Fraudsters and eCommerce:

A complicated relationship

Conference&Expo ABI-Consorzio BANCOMAT "CARTE 2014

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Agenda

1. Fraudsters favourite place to work
2. Fraudsters habits
3. The problem in figures:

   Worldwide

   Italy

   UK

   Brasil

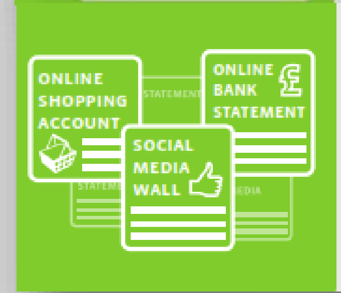
   China
4. Market approach

Taking a coffe...

1 The fraudster sits in a coffee shop using his or her laptop to create a Wi-Fi hub that's identically named to the venue's legitimate Wi-Fi hotspot.

2 Coffee shop customers log onto the fraudster's hotspot, which contains malware that allows the fraudster to access their machine whilst he is sitting at a nearby table.

3 The fraudster accesses the customer's online accounts whilst sipping a latte at the same time hacking their password using fraudster cryptography tools such as Cain & Abel.



4 Customer leaves the coffee shop and fraudster moves onto his next victim all the while amassing access to online accounts for online banking, online retail and social media ready for exploitation.

And of course, this isn't just done in coffee shops but also shopping malls, on trains, in bars, libraries, airports...

"I use a mixture of hi-tech and old school tricks to steal identities. In the summer I likes to get out for a stroll and lift bank statements from hi-density housing postboxes but the coffee shop routine gives me richer data and deeper access to my victim's financial identity."

Convicted Fraudster

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The local government census:
The fraudster always knocks twice

1

Fraudster selects a neighbourhood or series of streets to target and begins to build the confidence trick by putting leaflets through letterboxes the day before to advertise the census and give his gang an air of legitimacy.

2

The fraudster's gang work in teams and canvas a street. Hand-picked to match the demographic of the neighbourhood, dressed in suits, with badges and letterheads to announce their (bogus) credentials, they figure on a one in four success rate for harvesting name, address, date of birth length of tenancy, email address and other data-points they need to commit fraud.

"We would teach them which houses on a street to target and which ones not to bother with. Basically the ones with nice cars we would go for and the ones with the crappy old banger on the drive we would avoid as that was a good tell for what they had in the bank"

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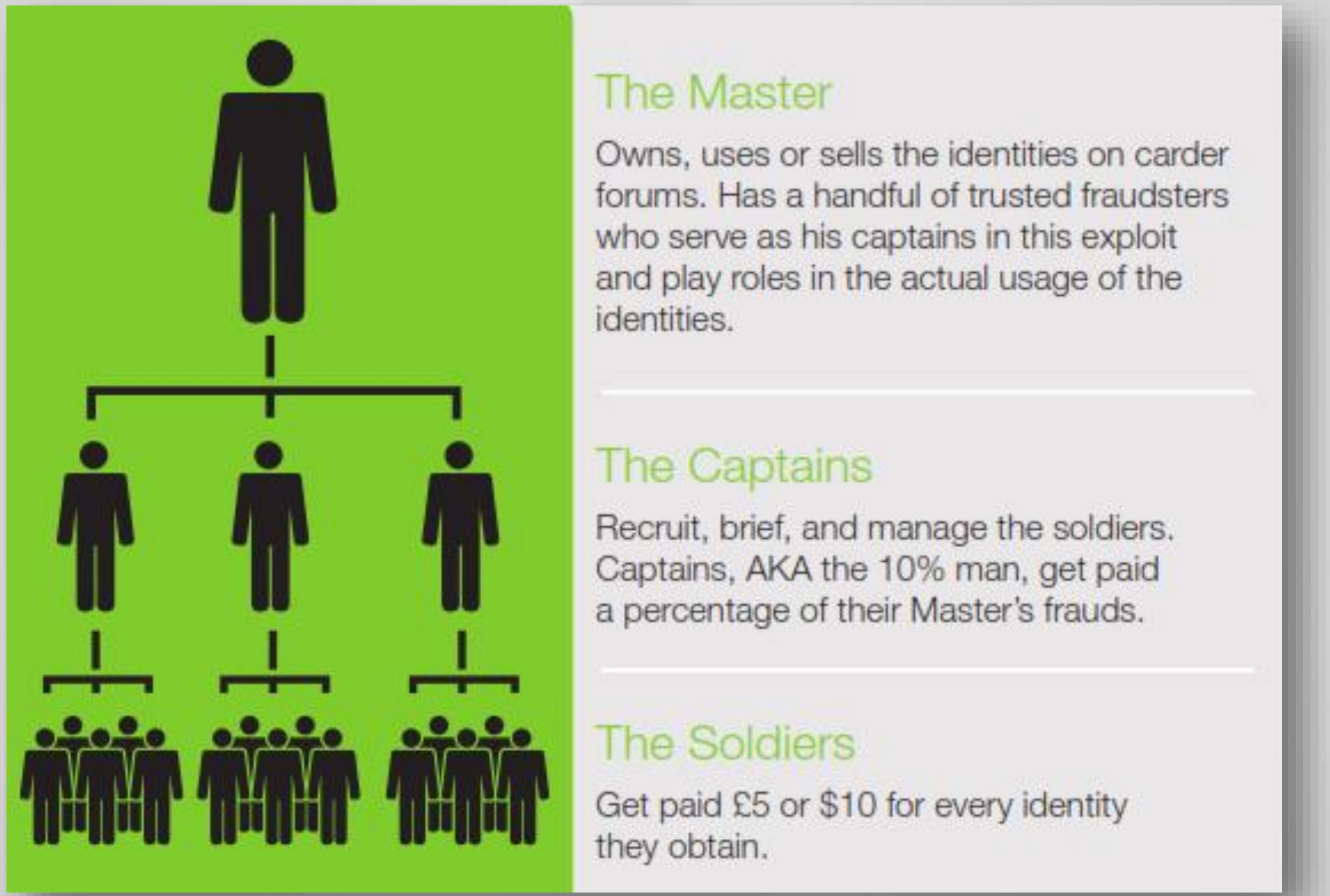
The local government census: The fraudster always knocks twice



The Master

Owns, uses or sells the identities on carder forums. Has a handful of trusted fraudsters who serve as his captains in this exploit and play roles in the actual usage of the identities.

