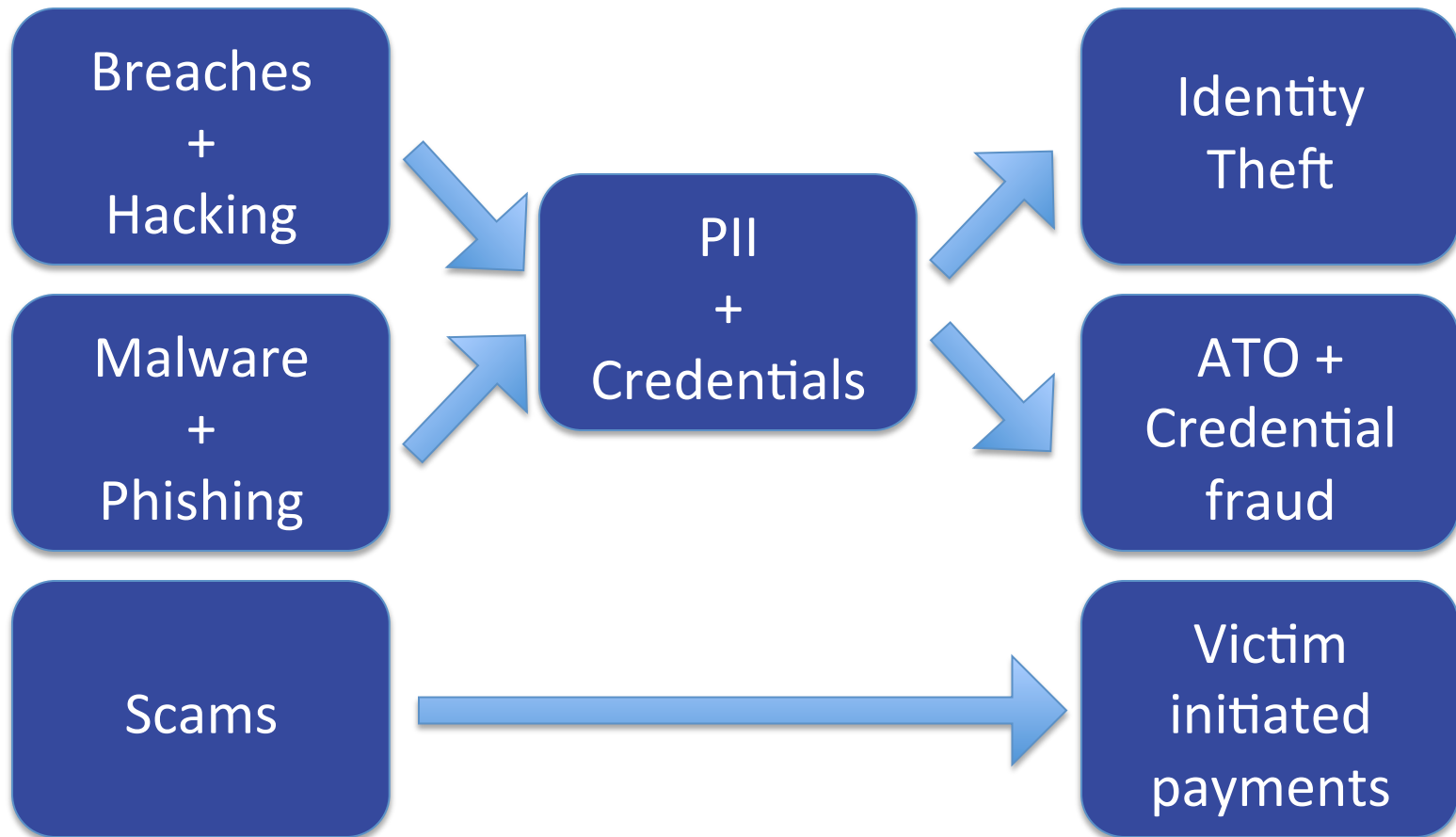


