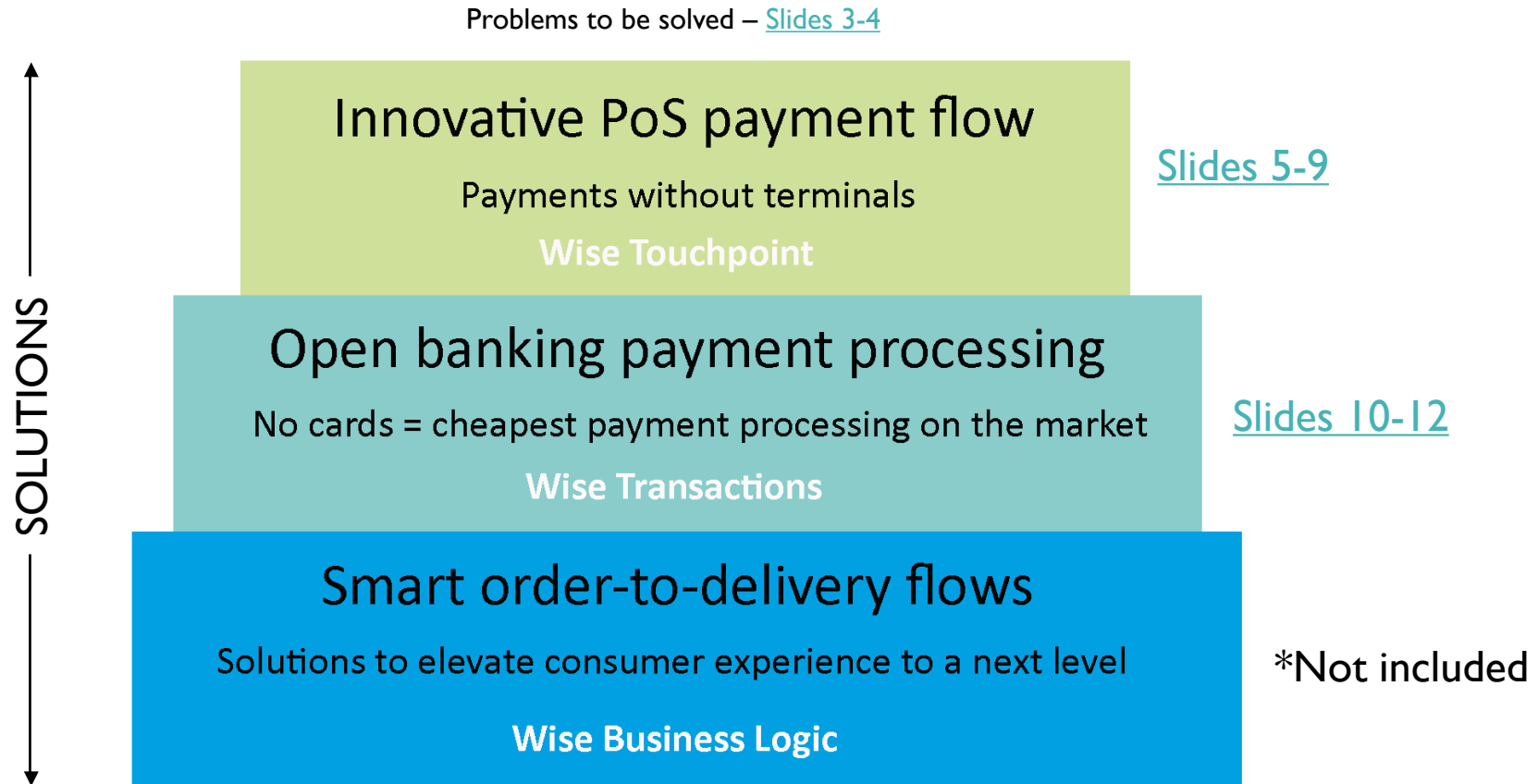


**Wise**

# WISE PLATFORM – BUILDING BLOCKS



# PROBLEM STATEMENT



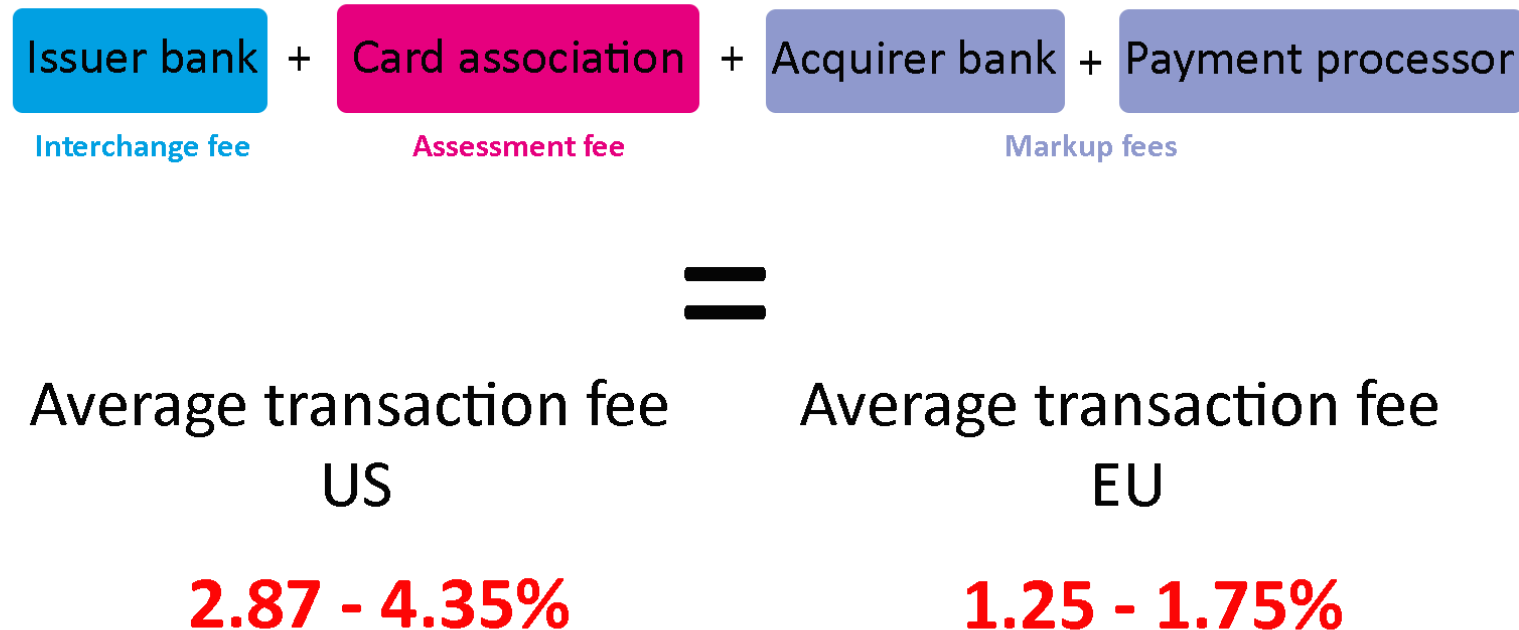
## CARD PAYMENTS

ARE **INEFFICIENT** AND **EXPENSIVE** FOR **MERCHANTS** TO PROCESS

- FOUR, SOMETIMES MORE PARTIES ARE INVOLVED IN PAYMENT PROCESSING.
- EACH PARTY CRAVES FOR PIECE OF THE **PAY**, LEADING TO HIGH TRANSACTION FEES
- ON TOP OF TRANSACTION FEES, EQUIPMENT, SERVICE AND OTHER PROCESSING RELATED COSTS

# PAYMENT FEES FOR MERCHANTS

What's included in the card payment transaction fee?



