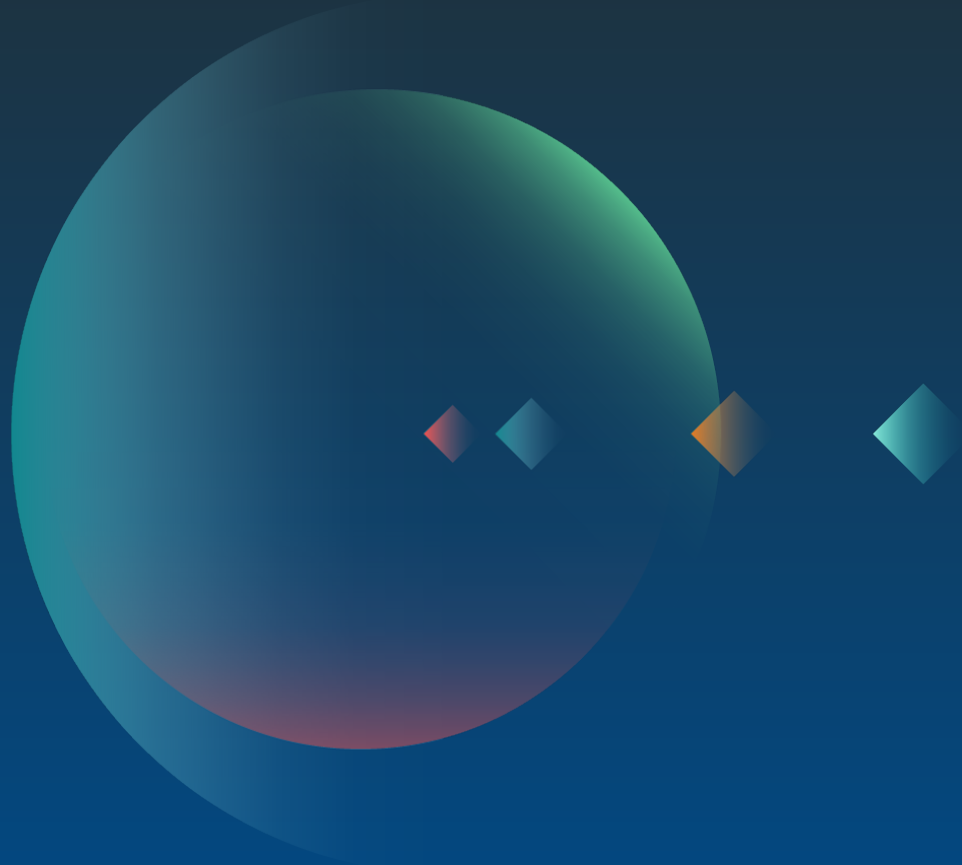


LS Retail

We make business easy

Mobile and LS Central



Ólafur Jónsson

Product owner

Olafur@lsretail.com



Andri Fannar Freysson

Developer

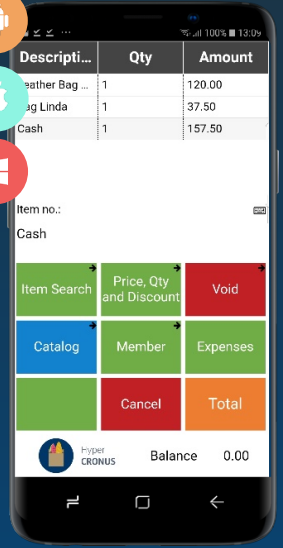
Andrif@lsretail.com

Mobile apps for LS Central

- **Mobile POS**
 - **Mobile inventory**
 - **LS Central AppShell**
 - **LS Central ScanPayGo ***
- Developed to support business processes



The apps



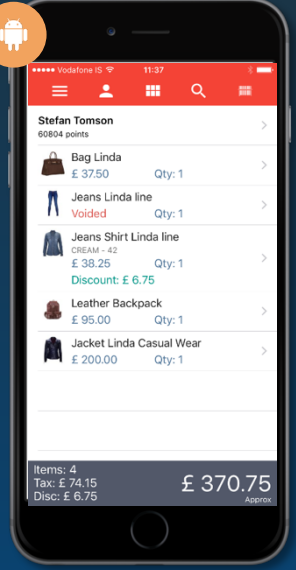
LS Central AppShell

Descripti...	Qty	Amount
Leather Bag ...	1	120.00
Bag Linda	1	37.50
Cash	1	157.50

Item no.:
Cash

Buttons: Item Search, Price, Qty and Discount, Void, Catalog, Member, Expenses, Cancel, Total

Balance: 0.00



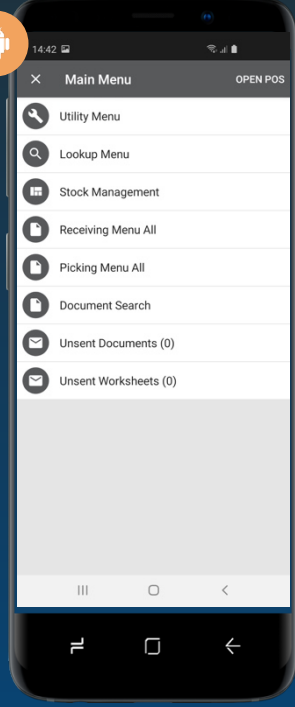
Mobile POS

Stefan Tomsson
60804 points

- Bag Linda £ 37.50 Qty: 1
- Jeans Linda line Voided Qty: 1
- Jeans Shirt Linda line £ 38.25 Qty: 1
Discount: £ 6.75
- Leather Backpack £ 95.00 Qty: 1
- Jacket Linda Casual Wear £ 200.00 Qty: 1

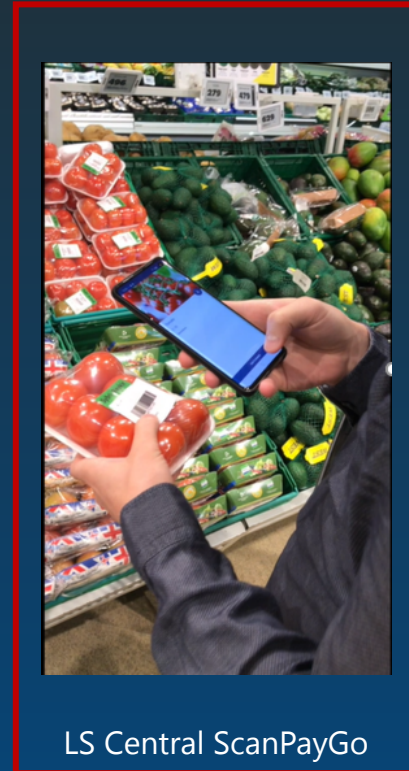
Items: 4
Tax: £ 74.15
Disc: £ 6.75

£ 370.75



Mobile Inventory

- Utility Menu
- Lookup Menu
- Stock Management
- Receiving Menu All
- Picking Menu All
- Document Search
- Unsent Documents (0)
- Unsent Worksheets (0)