The Captains

Recruit, brief, and manage the soldiers. Captains, AKA the 10% man, get paid a percentage of their Master's frauds.

The Soldiers

Get paid £5 or $10 for every identity they obtain.

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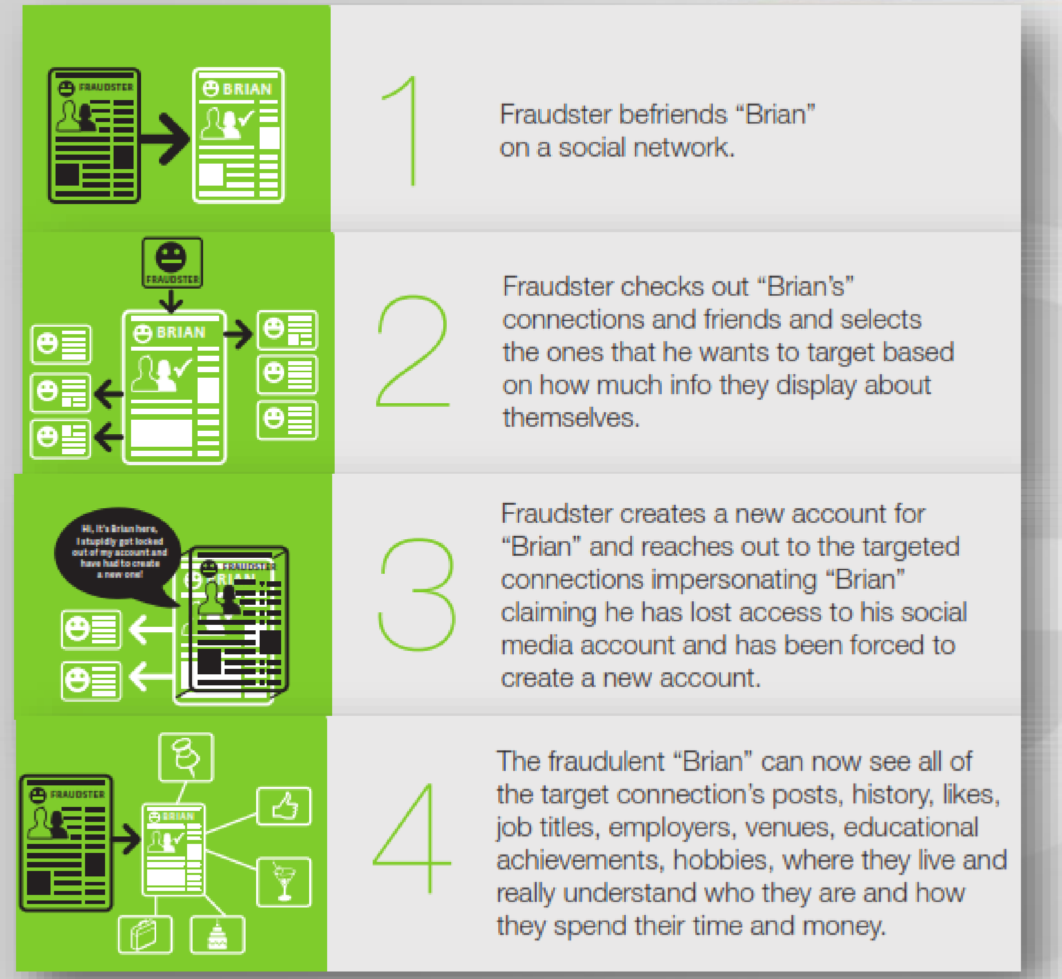
Social media techniques:
My virtual friend, the real life fraudster


FRAUDSTER
BRIAN
FRAUDSTER
BRIAN
Hi, it's Brian here, I stupidly got locked out of my account and have had to create a new one!
FRAUDSTER
BRIAN
FRAUDSTER
BRIAN

1 Fraudster befriends "Brian" on a social network.

2 Fraudster checks out "Brian's" connections and friends and selects the ones that he wants to target based on how much info they display about themselves.

3 Fraudster creates a new account for "Brian" and reaches out to the targeted connections impersonating "Brian" claiming he has lost access to his social media account and has been forced to create a new account.

4 The fraudulent "Brian" can now see all of the target connection's posts, history, likes, job titles, employers, venues, educational achievements, hobbies, where they live and really understand who they are and how they spend their time and money.

"My favourite targets on social media tend to be people born between 1960 and 1975. They are into social media enough to have a decent amount of data on their wall or profile but are not Internet savvy enough to protect themselves.

Plus they are the perfect age to still have a good credit history and line of credit, still be economically active and also to be time-poor which makes it easier for me to con them."

Convicted Fraudster

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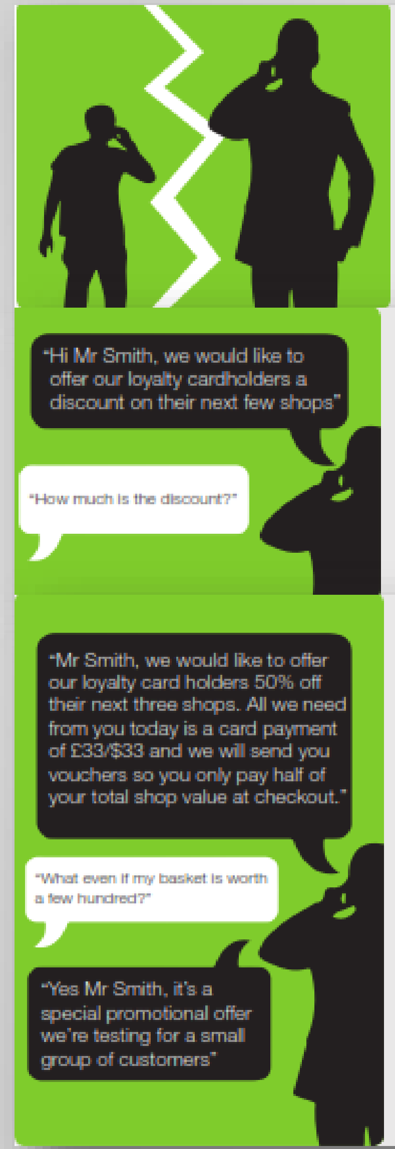
The loyalty discount offer: If it looks too good to be true...