# WISE TOUCHPOINT. PAYMENTS WITHOUT POINT-OF-SALE TERMINALS.

- Card terminals are expensive at Point of Sale
  - one-time costs (purchasing, rent, installation)
  - and reoccurring costs (PCI-compliance fees, network, service, ...)
  - other costs (service termination fee, transaction reports, ...)
- **Wise** solution is to get rid of the terminals altogether, use smartphones!
- Introducing two Wise Point of Sale solutions:
  - [Touchpoint Tag](#) (NFC) and [Wise Beacon](#) (BLE)

# WISE TOUCHPOINT TAG REPLACES TERMINALS AT POINT-OF-SALE

*Tables have been turned.*

*Payment processing moves from card terminal to smartphone!*

## Touchpoint Tag

Consists of:

1. Programmed NFC tag, e.g NTAG213/215/216
2. Printed out QR code

Includes:

1. Transactions details or
2. Basket-ID for Point of Sale or
3. Merchant Business logic link

*Is used to initiate transactions.  
Cheap. Replaces terminals!*



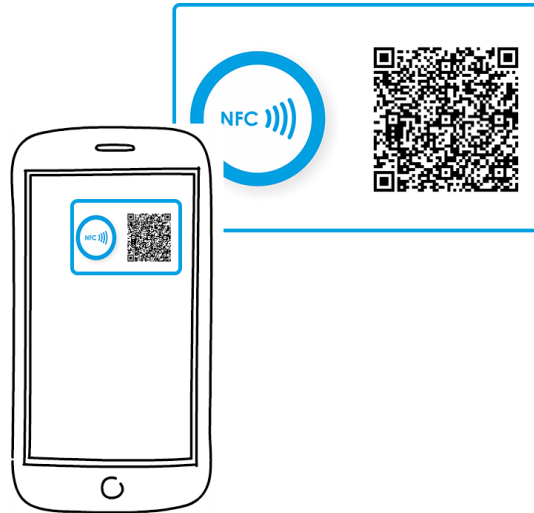
Payment terminal	Touchpoint tag
Purchase of equipment >\$50	Cost of a tag <\$1
Installation fee+	<b>No additional costs</b>
Network fees+	
PCI compliance fees+	
+ ... other fees	

## Payment process @ Point-of-Sale

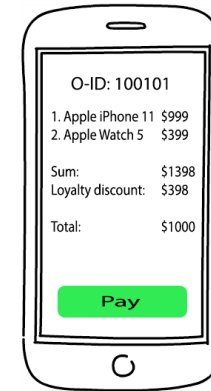
1. Merchant initiates payment process at Point-of-Sale terminal or Smart Device. Basket info to Cloud.