The LS Central AppShell

VS

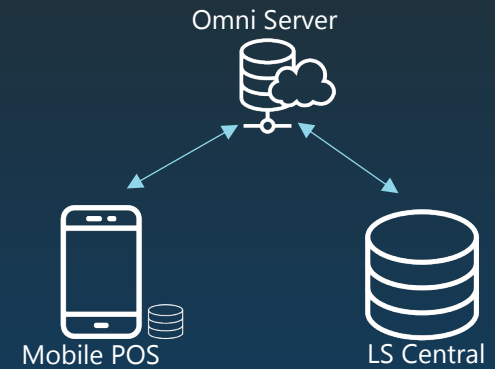
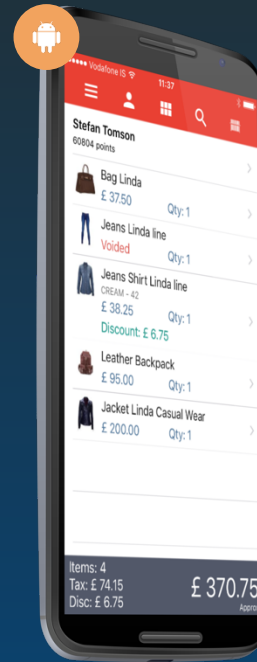
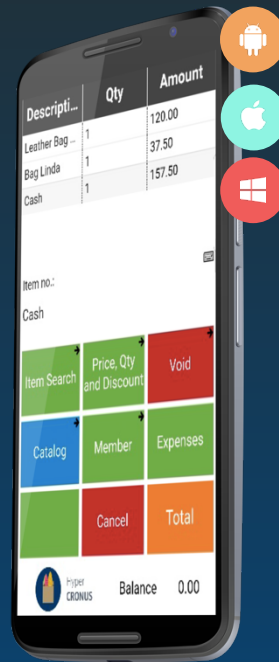
the Mobile POS



LS Central AppShell

LS Central

- App to run webPOS on a device in a controlled way



- Standalone POS app with limited functionality that connects to LS Central through LS Omni server

- Gives POS direct access to peripherals *
 - Printers (Epson EPos, Zebra link OS)
 - LS Pay connected EFT device
 - Camera built into a mobile device to scan

* Available in Android version

webPOS AppShell

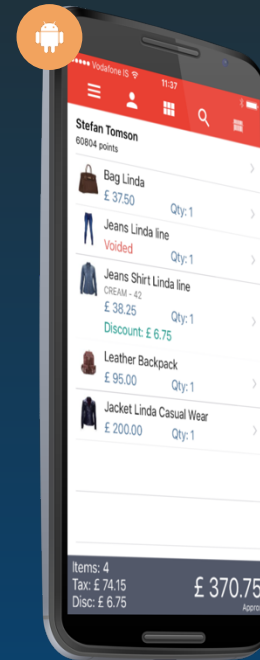
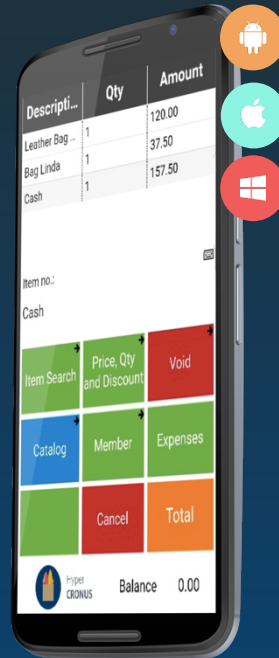
vs

Mobile POS

webPOS in LS Central AppShell

- Full functionality of LS Central webPOS
- Same customizations as traditional POS
- Always online
- Access to peripherals direct or through LS Central Hardware Station

➤ **Ideal to run the POS on a mobile device in a regular retail environment**

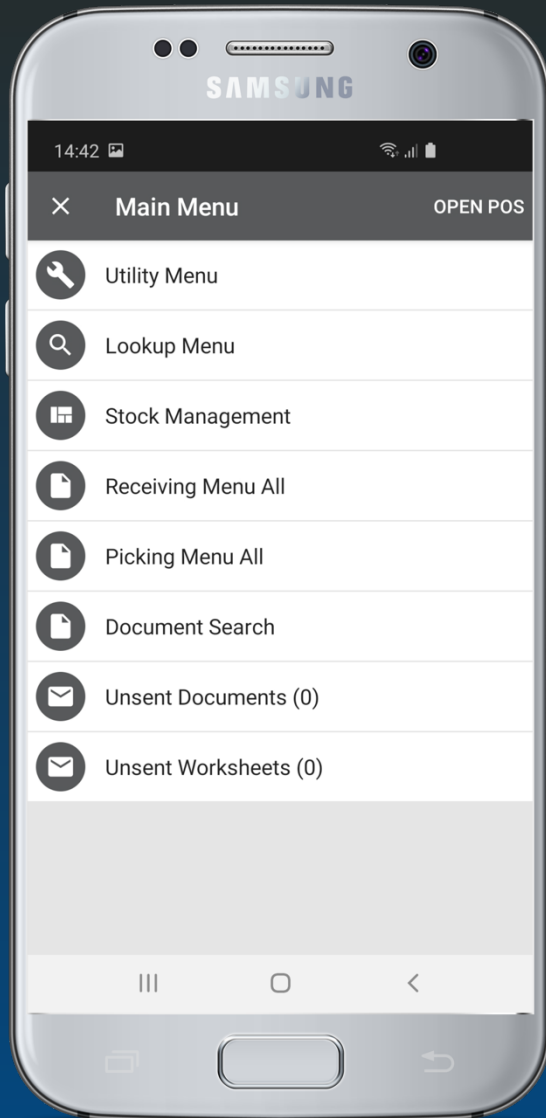


Mobile POS

- Limited POS functionality through LS Omni server
- Customization needs to be done by LS Retail
- Offline capabilities with automatic sync on reconnecting
- POS has direct access to peripherals

➤ **Ideal for**

- **Outdoor use (tickets, attractions)**
– when it needs to be off-line
- **Pop-up stores**
- **Travel retail**
- ...