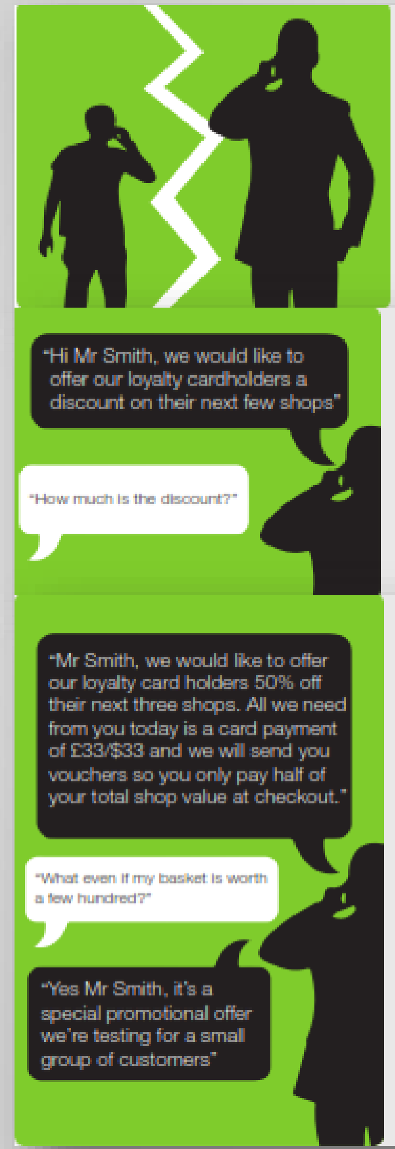

"Hi Mr Smith, we would like to offer our loyalty cardholders a discount on their next few shops"
"How much is the discount?"
"Mr Smith, we would like to offer our loyalty card holders 50% off their next three shops. All we need from you today is a card payment of £33/$33 and we will send you vouchers so you only pay half of your total shop value at checkout."
"What even if my basket is worth a few hundred?"
"Yes Mr Smith, it's a special promotional offer we're testing for a small group of customers"

1 Fraudster calls his "target" from the phone book.

2 Fraudster engages their target by masquerading as a major supermarket.

3 Fraudster makes their target "an offer they can't refuse". The fraudster promises unfeasibly attractive discounts off future purchases in return for a small cash payment taken via the card. The fraudster then obtains the card number and necessary details to go on to do fraud with their target's identity.

The loyalty discount offer:
If it looks too good to be true…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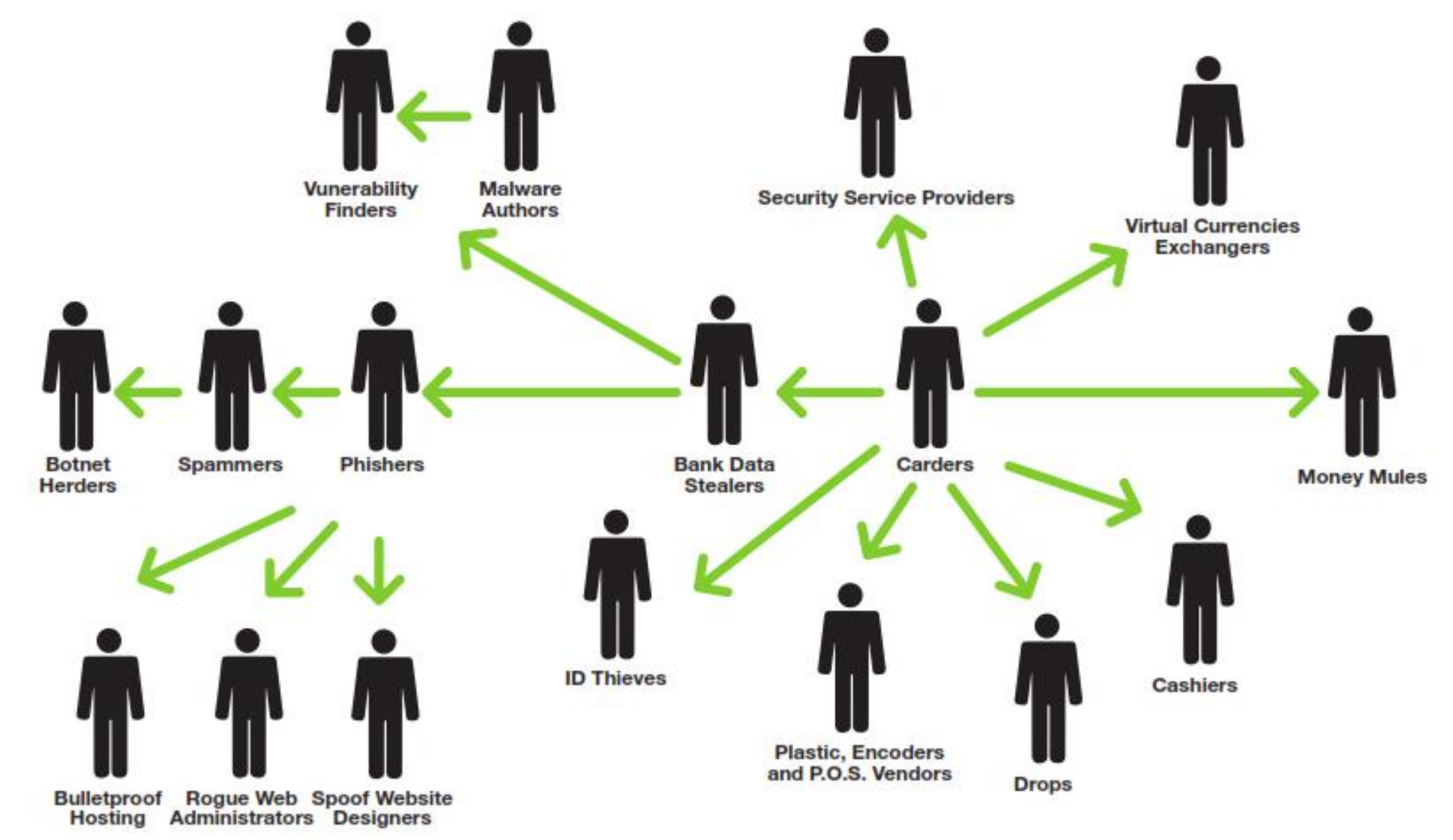
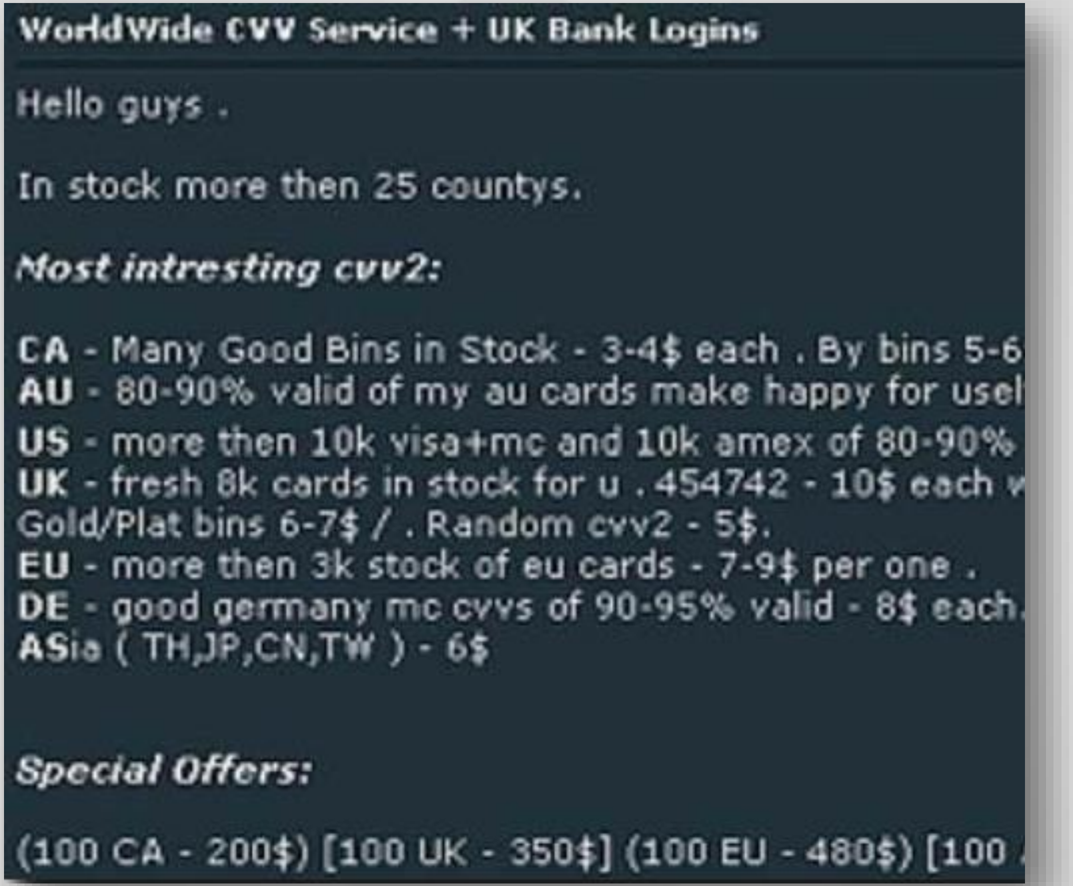
Many roles....


