

CS Speaker's Series

Fast payment systems

topics

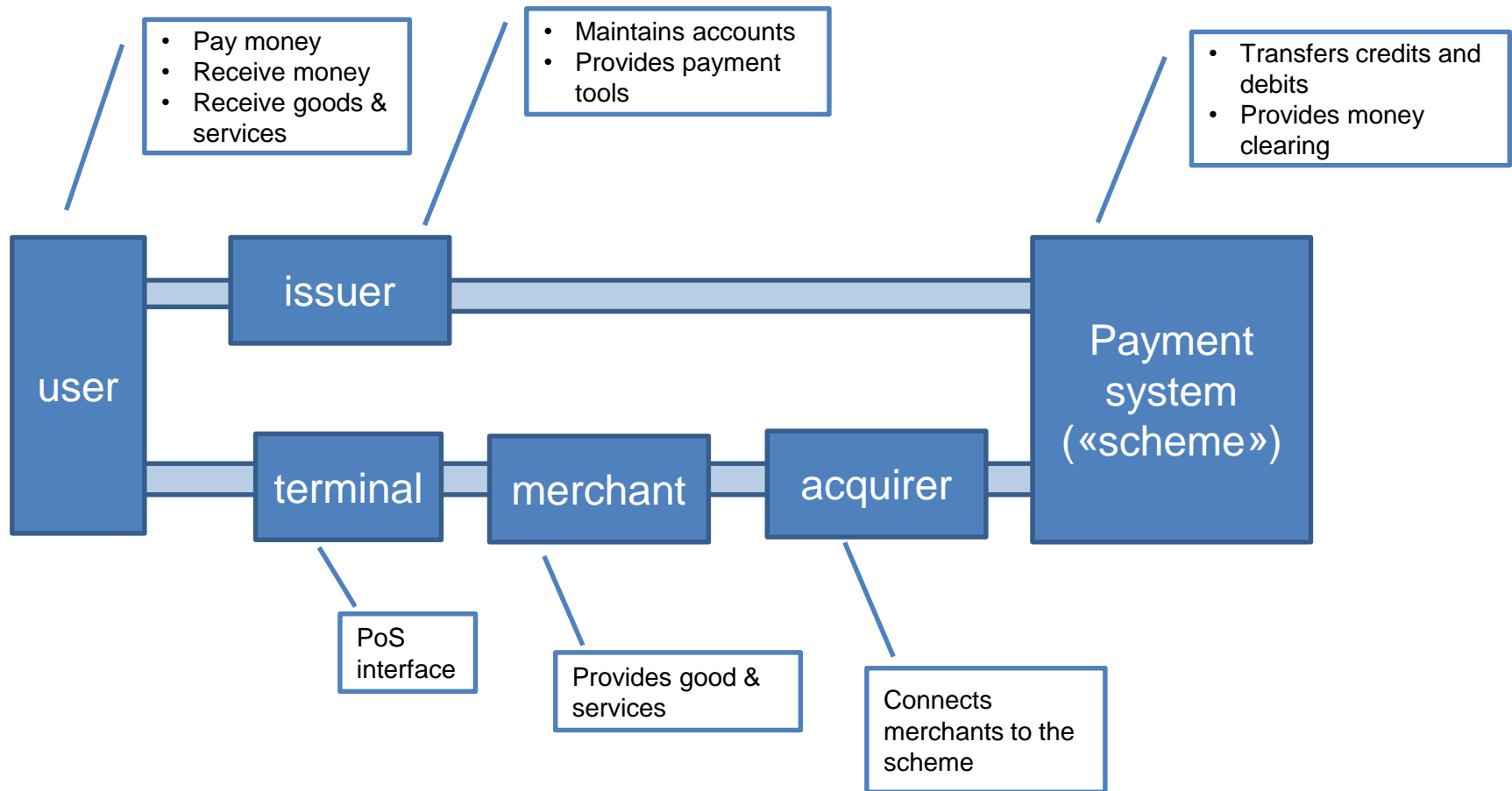
- Products (CH)
 - Paymit
 - Twint
 - Migros Bank
 - Schnellservice PostFinance
 - Bellamy (Swatch)
 - Apple Pay
 - PayPal
- PIN-less PoS payments
- Comparison
- Theses