Mobile inventory

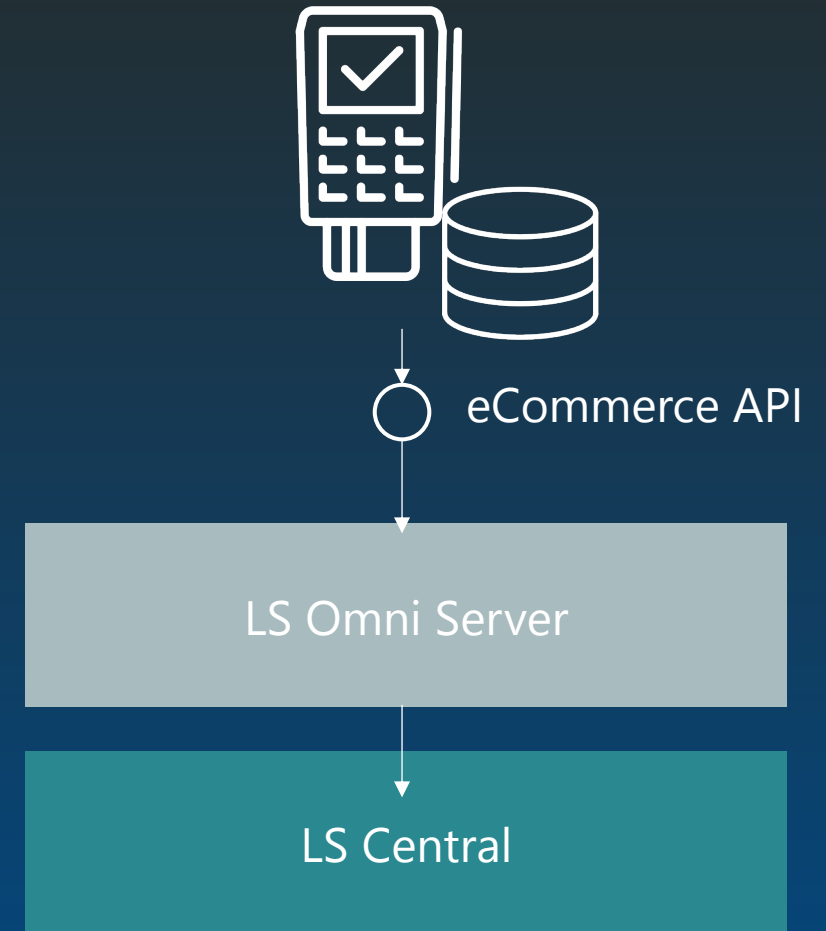
Mobile inventory extends LS Central's powerful inventory functionality (PO / TO / picking, receiving, counting ...) to mobile devices

- Perform inventory tasks where needed
- Update inventory info quickly
- Scan barcodes instead of keying in data: reduce errors and need for data maintenance
- Make the best use of info delivered from supplier
- Eliminate paper as data storage

➤ **Mobilizes inventory processes**

The architecture

- Mobile inventory uses the LS Omni Server
 - Passes data to and from LS Central
 - Ensures backwards compatibility and multi-tenant
 - Can connect to multiple ERPs
- All setup of mobile inventory (menu, store, terminal, user,...) is retrieved at startup from LS Central
- Master data is replicated from LS Central and stored on the mobile device
- Offline capabilities: collects and stores working data on the handheld, then sends to LS Central



LS Central inventory processes



The processes:

- Purchase ordering
- Return management
- Picking
- Receiving
- Stock request
- Stock transfer
- Stock counting
- Label printing

With LS Central:

- Handled in standard system
- Documents and worksheets
- Controlled by rules and user rights
- Automatically updating stock info and giving correct status

Adding Mobile inventory:

- Functions and data available at mobile device
- View tasks and current inventory info on the spot
- Update by scanning and sending directly to LS Central
- Add texts and pictures if needed
- Easier, simpler and **faster**

New features

Customer feedback drives development

Recent changes include

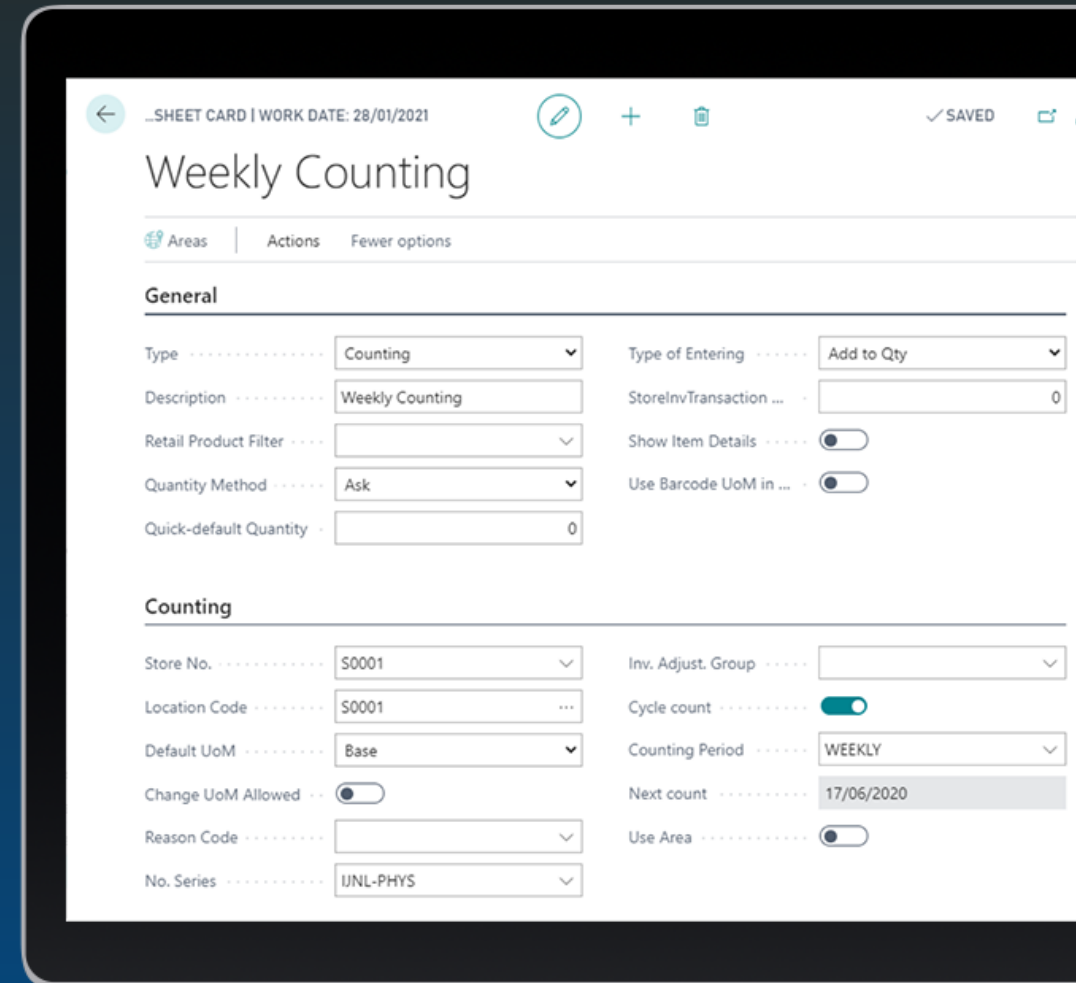
- Faster scanning
- Add a picture in receiving
- Load balance in posting large worksheets
- And more ...



Cycle counting

In LS Central:

- For each item that must be counted at a regular interval (on a "cycle"), set counting period, for ex. "weekly".
- Create worksheet journal for the counting period.
- Run "Get cycle count item": all applicable items are added to the worksheet.
- This list is also refreshed when you select the Cycle counting worksheet in the Mobile inventory app.



The screenshot shows the 'Weekly Counting' screen in the LS Central mobile app. The interface is organized into sections: 'General' and 'Counting'. The 'General' section includes fields for 'Type' (set to 'Counting'), 'Description' ('Weekly Counting'), 'Quantity Method' ('Ask'), and 'Type of Entering' ('Add to Qty'). The 'Counting' section includes 'Store No.' and 'Location Code' (both 'S0001'), 'Default UoM' ('Base'), 'Cycle count' (checked), 'Counting Period' ('WEEKLY'), and 'Next count' ('17/06/2020').