Vunerability Finders
Malware Authors
Security Service Providers
Virtual Currencies Exchangers
Botnet Herders
Spammers
Phishers
Bank Data Stealers
Carders
Money Mules
ID Thieves
Plastic, Encoders and P.O.S. Vendors
Drops
Cashiers
Bulletproof Hosting
Rogue Web Administrators
Spoof Website Designers

Where are going all these data?



WorldWide CVV Service + UK Bank Logins

Hello guys .

In stock more then 25 countys.

Most intresting cvv2:

CA - Many Good Bins in Stock - 3-4$ each . By bins 5-6
AU - 80-90% valid of my au cards make happy for usel
US - more then 10k visa+mc and 10k amex of 80-90%
UK - fresh 8k cards in stock for u . 454742 - 10$ each w
Gold/Plat bins 6-7$ / . Random cvv2 - 5$.
EU - more then 3k stock of eu cards - 7-9$ per one .
DE - good germany mc cvvs of 90-95% valid - 8$ each.
ASia (TH,JP,CN,TW) - 6$

Special Offers:

(100 CA - 200$) [100 UK - 350$] (100 EU - 480$) [100

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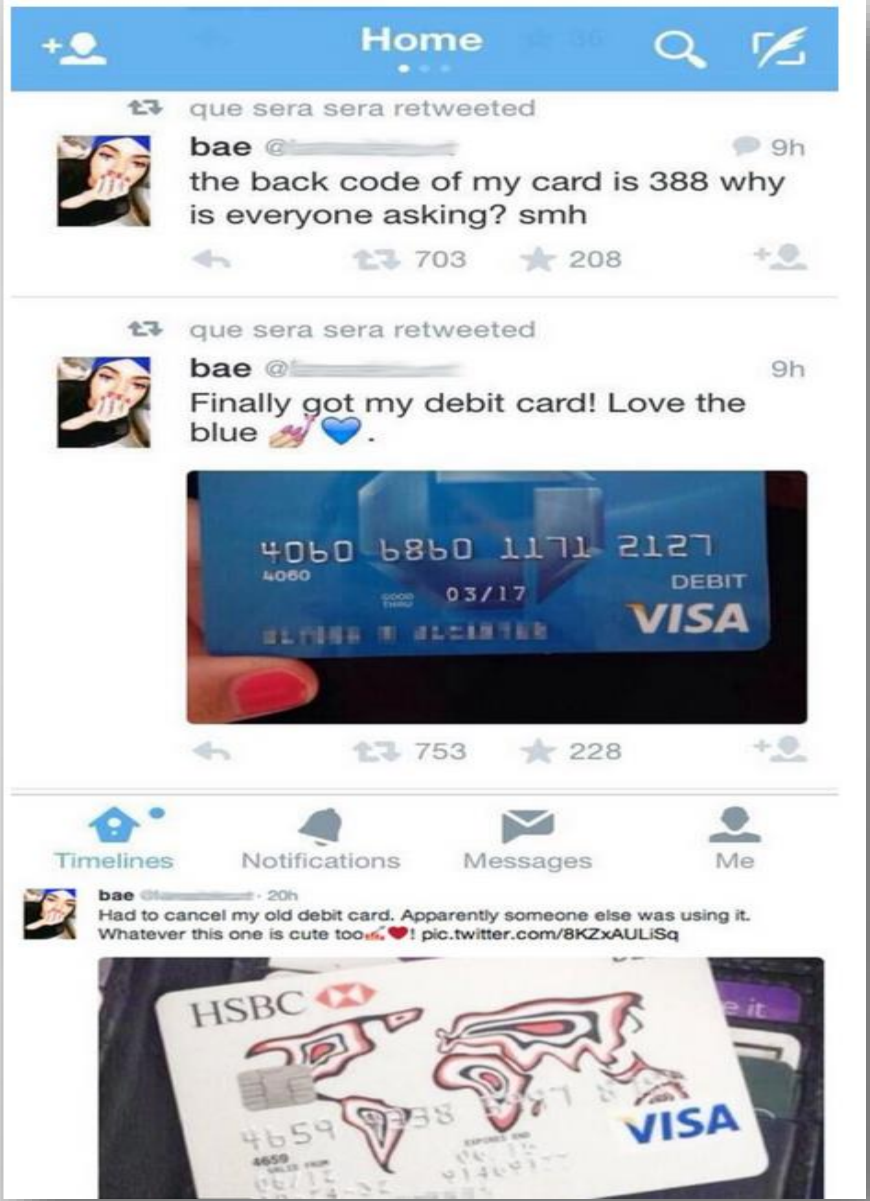
Insane user behaviour....