2. Consumer starts payment via scanning NFC tag (or QR code). Includes Basket ID.



3. Retrieve payment information from Cloud (via Basket ID)

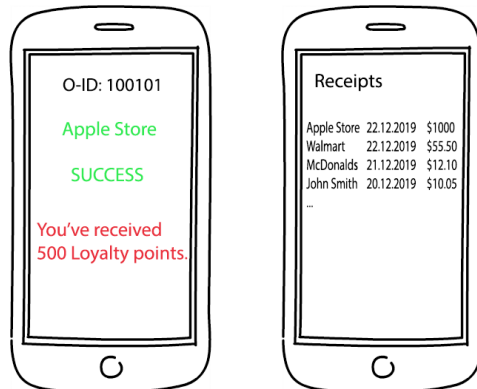


5. Payment processing in Cloud (via API-s, account-to-account, other)

6. Payment and feedback notification to merchant (via API PoS and/or Push notification to phone)



7. Confirmation of purchase and e-Receipt to consumer transaction history

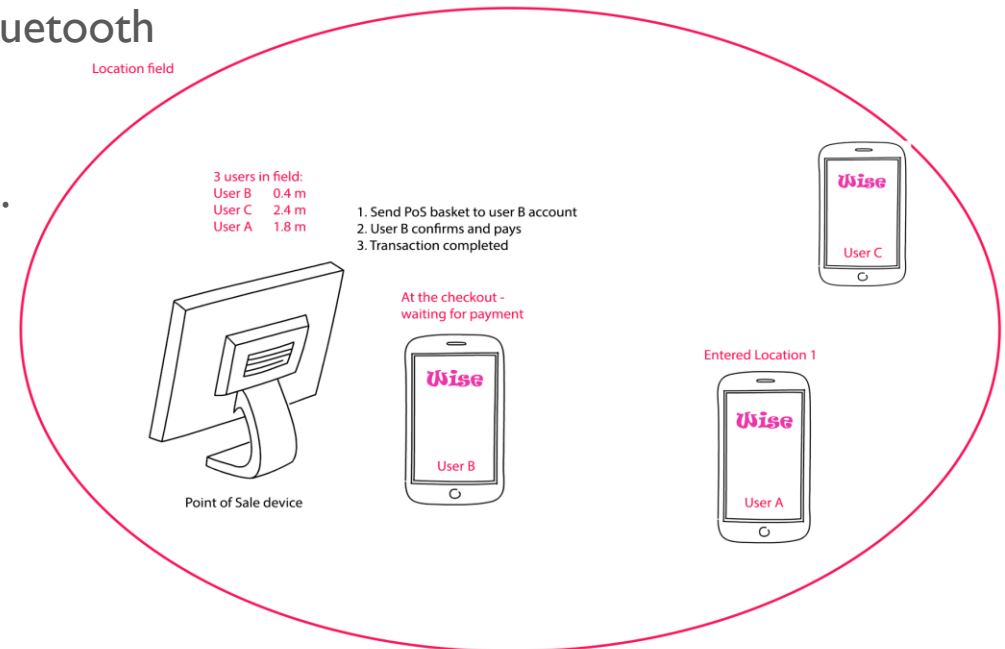


# WISE TOUCHPOINT BEACON. LOCATION BASED PAYMENT SYSTEM.

- Use Bluetooth LE Beacons at Point of Sale (*iBeacon and Eddystone*)
- Localization and Payment processing through Wise app and Cloud services
  - No private transaction details transmitted over Bluetooth
  - Smartphone acts as Locator and Communicator
  - Multiple safety checks in payment process! Secure.

*\*Possibilities to support in-pocket payment processing!*

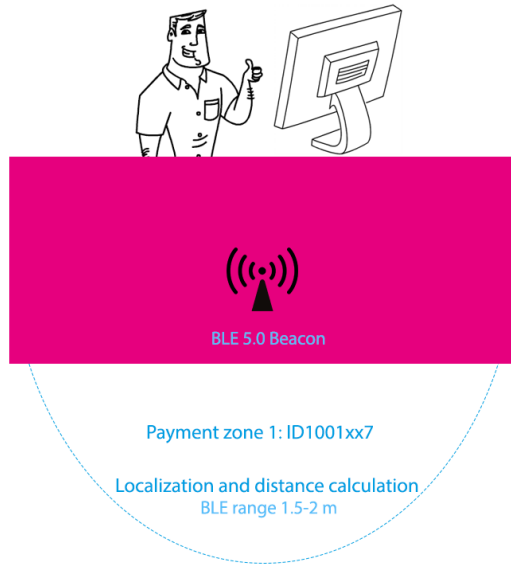
**Programmable Bluetooth 5.0 LE beacon tags can be purchased as low as \$3 at scale!**



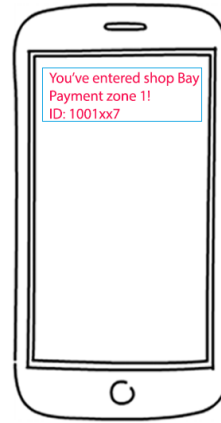


**\*Both Bluetooth and Mobile Internet need to be turned on smartphone!**

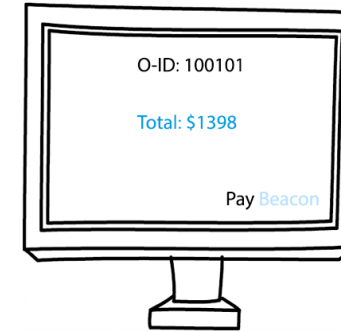
1. Point of Sale powered with Wise Beacon