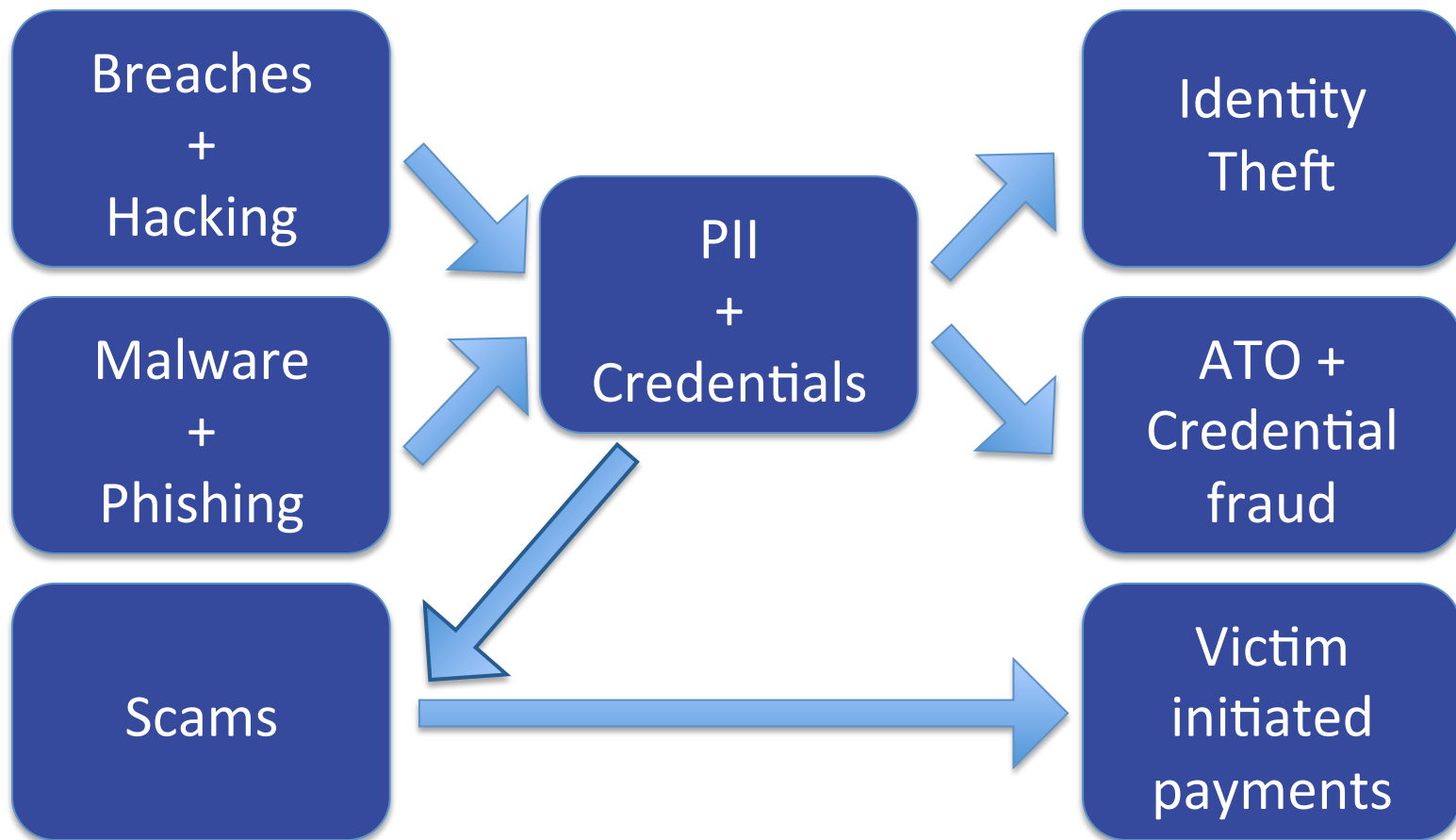


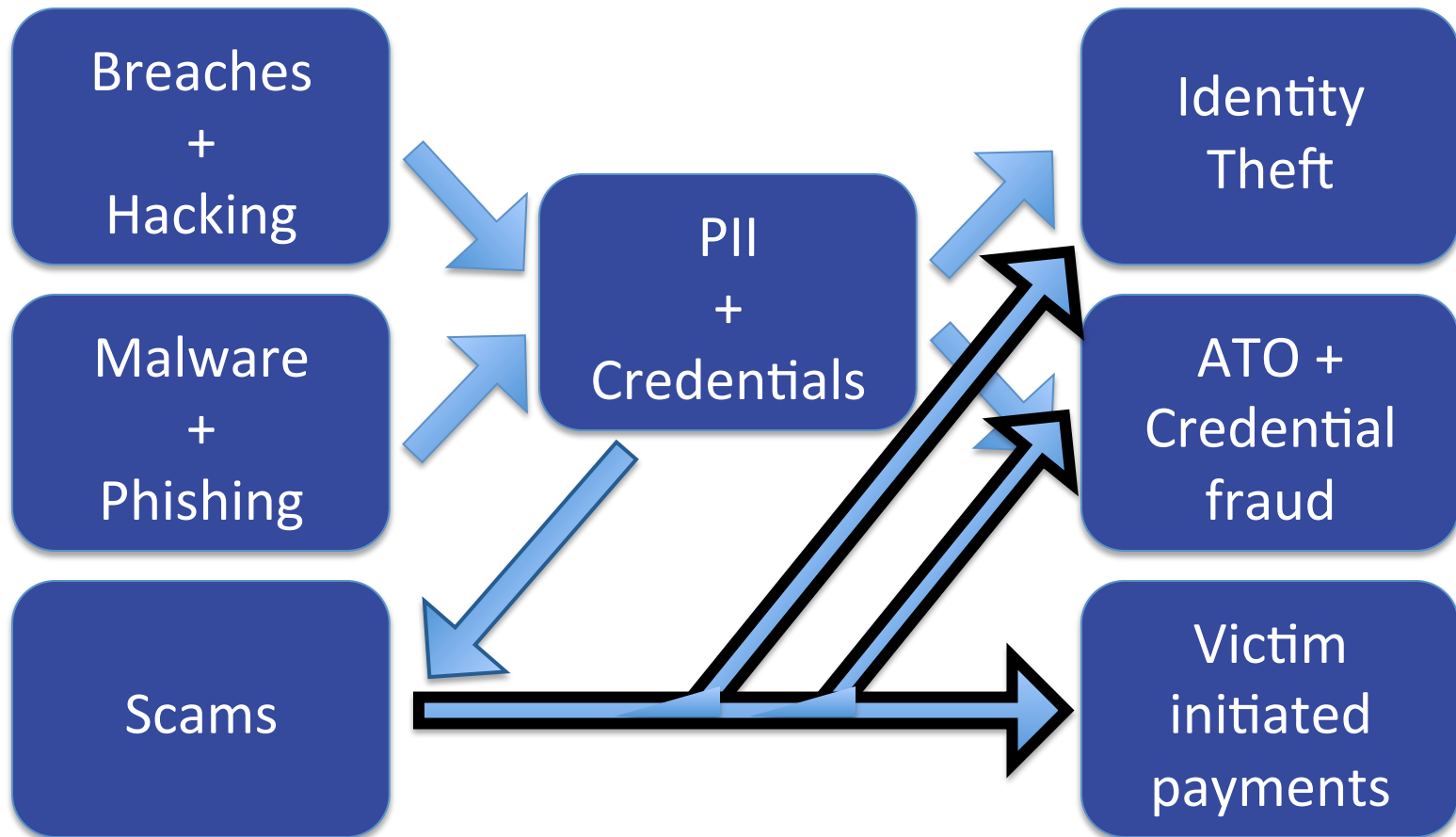
How Vulnerable Are We to Scams?