Further similar services

- | | |
|----------------------|------------------|
| - Google Android Pay | P2M, not yet CH |
| - Pingit | P2P, Barclays UK |
| - Alipay | P2M, CN |
| - WeChat Wallet | P2M, CN |



Payment system related roles



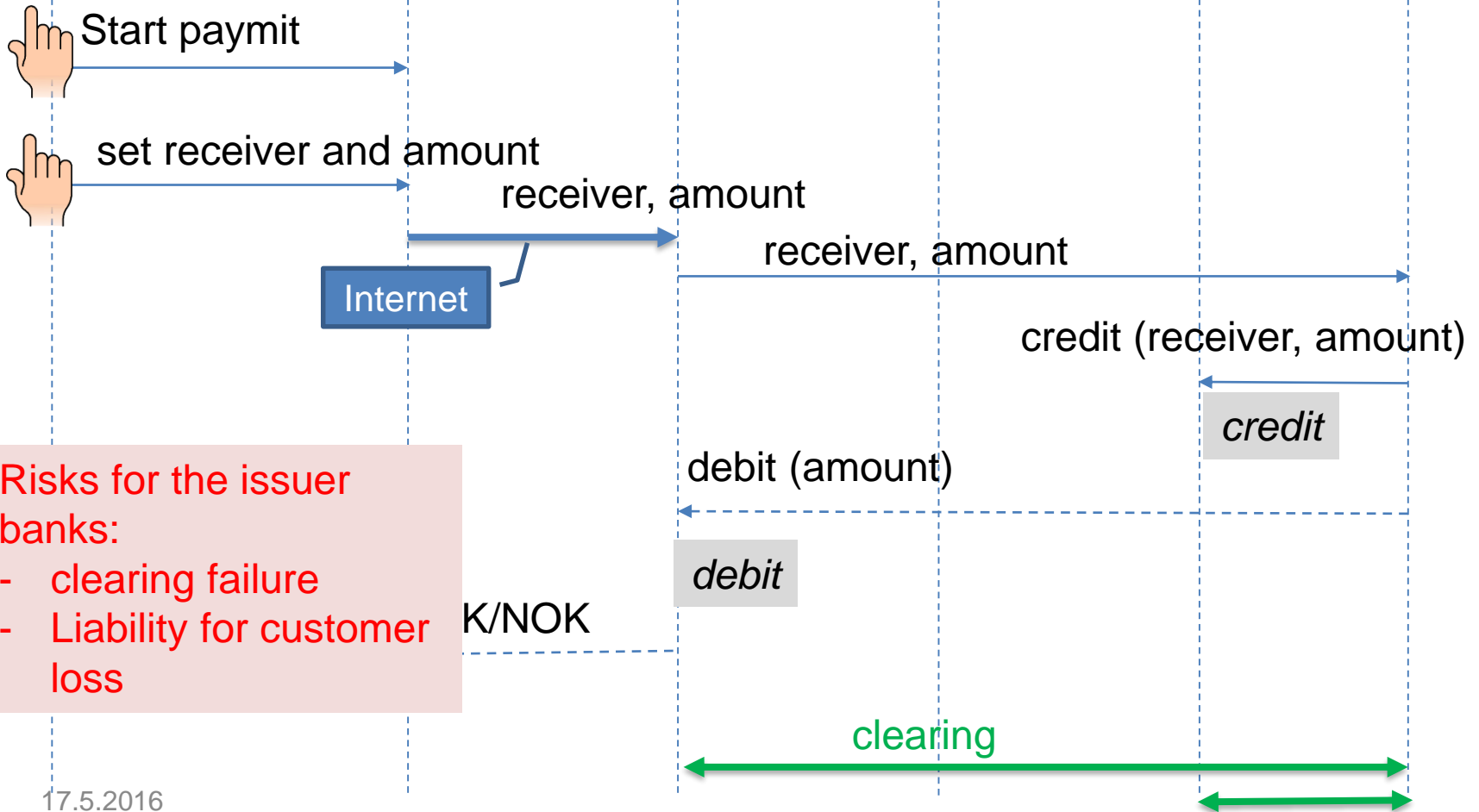
paymit

- function
 - P2P
 - P2M (merchant)
- Issuer
 - Banks
 - SIX
 - (credit cards)
- Merchant Interaction
 - manual
 - QR-Code
 - In-App payment