@NeedADebitCard



que sera sera retweeted

bae @[redacted] 9h

the back code of my card is 388 why is everyone asking? smh

703 208

que sera sera retweeted

bae @[redacted] 9h

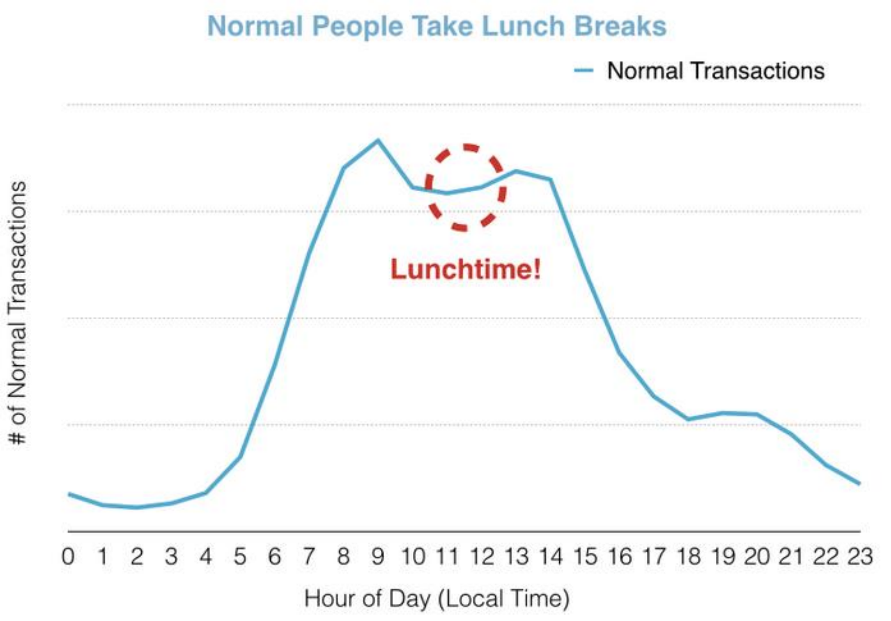
Finally got my debit card! Love the blue 💅💙.

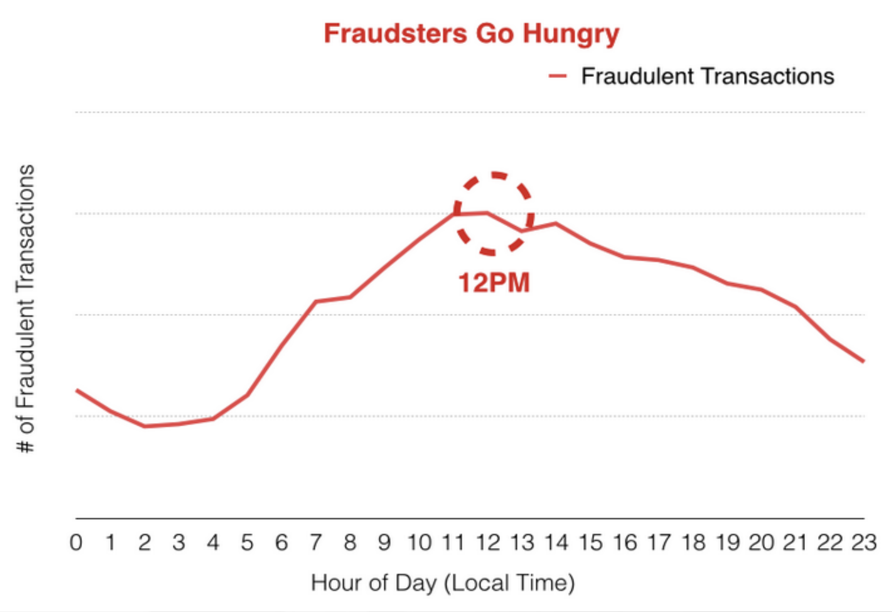
753 228

bae @[redacted] · 20h

Had to cancel my old debit card. Apparently someone else was using it. Whatever this one is cute too💅❤! pic.twitter.com/8KZxAULiSq