Markus Jakobsson
ZapFraud

Ting-Fang Yen
DataVisor







\$4B/year

Estimated fraud loss in US

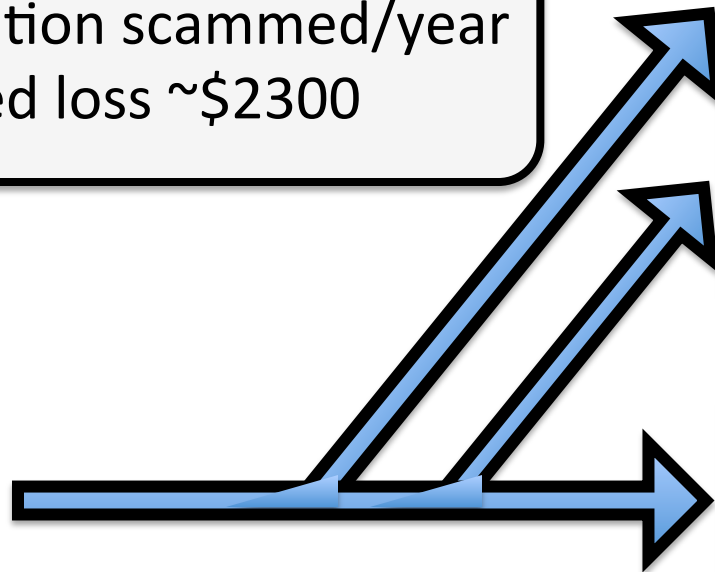
3.5% U.S adult population scammed/year
Average reported loss ~\$2300