...SHEET CARD | WORK DATE: 28/01/2021

Weekly Counting

Areas | Actions | Fewer options

General

Type	Counting	Type of Entering	Add to Qty
Description	Weekly Counting	StoreInvTransaction ...	0
Retail Product Filter		Show Item Details	<input type="checkbox"/>
Quantity Method	Ask	Use Barcode UoM in ...	<input type="checkbox"/>
Quick-default Quantity	0		

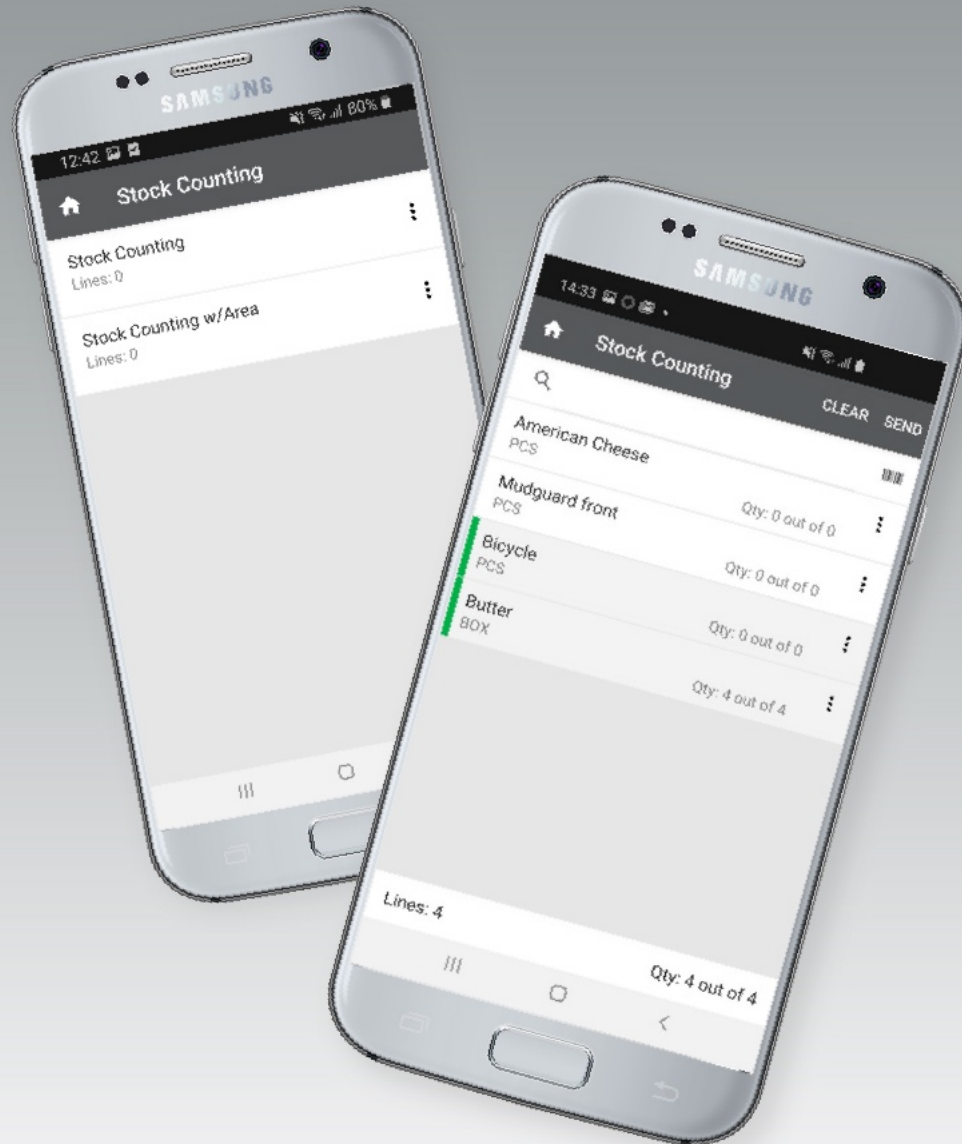
Counting

Store No.	S0001	Inv. Adjust. Group	
Location Code	S0001	Cycle count	<input checked="" type="checkbox"/>
Default UoM	Base	Counting Period	WEEKLY
Change UoM Allowed	<input type="checkbox"/>	Next count	17/06/2020
Reason Code		Use Area	<input type="checkbox"/>
No. Series	IUNL-PHYS		

Cycle counting

In Mobile inventory:

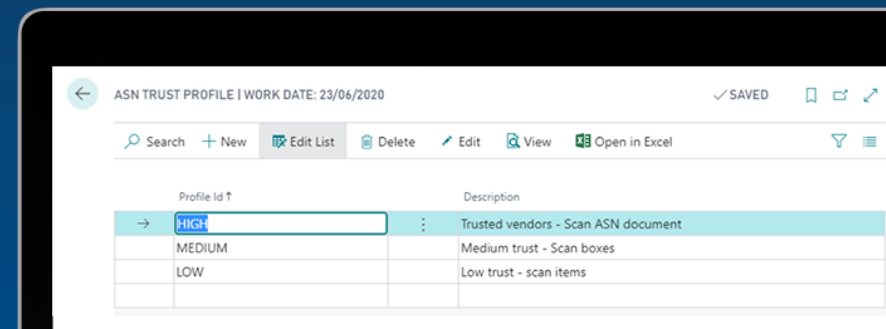
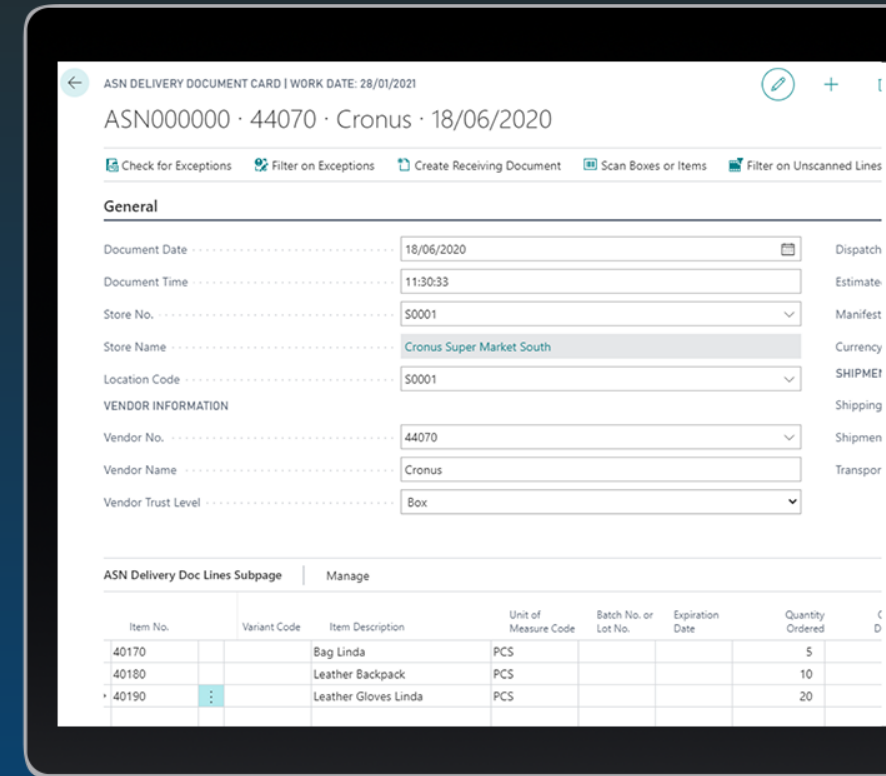
- Select Cycle Counting worksheet from menu.
- Worksheet displays all the items that need to be counted.
- Items that have already been counted are marked in a different color.
- You can't send the worksheet back to LS Central until all the items in the worksheet have been counted.