Paymit (P2P): send money

Bank (account)
or SIX (pre-paid)

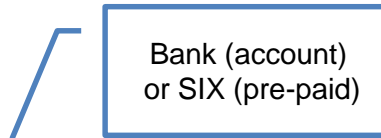
User Paymit App 1 Issuer 1 Paymit App 2 Issuer 2 Scheme



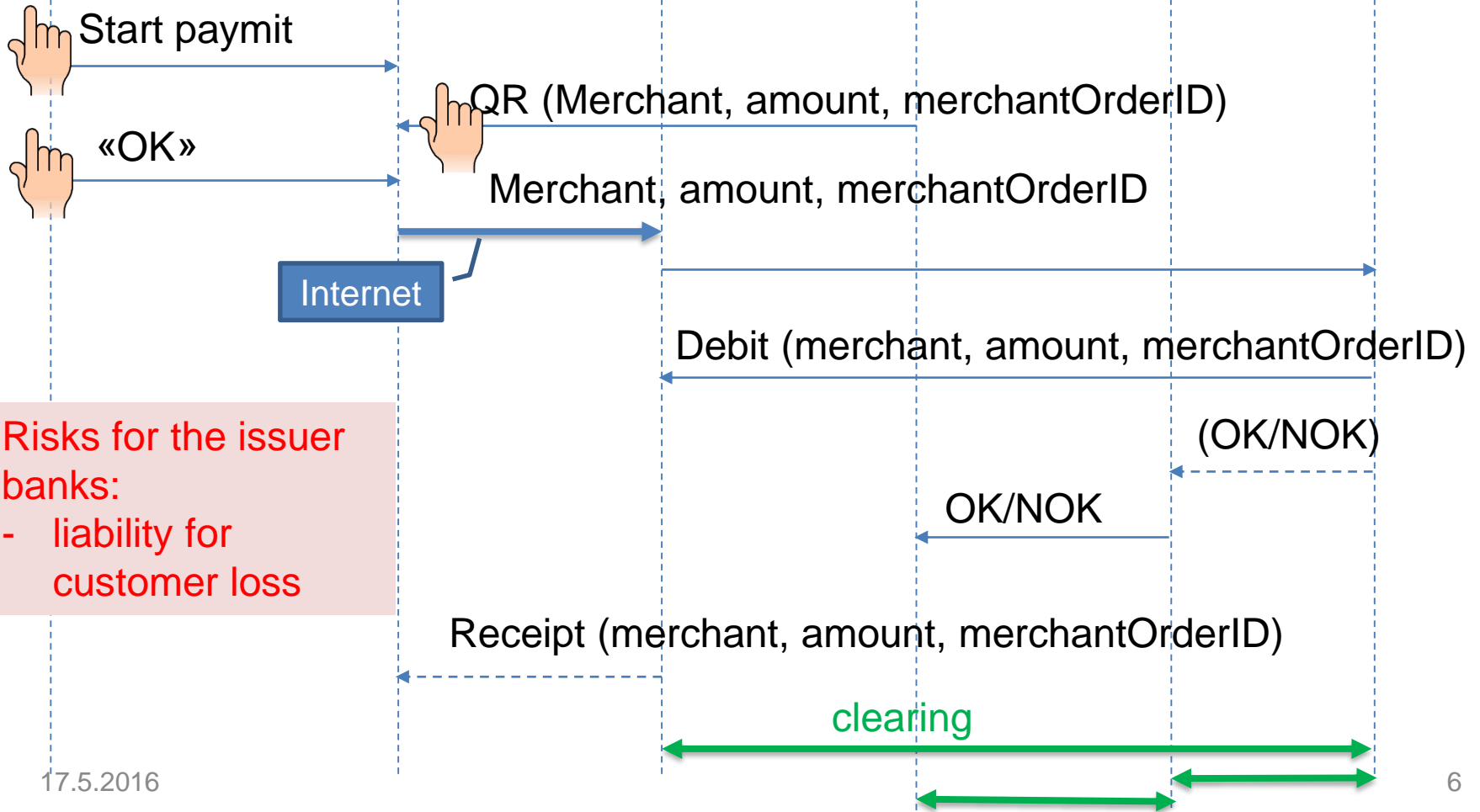
Risks for the issuer banks:

- clearing failure
- Liability for customer loss

Paymit (P2M), PoS case



User Paymit App Issuer Merchant Acquirer Scheme



Risks for the issuer banks:
 - liability for customer loss

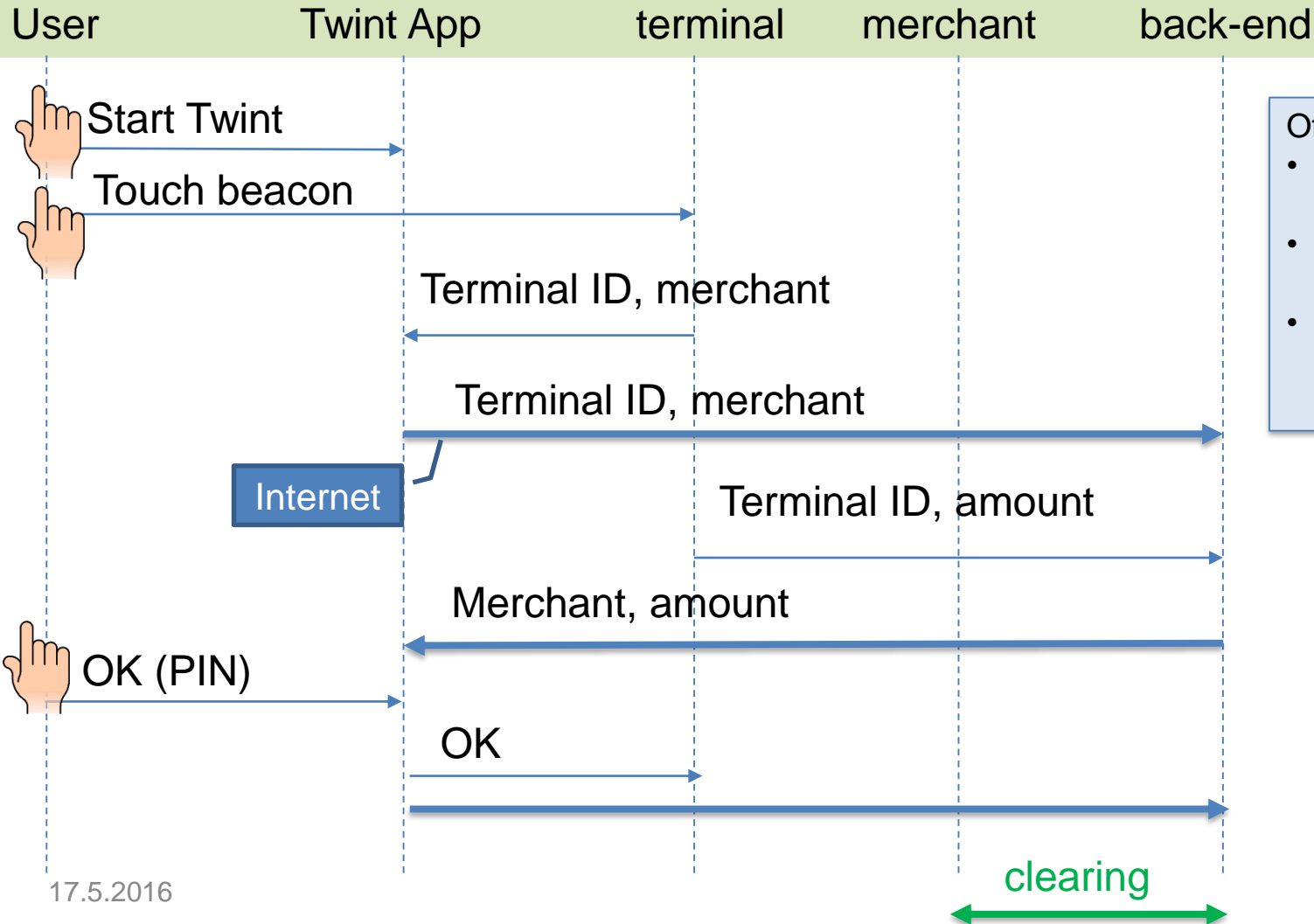


Twint

- function
 - P2P
 - P2M (Merchant)
- Issuer
 - Twint
- Merchant interaction (PoS)
 - BLE for SmartPhone to terminal
 - Internet for SmartPhone to Twint
 - Offline facility for SmartPhone



Twint PoS



Offline mode :

- Debit on next Internet access
- PIN entry required for all transactions
- Detailed interaction unknown

Migros und Migros Bank

- MobilePay P2P, P2M
 - Part of the **Mobile Banking App**
 - Debit and credit to banking account, credit card or PayPal
- E-Pay in Online Shop (P2M)
 - Debit to MB account
 - Identification via «E-Pay-ID»
 - Confirmation via **Mobile Banking App** (or html client)
- Payment with the **Migros App** (P2M), PoS
 - Works in Migros-Supermärkten and -Fachmärkten
 - Debit to MB account or credit card
 - App generates a QR-Code, presented to cashier terminal, debits the account

Risks for the issuer bank:
- liability for customer loss



Schnellservice Postfinance

- Function
 - P2P (PostFinance account)
- Issuer
 - PostFinance
- User interface
 - From a registered PostFinance App
 - SMS from a registered telephone number

Risks for the issuer bank:
- liability for customer loss

Bellamy (Swatch)

- Function
 - P2M (merchant)
- Issuer
 - Corner Bank (prepaid)
- Merchant interaction (PoS)
 - NFC interaction with cashier terminal