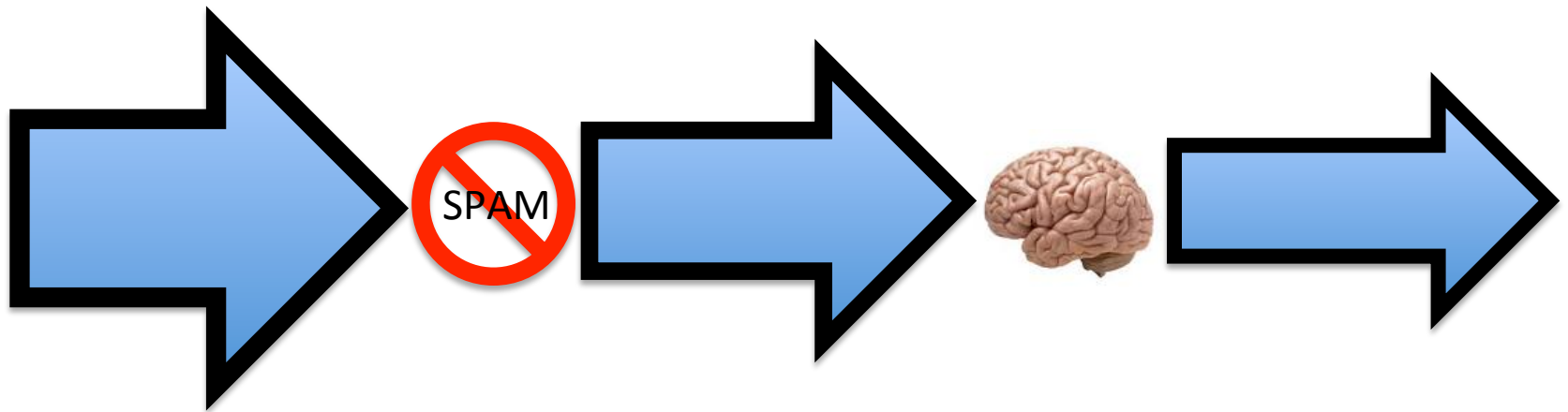
Scams

Identity
Theft

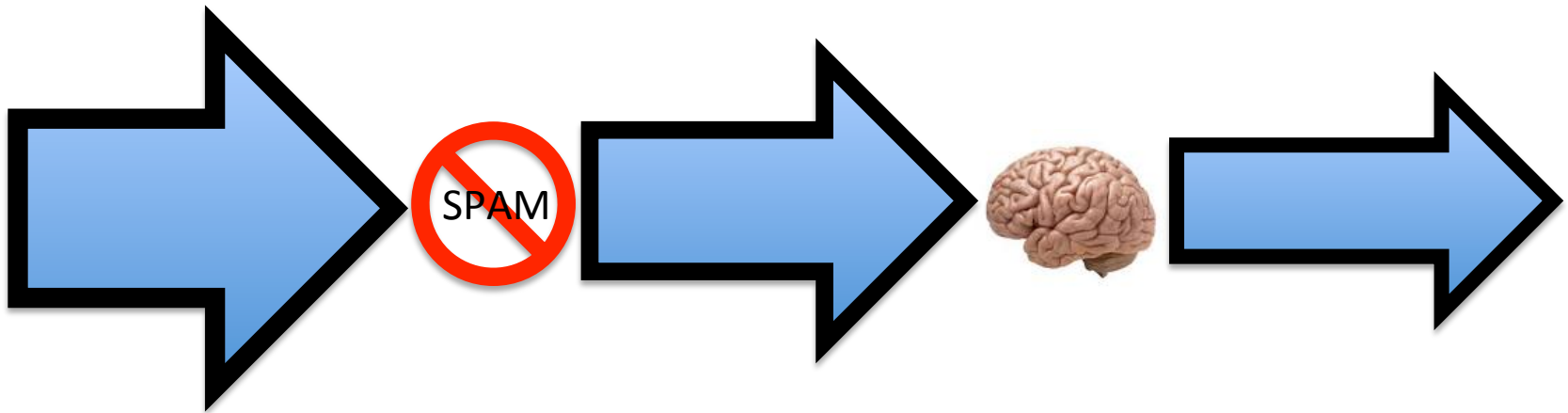
ATO +
Credential
fraud

Victim
initiated
payments



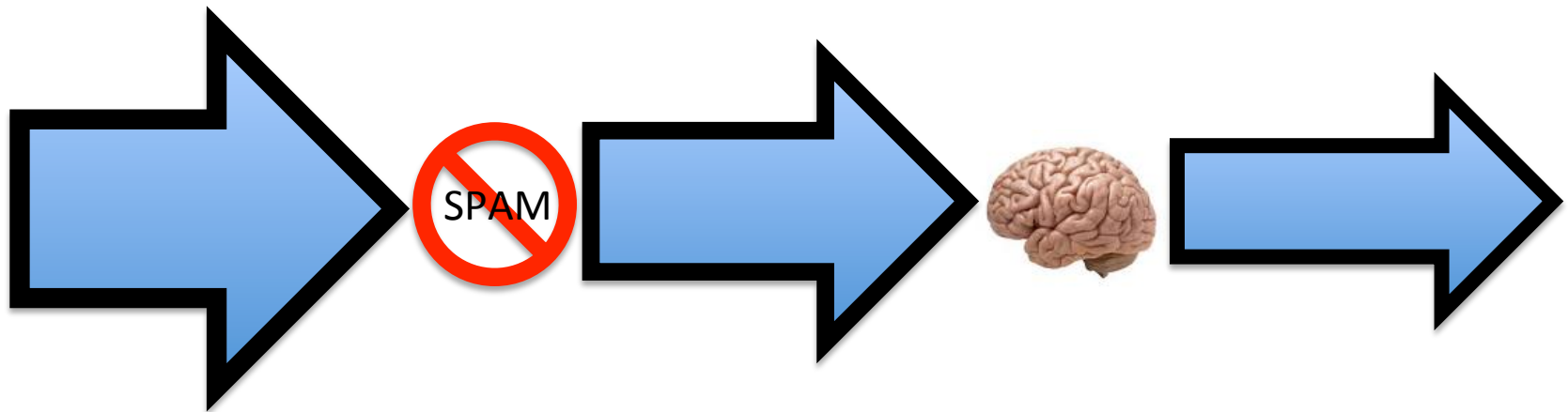


Block rates



Hotmail 66%
Yahoo 70%
Gmail 10-98%

Block rates

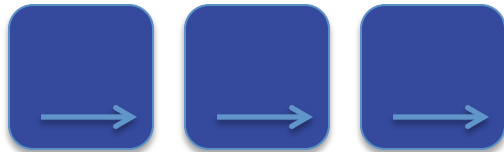


Hotmail 66%
Yahoo 70%
Gmail 10-98%

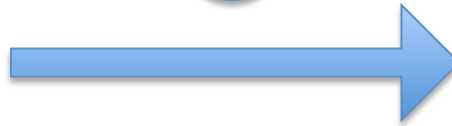
“Very Nigerian” 94%
“Sneaky” 37%



