

An Exploratory Study of User Perceptions of Payment Methods in the UK and the US

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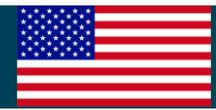
Background

UK



- EMV ('Chip-and-PIN') first introduced in 2004, made mandatory in 2006
- RFID-based contactless cards introduced in 2010-11, spending limit initially £20, now £30

US



- Chip-and-PIN is being gradually rolled out, one of the last adopters
- Swipe-and-Sign is the most common way of authenticating a purchase at a Point of Sale (POS)

Study aims

- Compare experiences of different payment methods in the UK and the US
- Learn how participants have appropriated payment technologies into every-day practices
- Identify any UK findings that help predict challenges for US adoption of Chip-and-PIN

Study set-up

- 40 semi-structured interviews (30 min. duration)
 - 20 participants in London (UK)
 - 20 in Manhattan, KS (USA)
- Demographics
 - UCL: 38.4 years on average (range: 24-65)
 - KSU: 36.5 years on average (range: 20-65)
- Interviews transcribed and coded
 - Codebook developed

Habits and experiences inform behaviours

- Items motivate payment behaviours
- Personal assessment of merchant trustworthiness
 - Both in-person and online
- Changing PINs over multiple cards
- Avoidance of credit cards in order not to go into debt (4 UK, 2 US)

Rewards motivate use of cards

- A prevalent theme for both US and UK participants
- *“I heard that [...] you have to build credit to buy bigger stuff later...”* (P:US01)
- *“ [...] one month I use one credit card and another month I use the other one. [...] I can juggle these around”* (P:UK04)
- Rewards also motivate *adoption* of new cards or technologies

False positives provide feeling of protection

- Feeling of protection, despite inconvenience
“I travelled a little bit [...] entering different countries [...] if I crossed a border, again it wouldn’t work and I had to ring them again [...] that was a bit of a pain but again quite reassuring that they keep an eye on what I was doing.” (P:UK03)
- Absence of calls from bank seen as a lack of vigilance

Users manage an ‘approximation’ of security

- Approx. 1/3 of US and UK participants used credit cards for online transactions
- *“I feel more secure with the credit card because I’ve had my credit card number stolen in the past and I know that [...] I can call them and they will, you know, revoke the transaction and I don’t have to worry.” (P:US08)*

Attitudes towards Swipe-and-Sign

- Seven UK participants felt Swipe-and-Sign was less secure than Chip-and-PIN
- Signature can be forged easily (3 US, 3 UK)

“well I think the signature thing is completely ridiculous right now... nobody checks it... I think that one is completely outdated and should be replaced somehow.” (P:US11)

Attitudes towards Chip-and-PIN

- UK participants found it acceptable and more secure: *“Chip-and-PIN is just a lot more sensible. I think it’s because it’s a lot more encrypted and not so open to abuse. People can always forge signatures.”* (P:UK09)
- Lack of experience by US participants: *“I don’t know... I honestly don’t know what that chip is for. I don’t know!”* (P:US08)

Attitudes towards contactless (UK only)

- Eight participants stressed the convenience factor
- Six participants stressed that not every POS supports contactless
- Two participants emphasised that learning how to use it might be costly since it is easier to make accidental purchases

Experiences of Fraud

- Five UK and six US participants reported having experienced actual fraud

“they’d spend about £600 at certain stores [...] And the bank said that the PIN number had been entered. So I had quite an argument with them.”
- Otherwise participants tended to know somebody who had experienced fraud
 - That somebody would offer advice as well

Summary of findings

- Habits and experiences inform behaviours
- Attitudes about payment cards also informed by purchase situation
- Rewards motivate use of cards
- False positives provide feeling of protection despite inconvenience
- Users manage an ‘approximation’ of security
- Experiences of fraud

Future work

- Conduct similar studies in different cities/countries
 - Including structured follow-on survey
- Use direct observation of log data to capture complex payment behaviours
- Invite participants from a wider range of backgrounds (educational, socio-economic)
- Explore role of choice in payment technologies
 - A great diversity in perceptions in our sample

Conclusions

- Purchasing habits and rewards motivate card use
- Participants liked being in control of their payment methods – can result in complex payment behaviours
- Participants preferred to be inconvenienced rather than be insecure

Thank you!

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