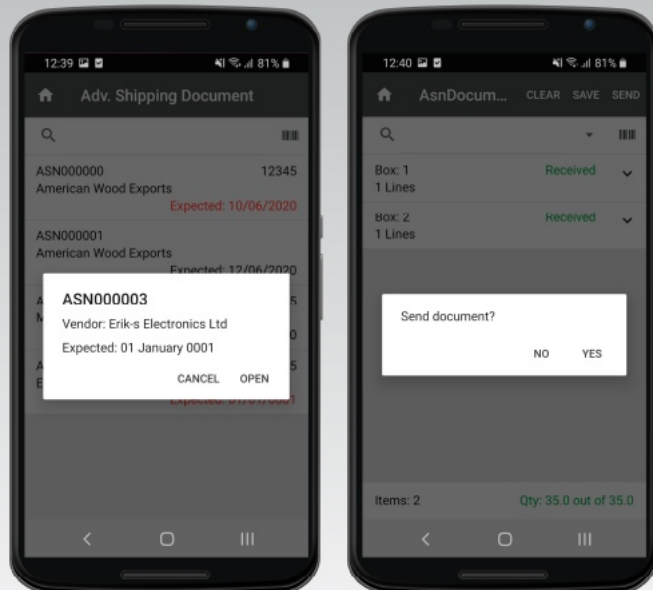
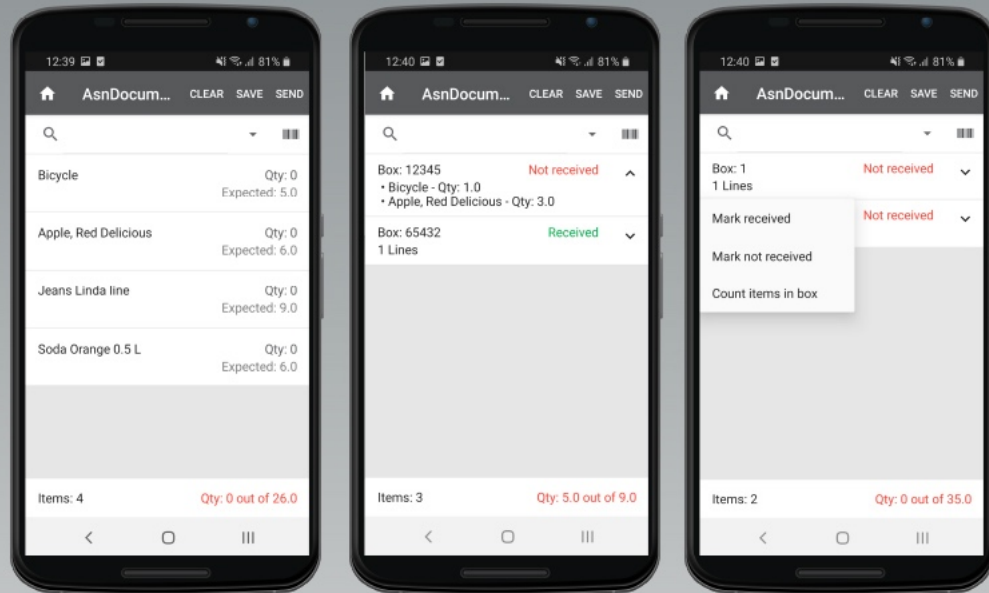


Advanced Shipping Notice (ASN)

The general process:

- Store sends purchase order(s) to supplier.
- Supplier decides what items to put in a shipment, from one or more orders.
- Supplier sends the store an ASN electric notification about the shipment: when it will arrive, what it will contain, items from POs, box info, etc.
- The store reads the ASN document into LS Central and processes it (importing ASN is an integration work).
- ASN document, and trust level of vendor, are sent to Mobile inventory to be worked on when items arrive.





ASN in Mobile inventory

- Select ASN document
- Scan barcode of item/box
- Based on trust level of vendor, you can
 - Accept all or box directly without counting
 - Count part of/entire shipment

...or handle according to a standard receiving process

- ASN document is sent to LS Central to be processed

Start and finish on a handheld

The standard process requires three steps:

- Create a document in LS Central
- Send to Mobile inventory, and receive back with data
- Post the document in LS Central

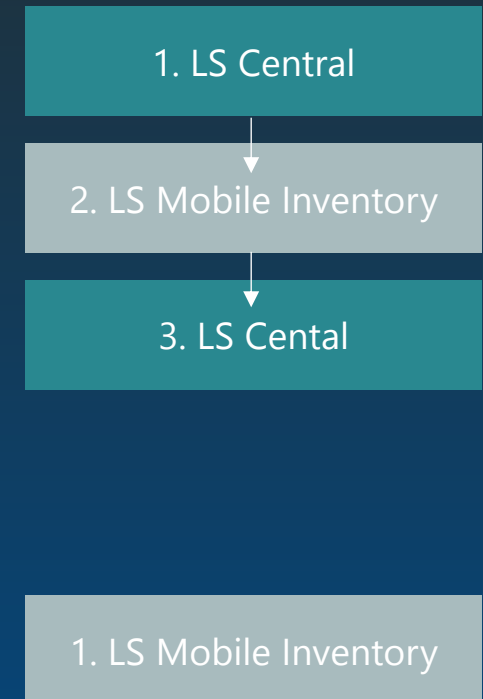
Today, you can start and finish in **one step**, in Mobile inventory

- Document is generated in LS Central and sent to Mobile inventory
- When document is sent back to LS Central it is automatically processed

Changes have been applied to:

- Purchase order receive
- Transfer order receive

In the future, more inventory document processes will be simplified the same way



LS Central ScanPayGo

Mobile self-checkout

- Pay-and-leave solution for customers
- R&D project: working prototype in Android
- Next steps: get more feedback, finalize version 1 and go into a pilot project

How does it work?