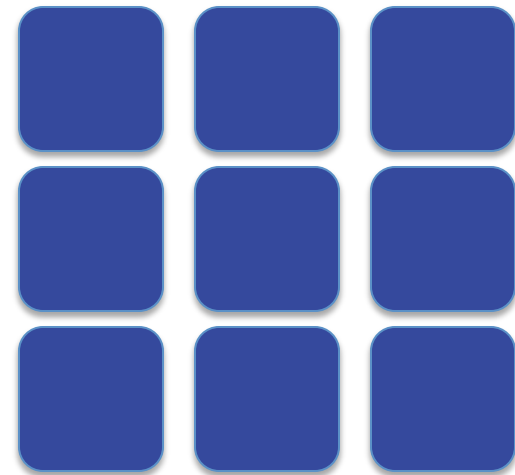
Hotmail Yahoo Gmail



427

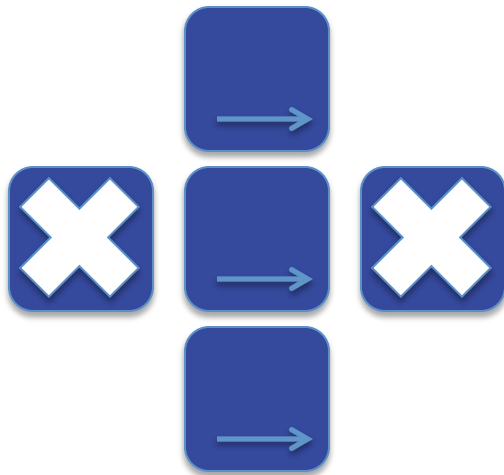


Hotmail Yahoo Gmail



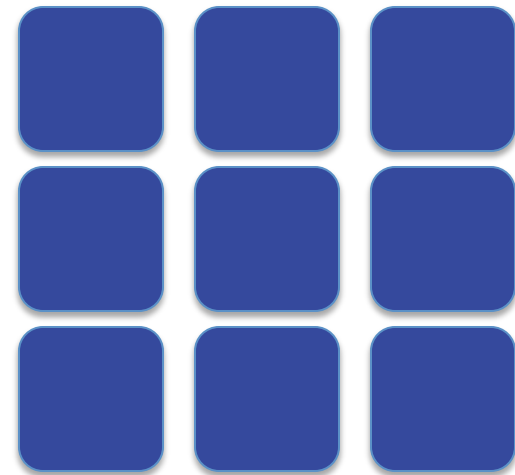


Hotmail Yahoo Gmail



427

Hotmail Yahoo Gmail

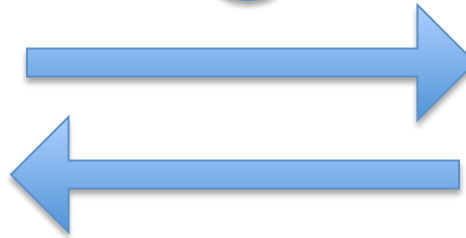




Yahoo



427

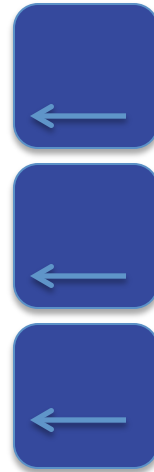
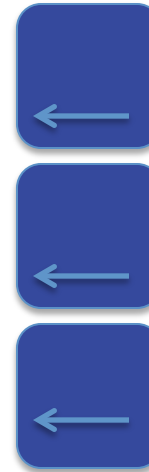
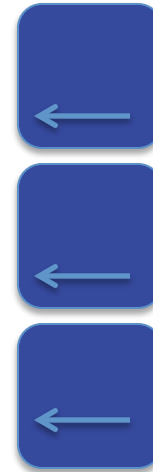


Thanks!