2. Wise powered smart device enters Beacon range. Notification on phone. Registration to Cloud.

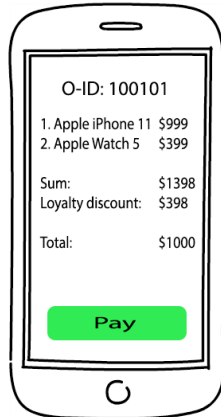


3. Point-of-Sale device is notified about consumer Wise Beacon payment capability. Pay Beacon!



4. Merchant Point of Sale Basket contents are uploaded to Cloud and registered with Consumer account

5. Payment basket details are forwarded to consumer mobile phone for confirmation. Confirm - Pay!

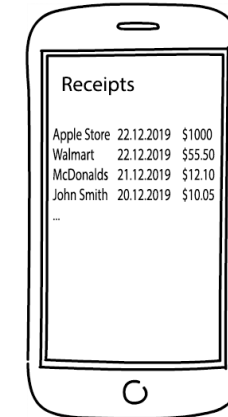
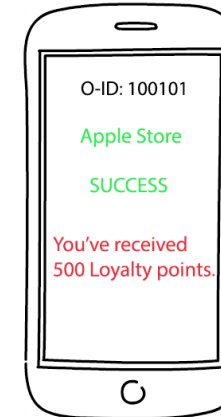


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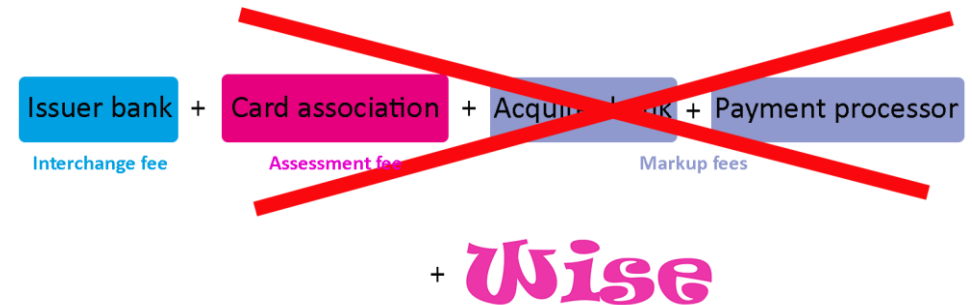


8. Confirmation of purchase and e-Receipt to consumer transaction history



# WISE TRANSACTIONS. SOLUTION FOR PAYMENT PROCESSING.

- Wise solution is a innovative payments scheme
- **No cards, no terminals and no card payment networks**
- Based on Internet connected smartphones, NFC touchpoint tags & Bluetooth beacons
- Multiple backend models for payment processing
  - European model based on Open banking (PSD2)
  - American model is decentralized based on ACH
  - ...
- Less stakeholders. Higher margins.



# WISE TRANSACTIONS. EUROPE GOES OPEN BANKING.

PSD2

- Open banking environment
- APIs as a key enabler
- Open access to bank account data & payment initiation

- Payment Services Directive 2 (PSD2) implemented in EU - September, 2019
  - Open banking and Strong Customer Authentication (SCA)
  - Bank customers own their banking data and are able to share with third party Account Information (AISP) and Payment Initiation Service Providers (PISP)
  - Third party providers use Open banking API-s to manage client bank accounts: real-time account information and payment initiation (SEPA credit transfer)
- Berlin group standardizes Open banking API implementation (**NextGenPSD2**)
- **Opens new possibilities for SEPA wide payment processing!**

PSD2 overview - [https://ec.europa.eu/info/law/payment-services-psd-2-directive-eu-2015-2366\\_en](https://ec.europa.eu/info/law/payment-services-psd-2-directive-eu-2015-2366_en)