Fraudsters working time





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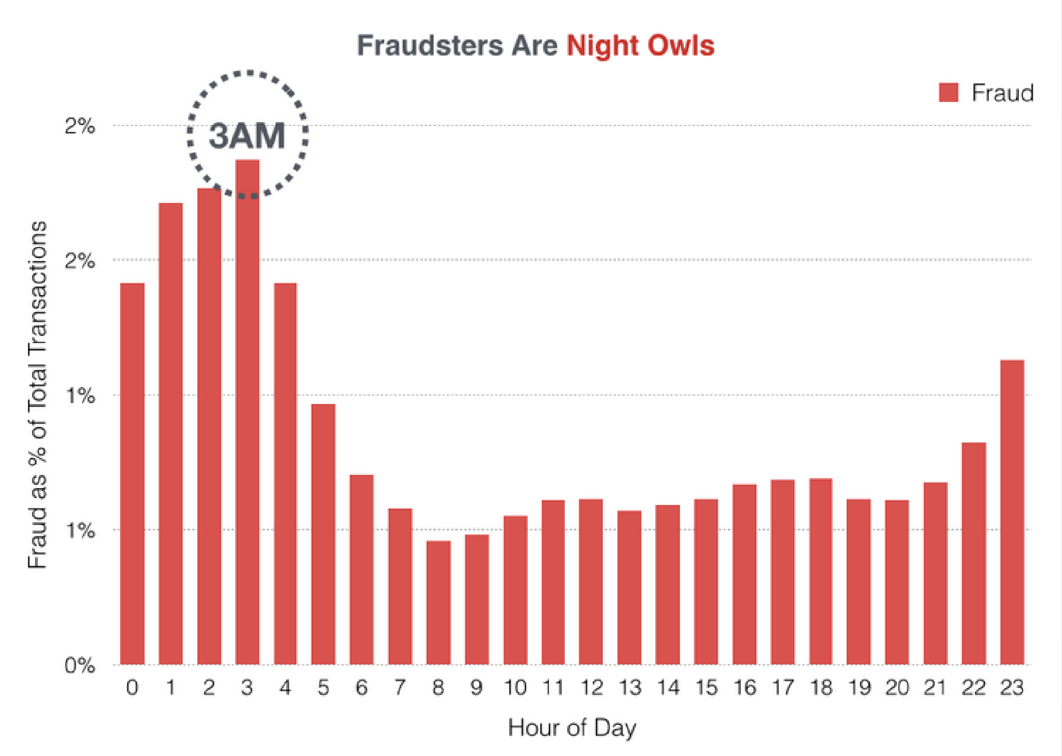
Fraudsters working time



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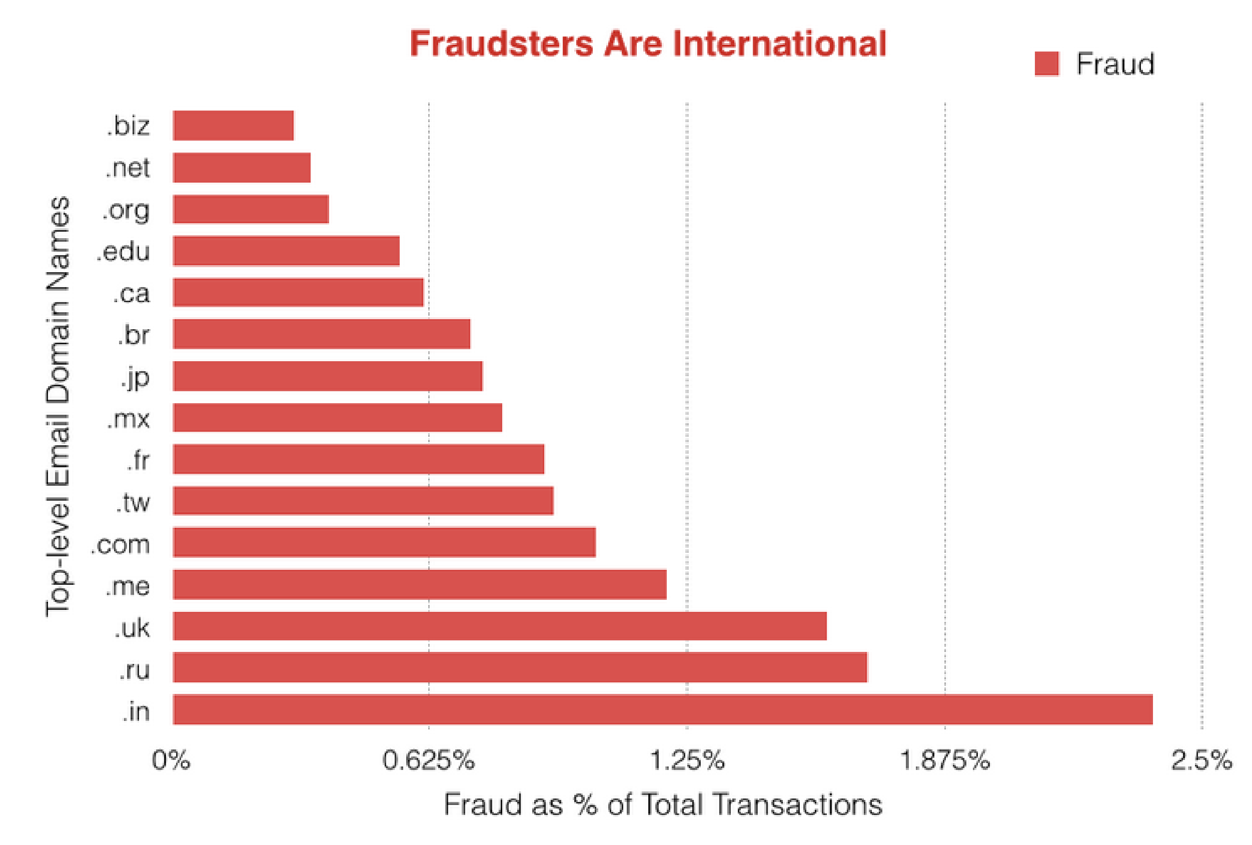
Where are they from?