Hotmail

Yahoo

Gmail

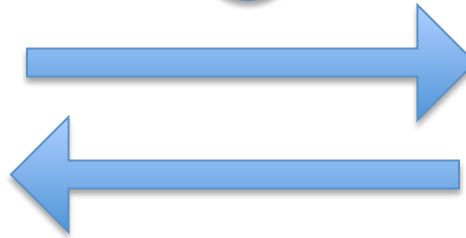




Yahoo



427

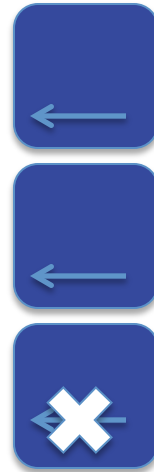
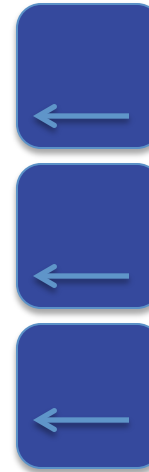
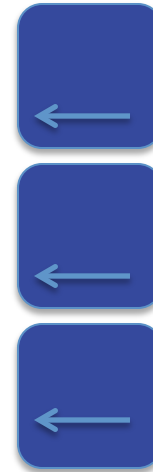


Thanks!

Hotmail

Yahoo

Gmail

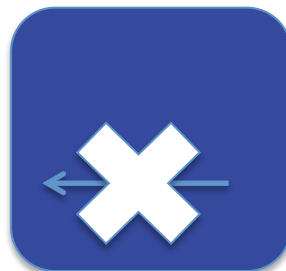
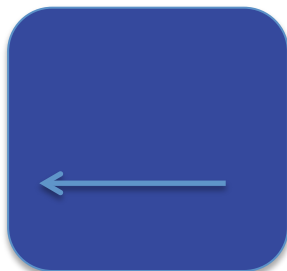
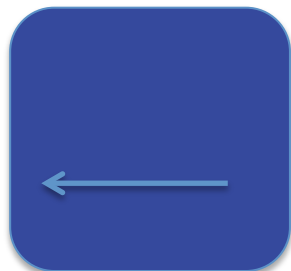
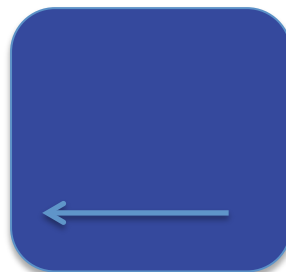
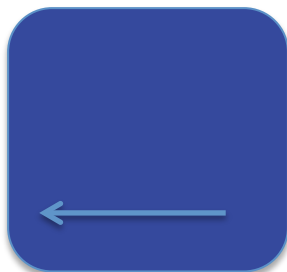
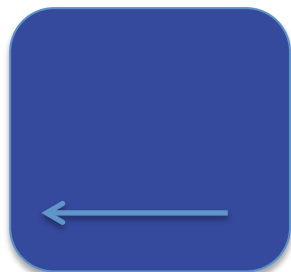
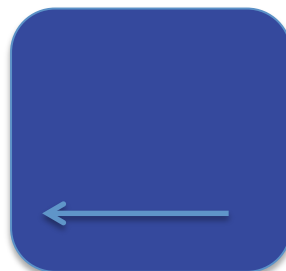
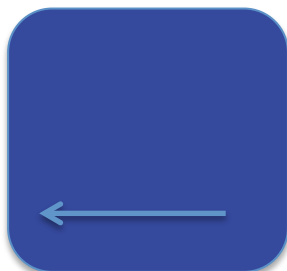
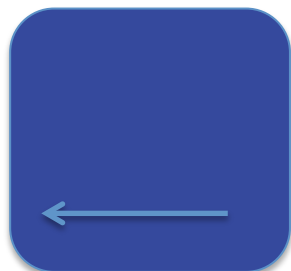




Hotmail

Yahoo

Gmail



98%

10%

Block rate: 66%

70%



“Does this look risky to you?”



“What type of risk is this
primarily associated with?”