- Consumers download the SPG app to their own mobile phone
- Open the app when in store
- Scan the barcode to see product information and add to basket
- Finish, pay, and leave following store procedures



The architecture

- Android and iOS* app downloaded from App store
- Runs on customer's own mobile device
- LS Omni Server connects to LS Central
 - Can be located in store or in-cloud
- Uses iBeacon technology to identify the store where the customer is
- LS Central calculates prices and discounts

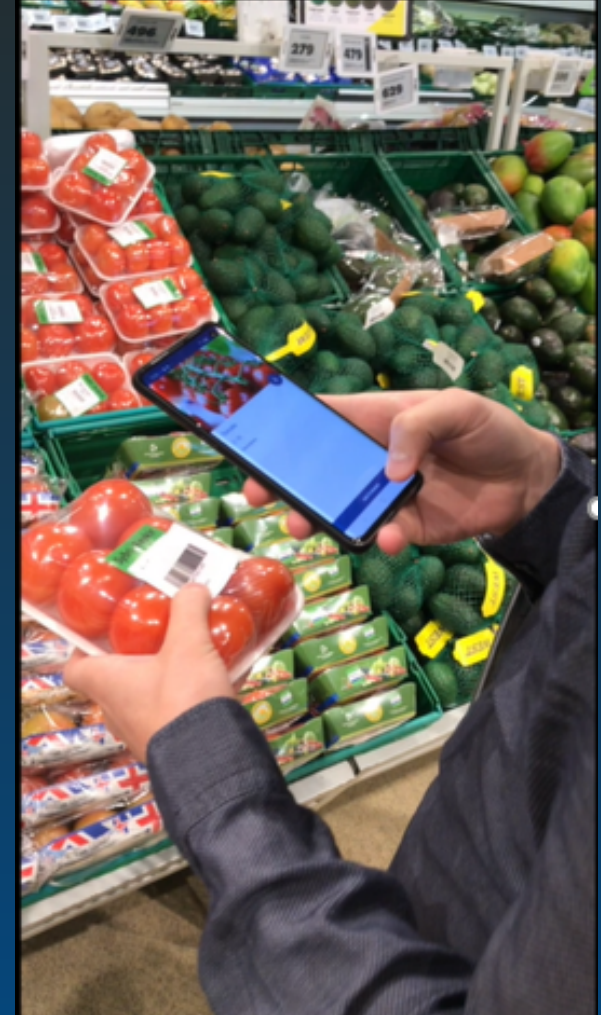
*iOS version in development





Scan and add to basket

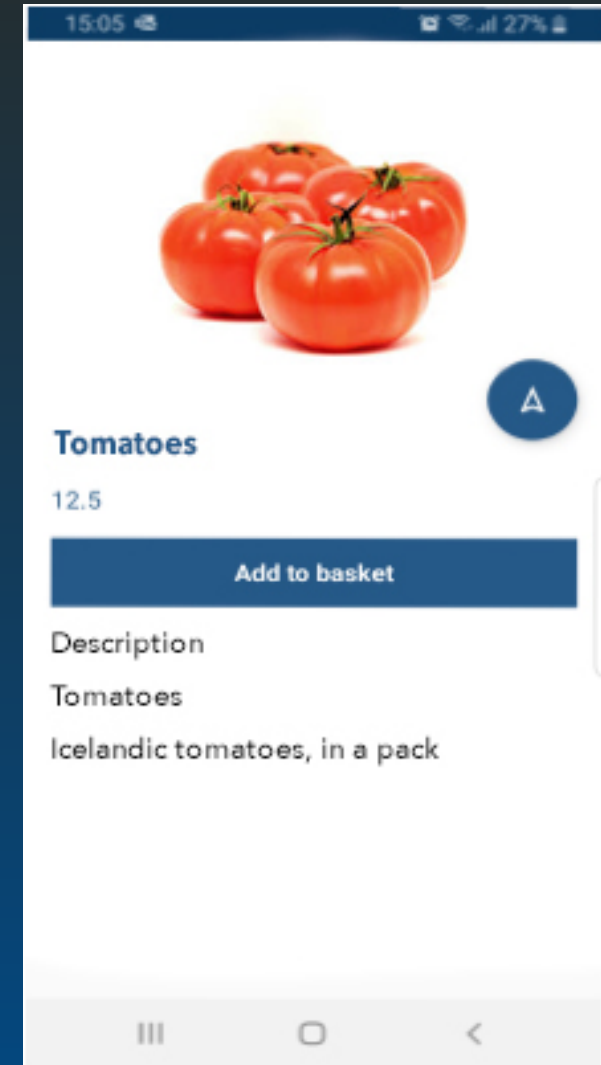
Scanning items to





Scan and add to basket

- View item info
 - Item description
 - Ingredients, allergens, nutrient
- Add to basket

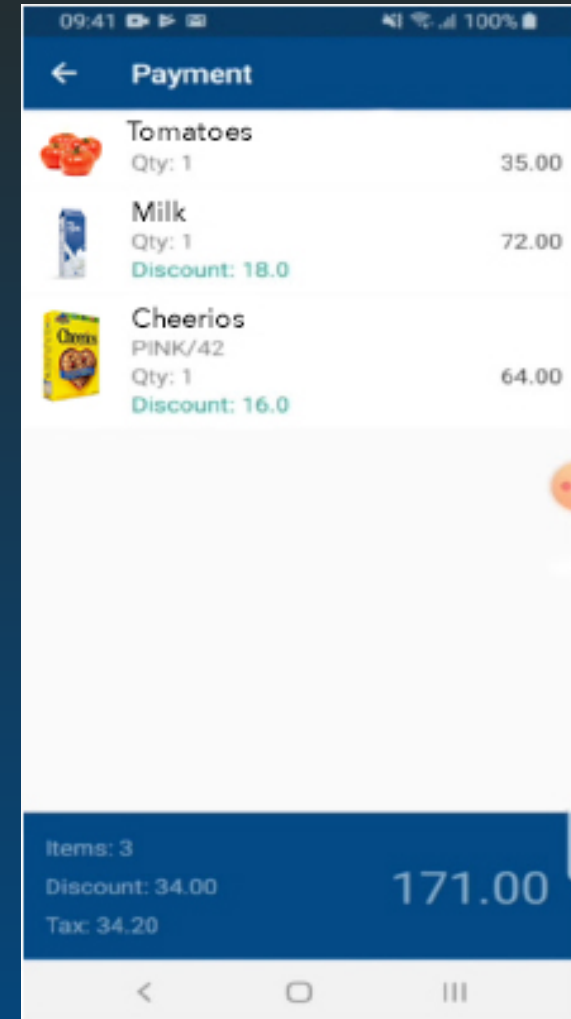




Scan and add to basket

Calculate basket

- Using member discount if logged in

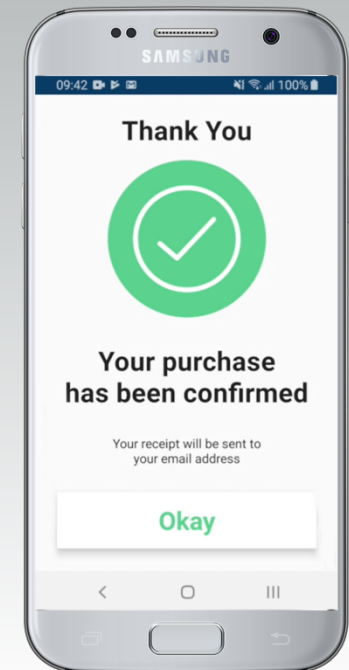
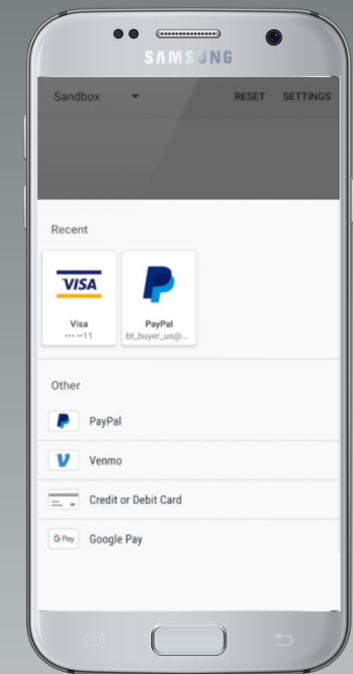
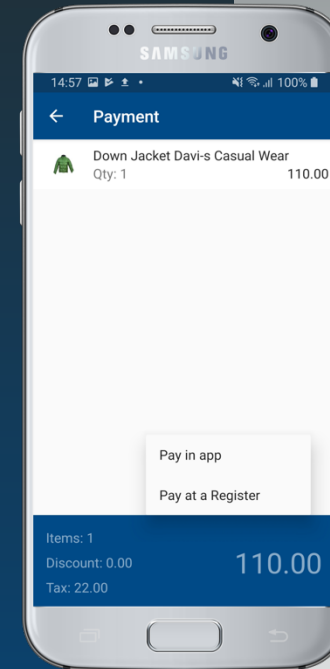