Risks for the issuer bank:
- liability for customer loss



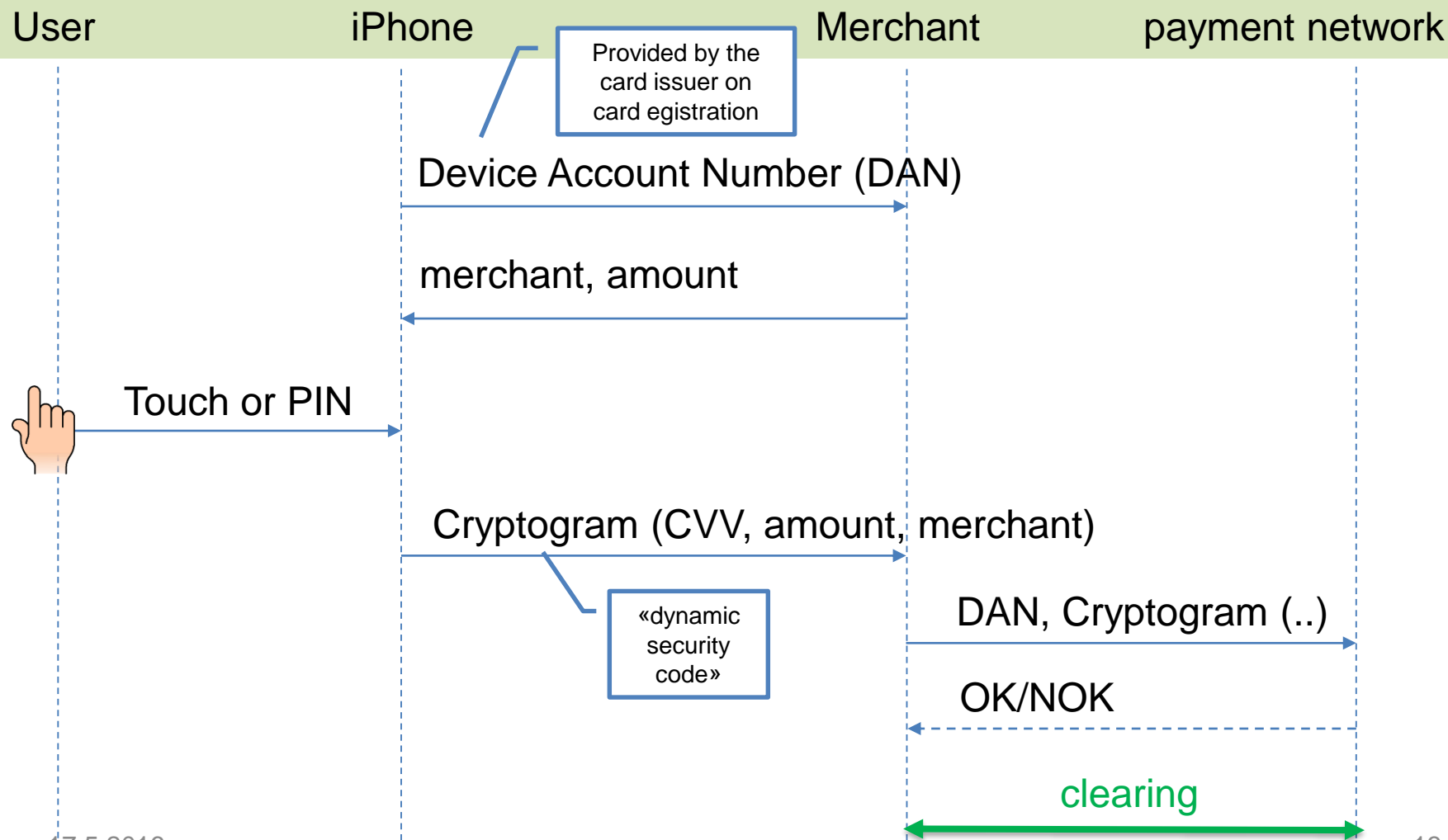
Apple Pay

- Function
 - P2M (merchant)
- Issuer
 - Apple (via credit card)
- Merchant interaction (PoS)
 - iPhone
 - automatic App start (NFC initiated) or integration into merchant Apps
 - TouchID payment activation
 - Apple Watch
 - NFC interaction with cashier terminal
 - Limits and PIN required in some countries

Not yet available in CH



Apple Pay with iPhone, PoS





Paypal

- Function
 - P2P
 - P2M
- Issuer
 - PayPal
- Merchant interaction
 - In-App payment

PIN-less PoS payments

- Scenario
 - Touchless credit card or prepaid payments
- Well-known examples
 - MC: «paypass»; Visa: «payWave»
 - Ticketing machines SBB
 - Parking
 - Swatch Bellamy
 - outside CH prepaid
 - Octopus in Hong Kong
 - ..
- **Specific weaknesses**
 - **minimum customer interaction**
 - Compensating controls required
 - Proximity sensors
 - Limitations on transactions

Comparison of the offerings

		Paymit		Twint	Migros Bank			Postfinance	Apple	PayPal	PIN-less	
		P2P	P2M		Mobile Pay P2P	E-Pay	Migros App	Schnellservice	Apple Pay		paypass, payWave	Bellamy
Device protection												
	PIN	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no
	binding to device	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
PoS Security												
	proximity	n/a	no	yes	no	no	no	no	yes	no	yes	yes
	manual App start	n/a	yes	yes	yes	yes	yes	yes	no	yes	no	no
	manual "go"	n/a	yes	yes	yes	yes	yes	yes	yes	yes	no	no
banking												
	Debit account	yes	yes	no	yes	yes	yes	yes	no	no	no	no
	credit card	yes	yes	no	yes	no	yes	no	yes	yes	yes	no
	prepaid	yes	yes	yes	no	no	no	no	no	yes	yes	yes
	immediate credit	yes	no	yes	yes	yes	yes	yes	no	no	no	no
	single bank	no	no	no	yes	yes	yes	yes	no	no	no	yes
PoS w/o Interet		n/a	no	yes	no	no	yes	no	yes	no	yes	yes
		legend	security issue									
			usability issue									
			OK									

