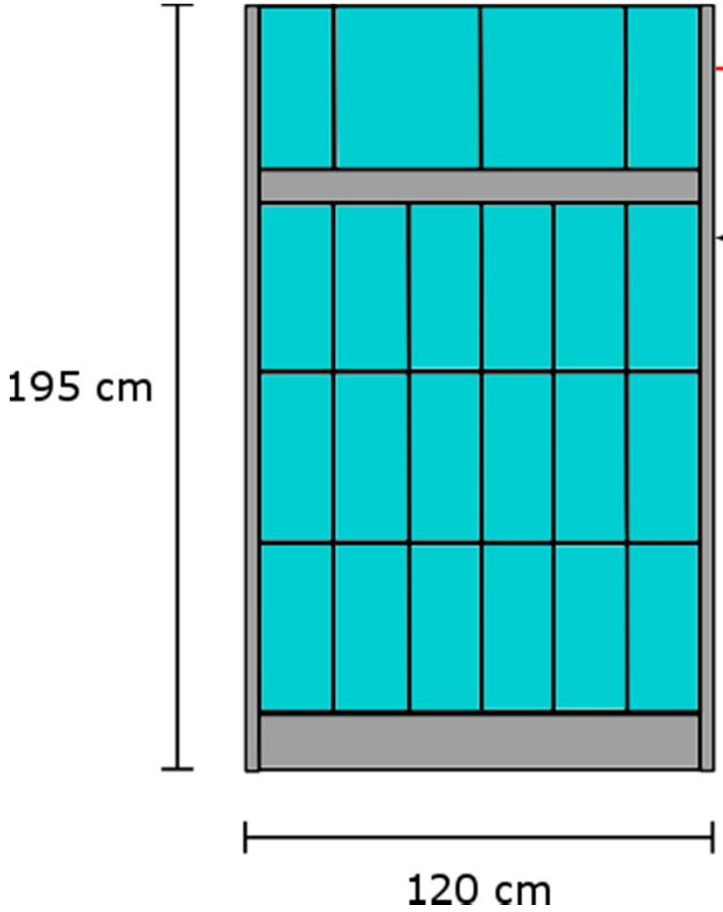
Automaton is able to serve at most eight customers, because it includes eight lockers.

Problem 6: A small number of customers can share the capasity of the automaton.

Solution

How Takeout wall solves the problems?