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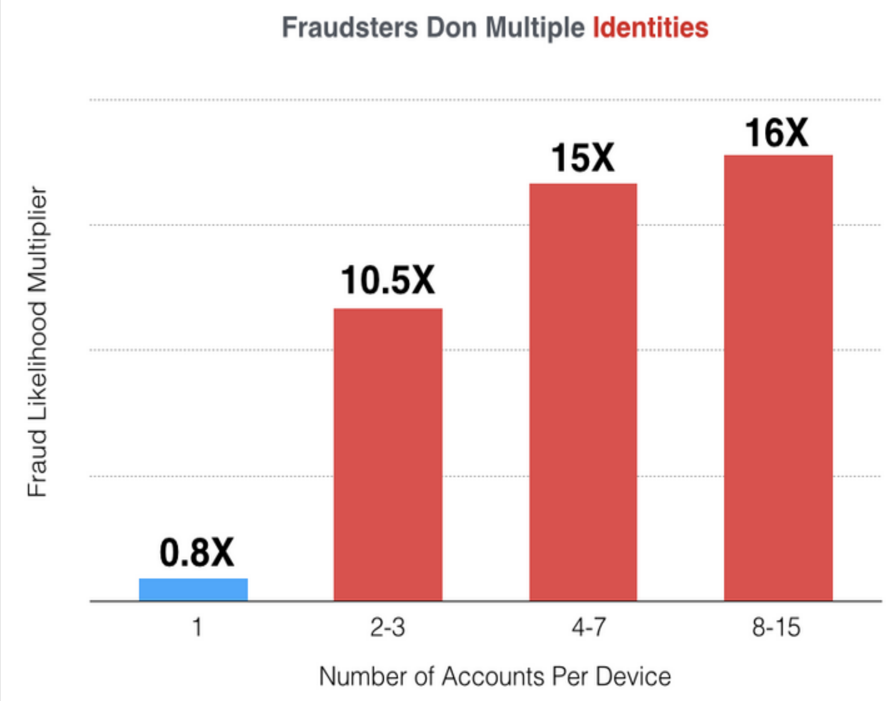
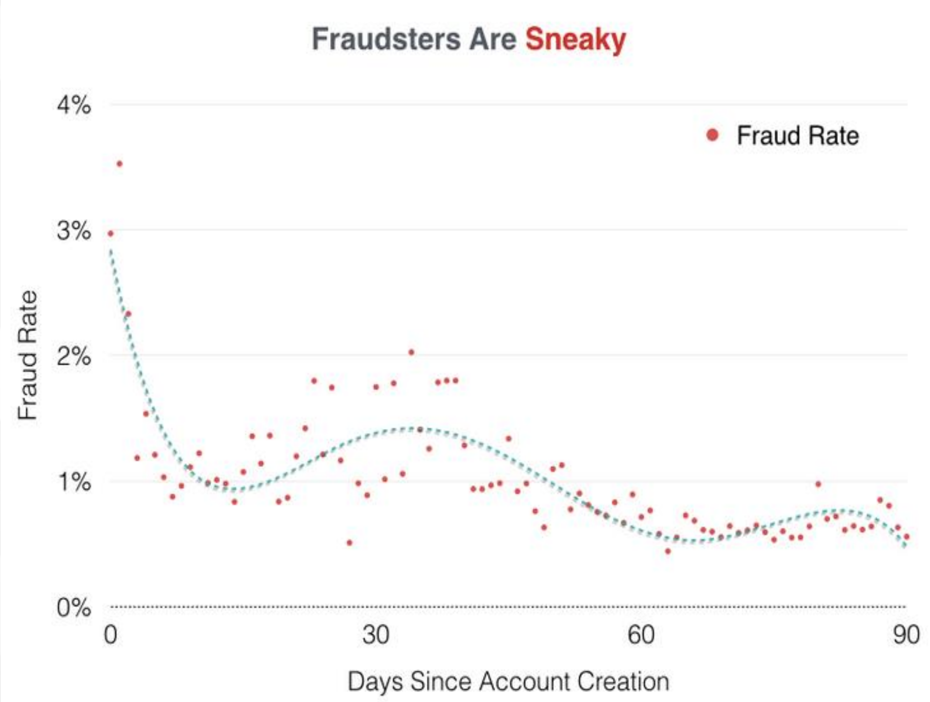
Fraudsters Multiple Identity





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In figures: World Wide

Every year

12 BIL $

are lost because online frauds

1 %

is the average fraud rate for ecommerce

25 %

of total ecommerce orders are reviewed manually

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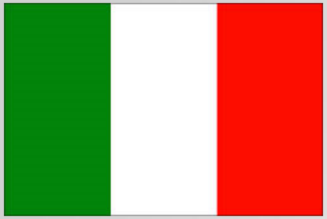
In figures: Italy



180M €

Loss on eCommerce revenues in Italy 2014

1 %

is the average fraud rate for ecommerce

2.15 M

# of fraudolents order in Italy 2014

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In figures: UK eCommerce

102 Bil $

eCommerce revenues in 2013

16.3 %

eCommerce Growth
In 2013

88.5 %

Credit/debit card

7.7 %

PayPal

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In figures: UK eCommerce Fraud

1.68 Bil $

Loss on eCommerce revenues in 2013

1.65 %

average fraud rate

85 %

of merchants expect
fraud revenue loses
to remain Static or Grow

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In figures: Brasil eCommerce

30.5 Bil $

eCommerce revenues in 2013

28 %

eCommerce Growth
In 2013

71 %

Credit/debit card

10 %

Boletos Bancario

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In figures: Brasil eCommerce Fraud

427 Mil $ **(1.4%)**

Loss on eCommerce revenues in 2013

85 %

of merchants conduct manual review and they review **35%** of the orders

8.2 %

of orders are rejected due to suspicion of fraud

64 %

of manually reviewed orders are ultimately accepted

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In figures: China eCommerce

193 Bil $

eCommerce revenues in 2013

78.5%

eCommerce Growth
in 2013

270 mil.

of Digital Buyers
in 2013

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In figures: China eCommerce Fraud

5 Bil $

Loss on eCommerce revenues in 2013

6%

Cash on delivery

29%

eWallets (Alypay,PayPal)

26%

Online bank transfer

33%

Credit/debit card

Market Approach

RULES APPROACH

- ✗ Some fraud blocked, some **allowed** through
- ✗ **False positive:**“Defensive” posture means much business lost
- ✗ Huge costs for **manual reviews**
- ✗ **Slow**: reviews can take hours, cost business
- ✗ High price for **costs incurred**, business lost

ARTIFICIAL INTELLIGENCE

- ✓ **Network Protection Effect:** All ecommerce are protected simultaneously
- ✓ **Real Time:** instant decision in 0.5 sec.
- ✓ **False Positive:** only fraud transactions are blocked
- ✓ **EU Privacy Compliance**
- ✓ **Scalable for** high transactions volume