You have exceeded your mailbox quota. Your account will be blocked 8 AM tomorrow unless you request more space. You can request more space by clicking [here](#).



- ☐ The recipient may get a computer virus.
- ☐ The recipient may lose his password.
- ☐ This may be a scam aimed at stealing your money.
- ☐ There is no risk.
- ☐ The recipient may get unwanted advertisements.
- ☐ The recipient's account may be blocked if she does not pay attention.



Correct answer

- ☐ The recipient may get a computer virus.
- ☒ The recipient may lose his password.
- ☐ This may be a scam aimed at stealing your money.
- ☐ There is no risk.
- ☐ The recipient may get unwanted advertisements.
- ☐ The recipient's account may be blocked if she does not pay attention.



Reasonable answer

- ☒ The recipient may get a computer virus.
- ☐ The recipient may lose his password.
- ☒ This may be a scam aimed at stealing your money.
- ☐ There is no risk.
- ☐ The recipient may get unwanted advertisements.
- ☐ The recipient's account may be blocked if she does not pay attention.



Naive answer

- ☐ The recipient may get a computer virus.
- ☐ The recipient may lose his password.
- ☐ This may be a scam aimed at stealing your money.
- ☐ There is no risk.
- ☐ The recipient may get unwanted advertisements.
- ☐ The recipient's account may be blocked if she does not pay attention.



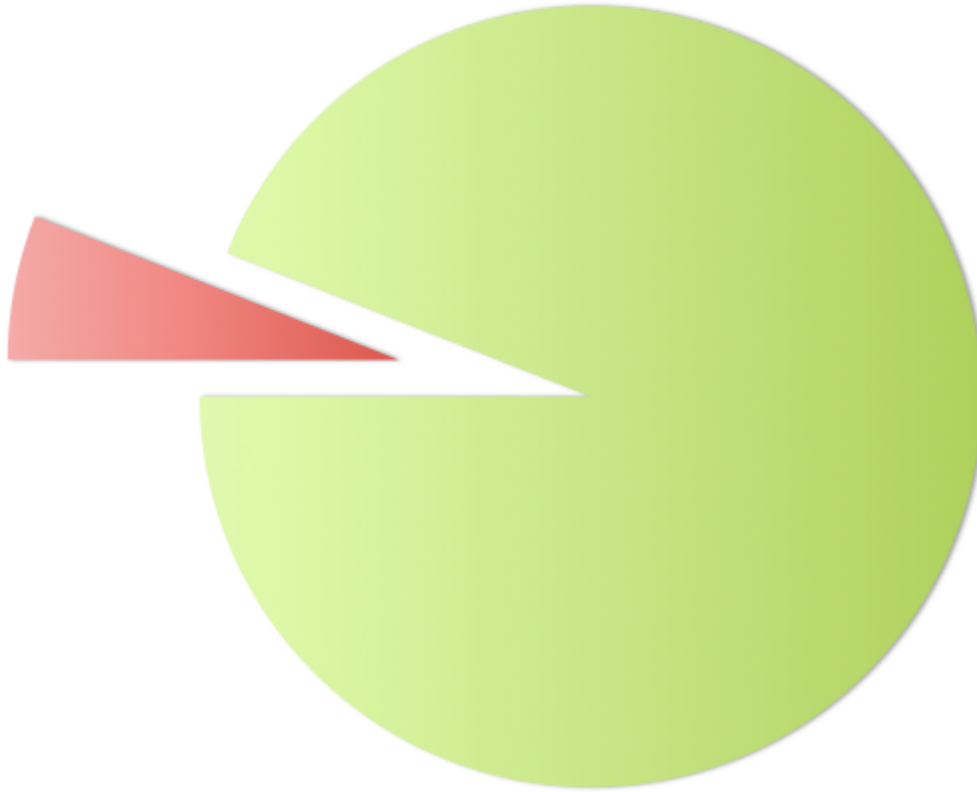
Naïve
(31%)





A “traditional” Nigerian Scam

Naïve
(6%)





Targeted scam with complex structure

Naïve
(56%)





“I know how to spot online scams”

Email security and user awareness