Wall part

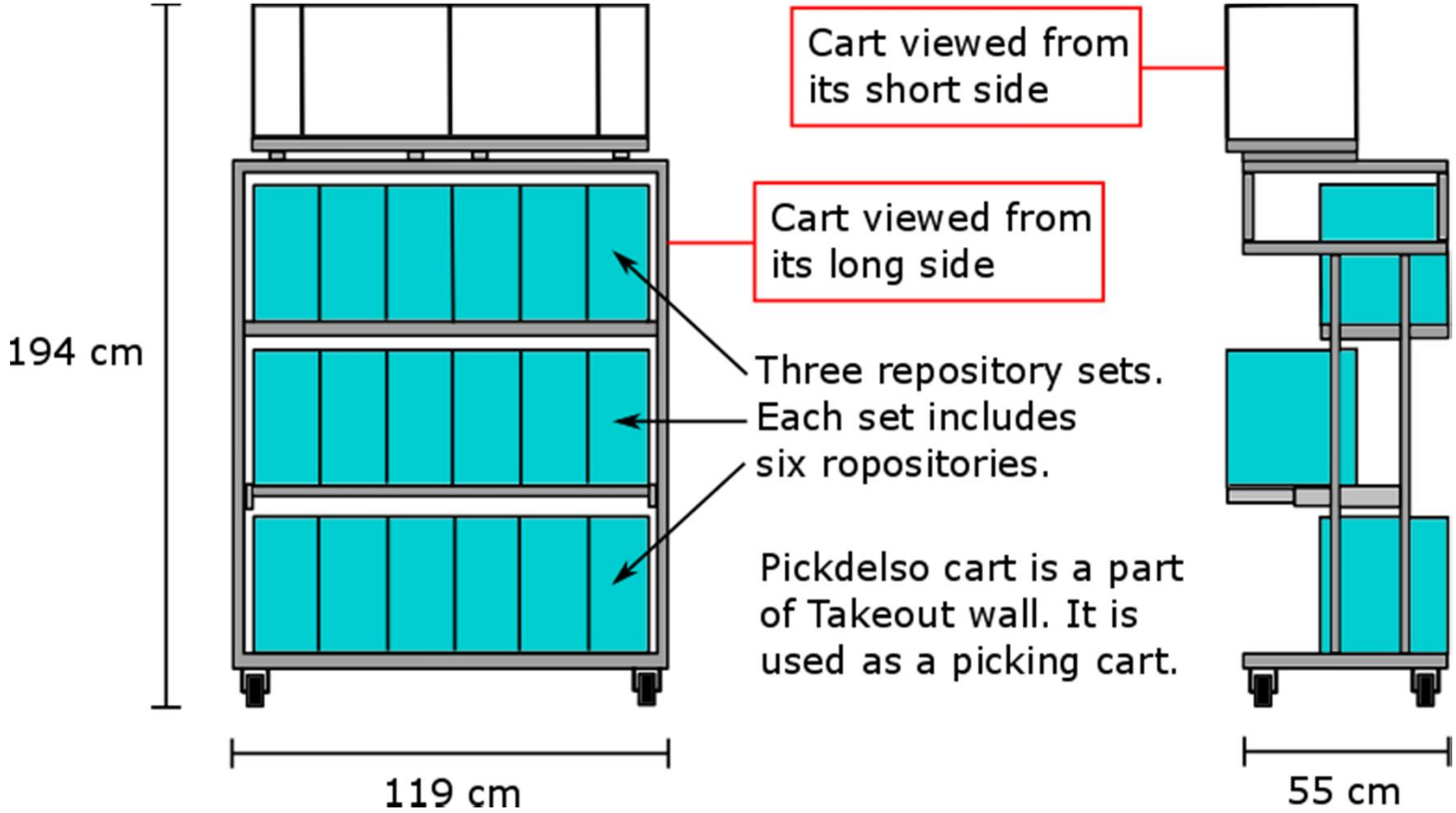


Takeout wall from a customer side

A wall part with locker doors. Takeout wall may comprise a number of wall parts.

Takeout wall is especially intended for products which are picked into shopping bags.

Pickdelso cart



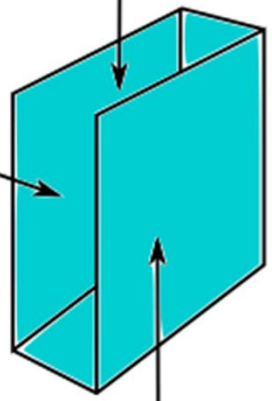
Repository

Pickdelso cart includes repositories each of which has two openings: a mouth and a side opening.

Mouth for receiving products to be picked.

Side opening is intended for receiving an empty shopping bag at the beginning of a picking stage.

Side opening is also intended for drawing the shopping bag out at the delivery stage.



Repository

An example of a shopping bag.

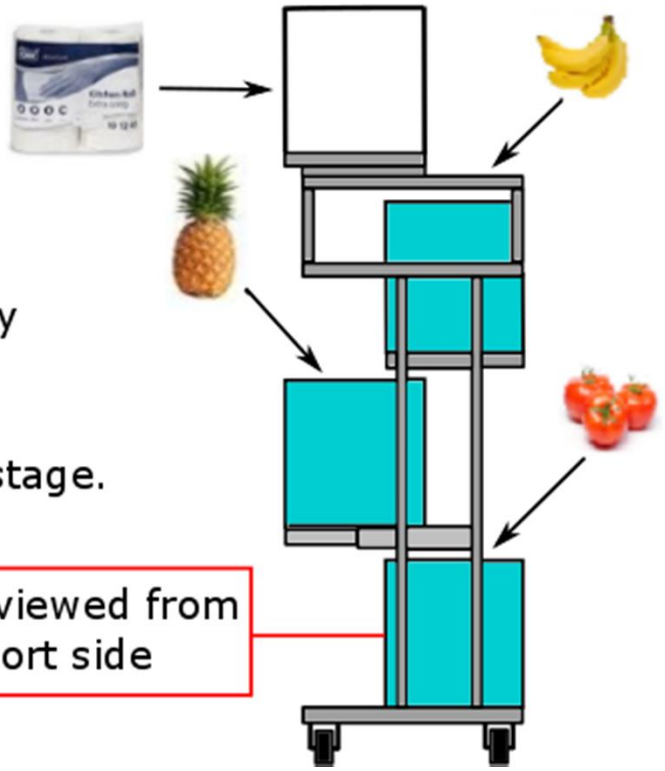
Solution to picking problem

No more opening and closing boxes of a picking cart!

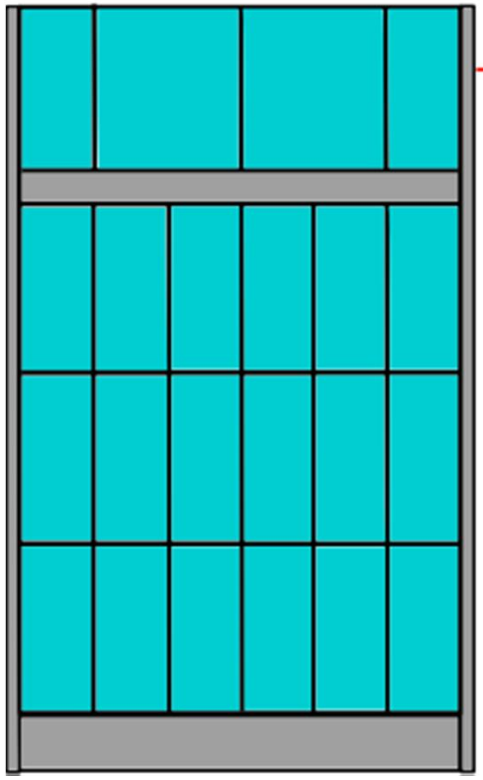
Repositories are continuously at least partly open.