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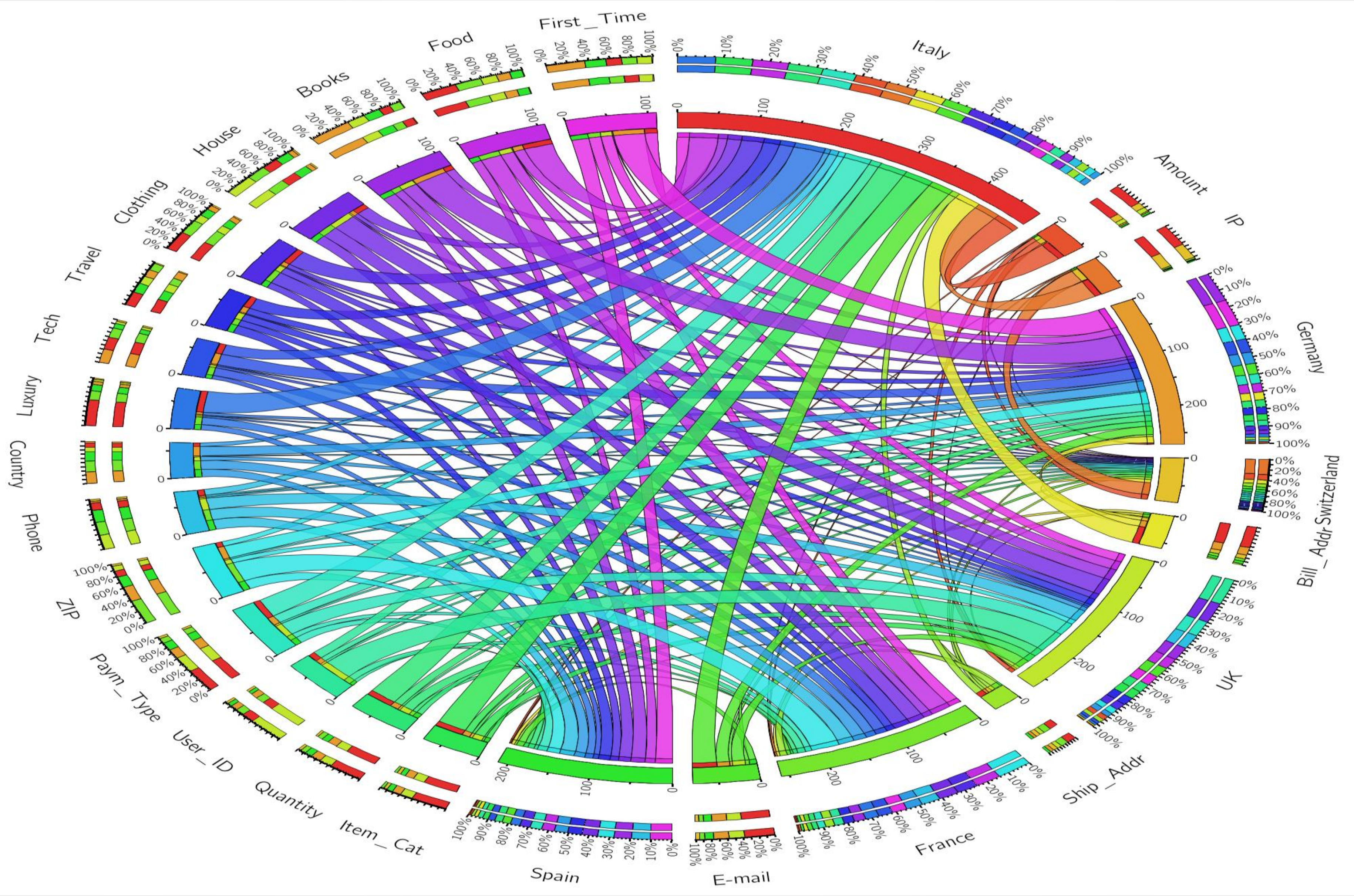
BEHAVIORAL BIOMETRICS

- 🚫 **Privacy Compliance:** not all clients are likely to give biometrics data
- 🚫 **Slow:** build a complete “biometrics profile” takes more than 30 purchases on the same website
- 🚫 **Not scalable** for high transactions volume
- 🚫 **Decrease ecommerce conversion** due step to biometrics authentication



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Telegraph
Jumio

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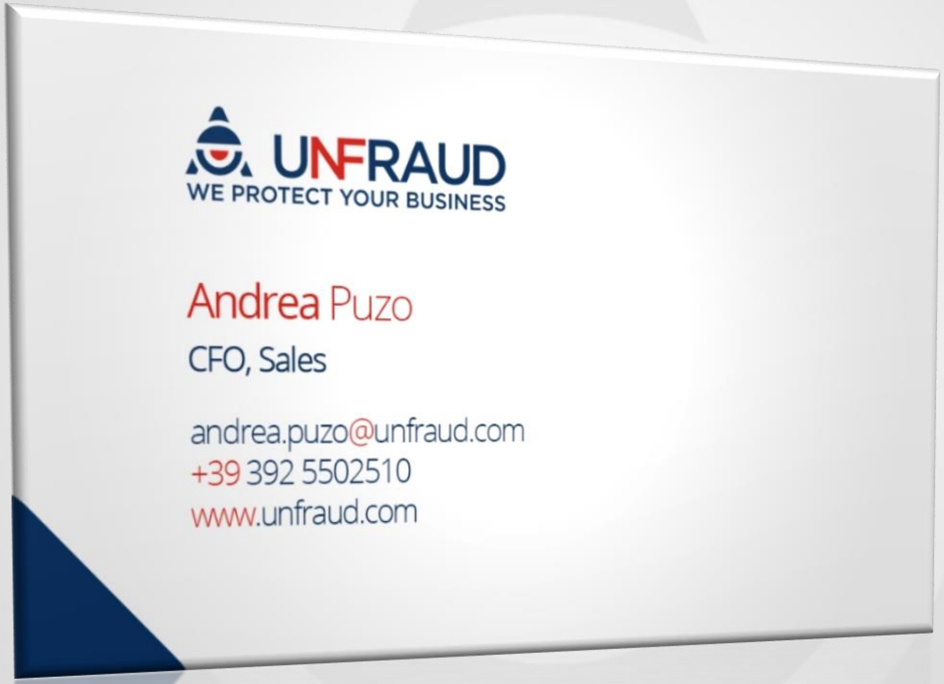
Write me! It is free…



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