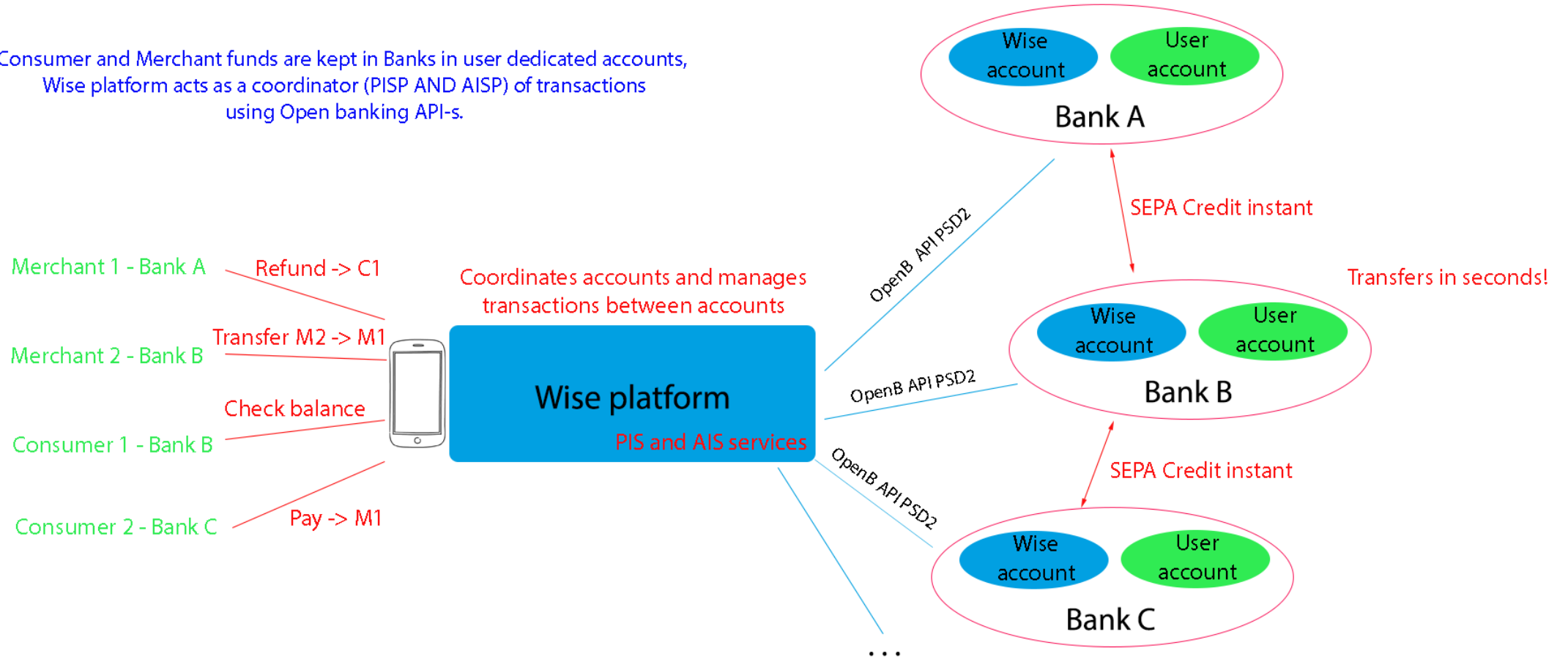
Berlin group NextGenPSD2 initiative - <https://www.berlin-group.org/psd2-access-to-bank-accounts>





# Open Banking model

Consumer and Merchant funds are kept in Banks in user dedicated accounts,  
Wise platform acts as a coordinator (PISP AND AISP) of transactions  
using Open banking API-s.



# SCAN-TO-PAY FLOW

1.1 Touchpoint generated via Wise App or Merchant specific logic

Generate NFC or QR code

Delivered via screen, printout or other



2. Consumer scans the NFC or QR code data sent to App

Scan NFC or QR

2.1 Simple flow: confirm & pay

2.1 Advanced flow: Business logic



Business Logic

3. Payment via App

Payment

3.1 Payments processor

- 1. Open Banking (PSD2) API AIS & PIS bank-to-bank transfer
- 2. Intra app account-to-account transfer
- 3. Other payment service

QR has a Type:

- Simple (account credentials)
- Simple transfer (account + amount + description)
- PSD2 API bank compliant transfer
- Custom advanced (user defined fields)
- Link to Business Logic

NFC tag includes a transaction Basket ID URI or link to Business Logic