Paying for items

- Three payment options
 - In app
 - At manned POS
 - At self-service POS machine
- Payment in app is subject to available options in each country/region

* Depends on retailer's processes

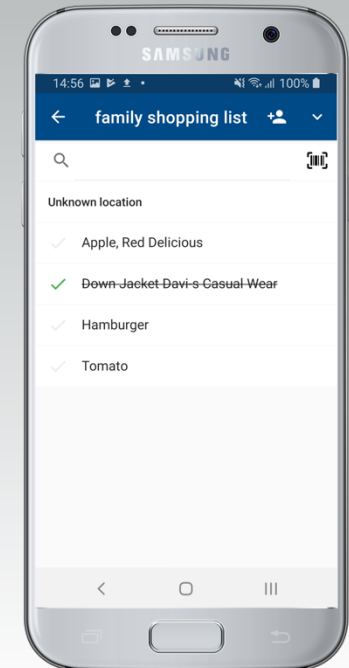
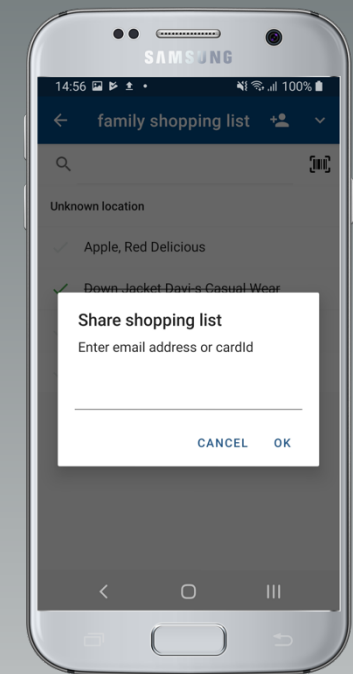
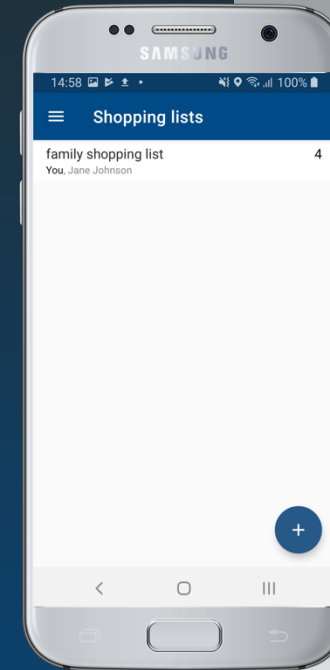




Shopping lists

Personal shopping lists

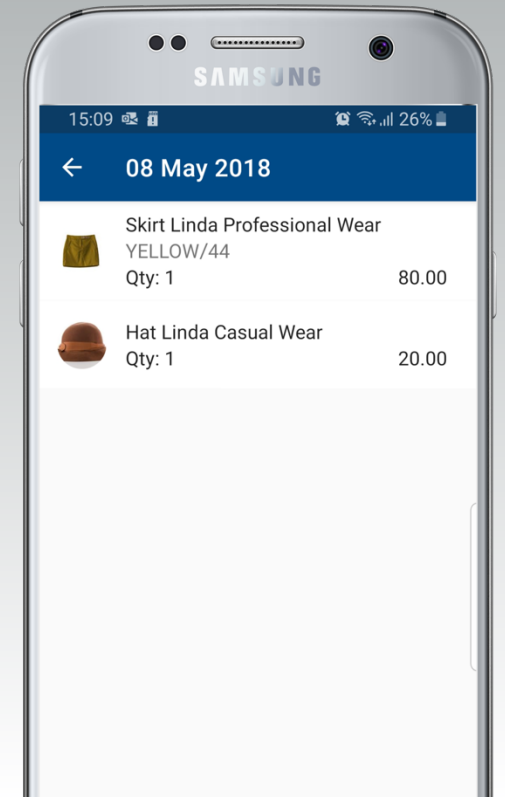
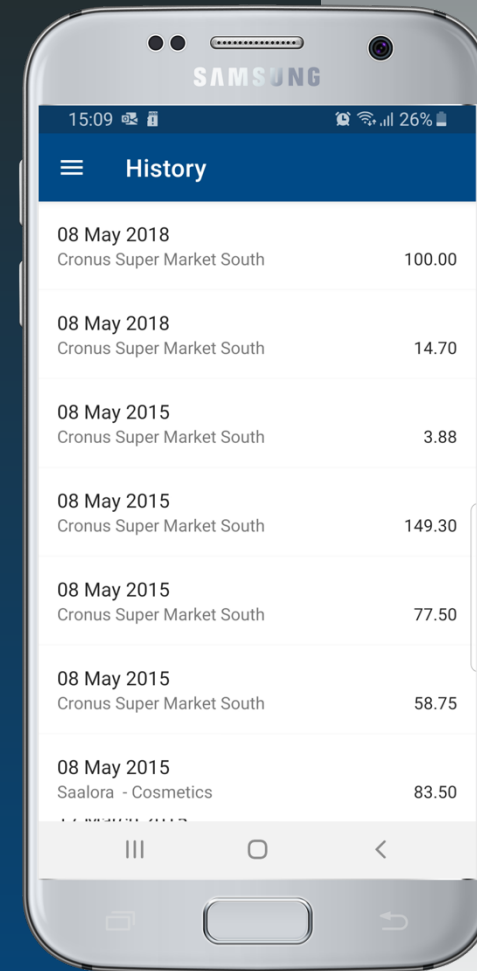
- To add items, scan a barcode or key in
- Share with other users
- When you add an item to the basket, it is deleted from shopping list
- Items in shopping list can include item location and can be sorted by location



Shopping history

See shopping history:

- Past purchases
- Total amount per transaction per day
- Details per transaction
 - Item
 - Quantity
 - amount