The theses

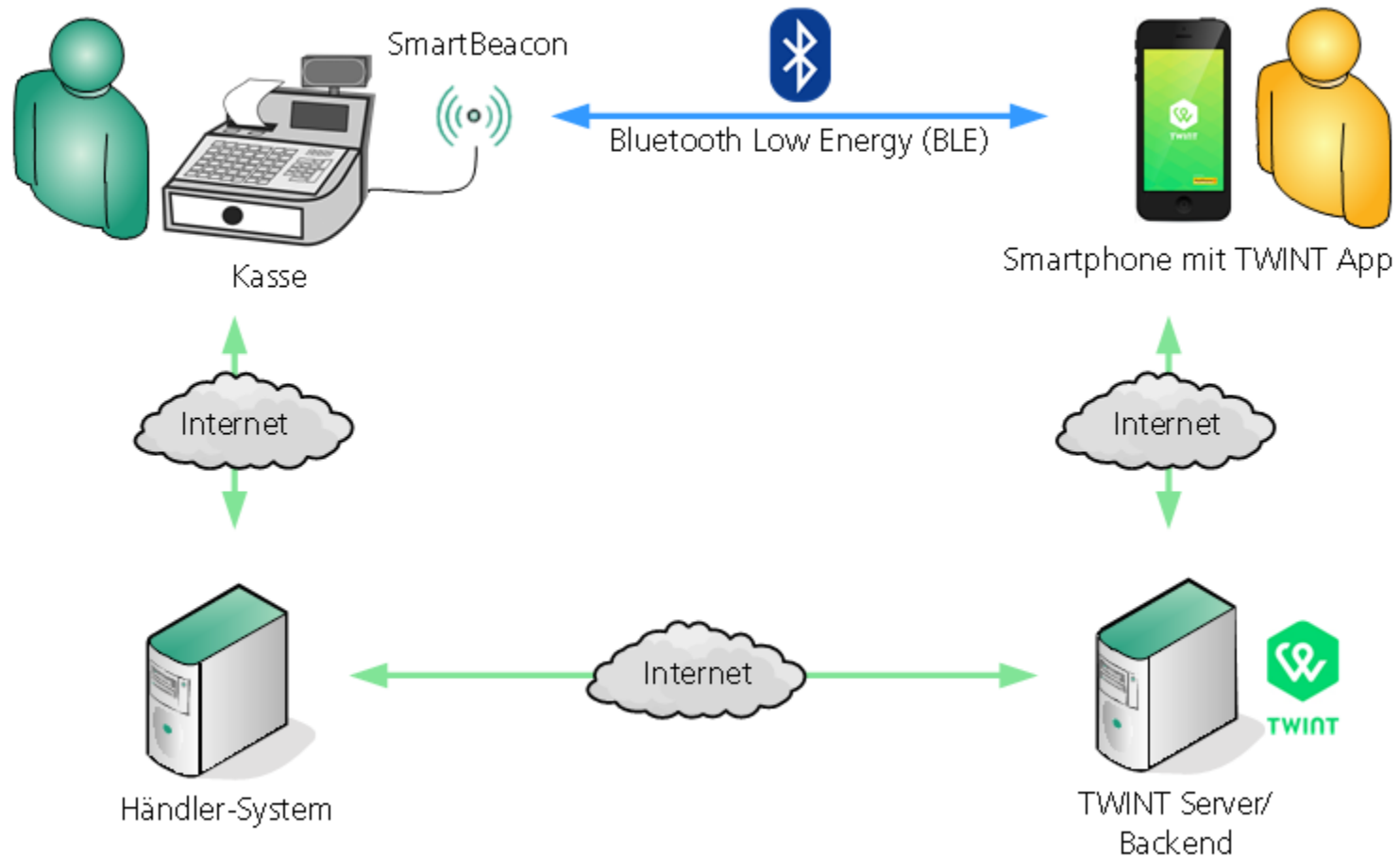
1. The ultimate CH «fast payment» system ist yet to be invented
 - Once there, the system will be widely used.
 - ... or vice-versa
2. Login to a bank is an obstacle for fast payments
 - Too clumsy
 - Opens too many doors
3. Banks still have a good position for playing in this field
 - They can provide direct access to accounts
 - But they should provide a «fast payment» service without a full login

Danke

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Twint Setup (AdNovum)



http://www.adnovum.ch/wissen/focus/projekte/twint_sicheres_bezahlen_per_smartphone.html