A product can be placed directly into a repository.

This saves time in the picking stage.



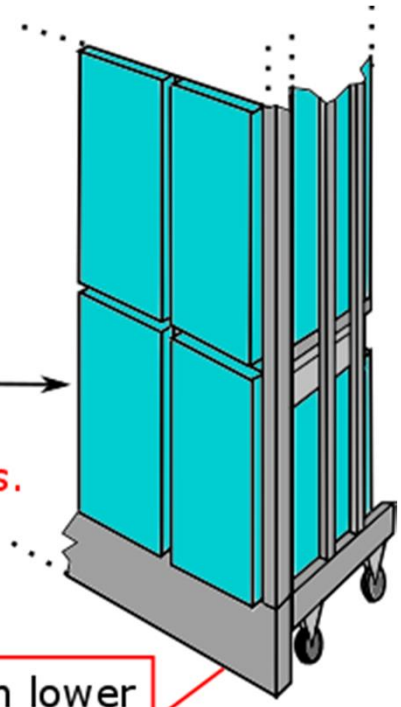
Solution to delivery problems



Takeout wall from a customer side

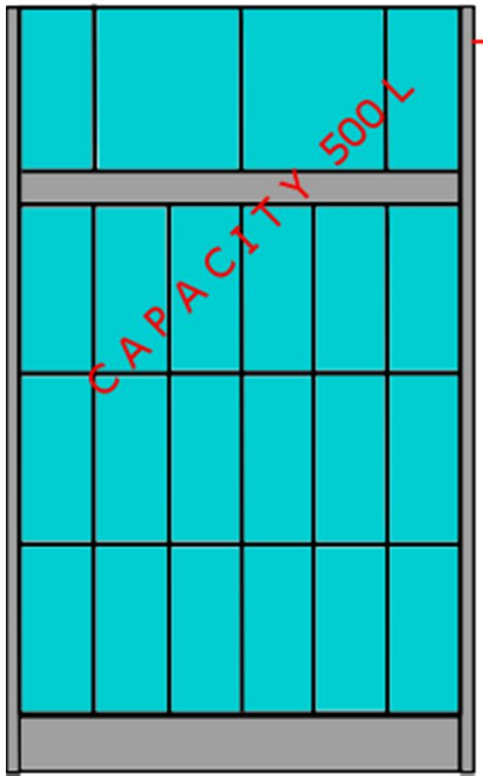
No more lifting of shopping bags!

Cart is just parked besides the wall that includes the locker doors.



Magnified view from lower left corner of Takeout wall

Solution to capacity problems



Takeout wall from a customer side

Locker size is one shopping bag.

No more waste space because of large lockers!
When a locker is in use a shopping bag fills it.

Takeout wall includes a number of lockers (in this example, 22 lockers).

More possibilities to share capasity!
Capacity can be shared among 1-22 orders.

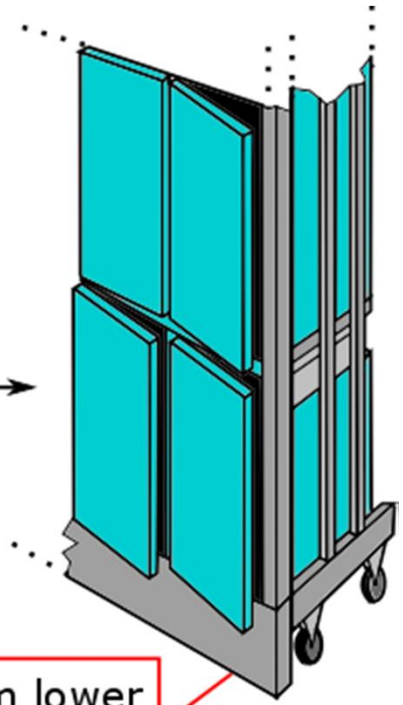
Use of lockers

Customer gets as many lockers as he needs.

Example: If the customer's order size is three shopping bags, three lockers are reserved for the order.

When the customer fetches the order, three locker doors are opened in response to a correct code.

Locker doors can be numbered to specify which lockers are reserved for the order.



Magnified view from lower left corner of Takeout wall

Value

Why Takeout wall is excellent?

Benefits

Takeout wall:

- may accelerate picking of products
- accelerates delivery, i.e. filling of automaton
- makes the delivery more reliable
- makes the delivery less burdensome
- utilizes efficiently the storing capacity and
- can share the capacity among a great number of orders

Versatile concept

- Takeout wall can be implemented in various manners
- It applies to retail sale products and wholesale products
- A manned delivery point can be fully or partly replaced with Takeout wall

Takeout wall suits best

- when orders include a number of products
- and the products are small-sized
- and the delivery time windows are short (1-4 h)

Takeout wall

- Solves problems related to conventional packet automatons and picking carts
- Enhances the work productivity
- Saves a service provider’s money in a Click & Collect service