Security considerations

Security issues

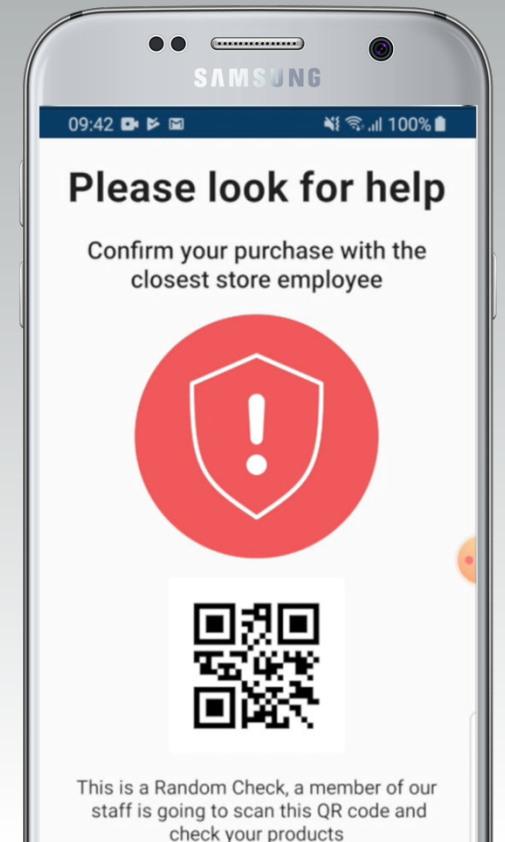
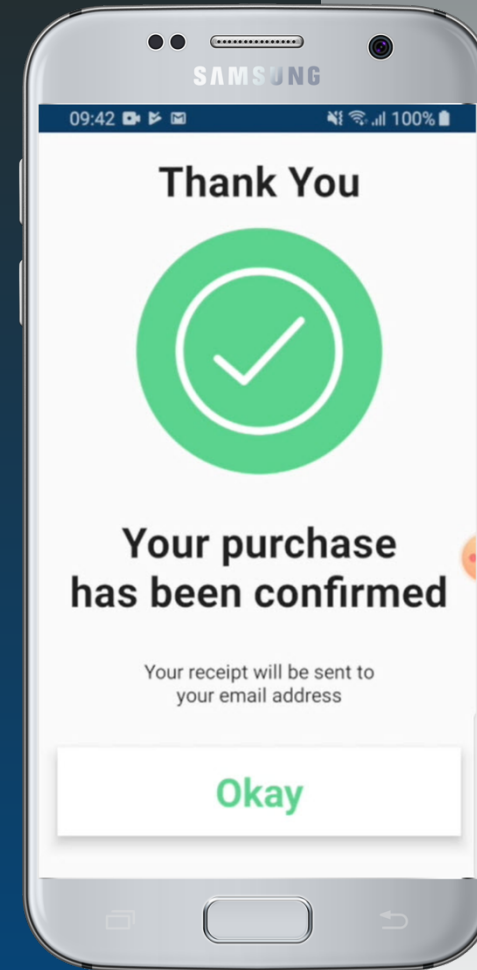
- Is the customer scanning the right items and quantities?
- Is everything paid for when the customer leaves?

are dealt with depending on the retailers' specific processes

Today, in the app

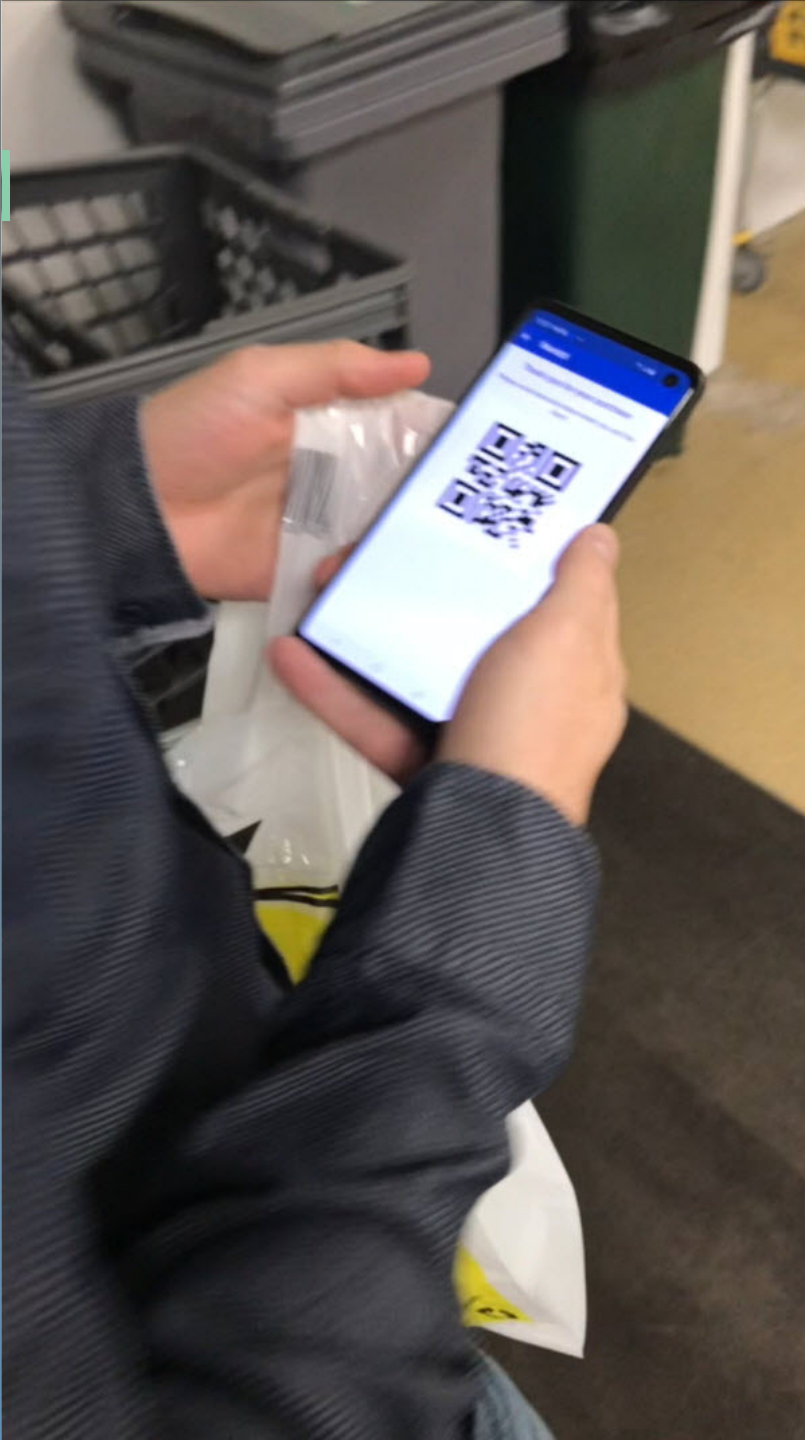
- After payment, two types of messages can be displayed:
 - Customer can leave
 - A store employee must first verify payment
- You can include a QR code to open a gate to leave

This process will be finalized with each retailer



Where do we go from here?

- Send your feedback – we love it..
 - Add click-and-collect?
 - Add recipes?
 - Face ID recognition to identify customer and age?
 - And more wild ideas...
- Finalize version one based on ideas and trial prototypes
- Go for a pilot for rollout – anyone interested?
- Stay tuned ...





LS Central

Questions?





Thank you!