Agenda

- Threat landscape

- The industry's response

- Key takeaways

Latest

2019

2018

2017

2016

2015

8fit · BriansClub · Capital One · CoffeeMeetsBagel · DoorDash 4,900,000 · Ge.tt · Fotolog · Houzz · Ixigo · Microsoft 44,000,000 · Petflow · Roll20 · Suprema · Toyota · US Customs and Border Protection · Whitepages · YouNow

Blank Media Games · Blur · DataCamp · Dubsmash 162,000,000 · HauteLook · Indian Jobseekers 275,000,000 · MBM Company · OxyData 380,000,000 · Quest Diagnostics · ShareThis · Stronghold Kingdoms · TicketFly · Vårdguiden · WiFi Finder

500px · BreedReady · Canva · Desjardins Group · Facebook 420,000,000 · Newegg · NMBS · Saks and Lord & Taylor · SKY Brasil · T-Mobile · Twitter 330,000,000 · Vision Direct

Artsy · Bulgarian National Revenue Agency · Coinmama · EyeEm · Healthcare.gov · LocalBlox · MyFitnessPal 150,000,000 · Nametests 120,000,000 · Panerabread · SingHealth · Texas voter records · Ticketmaster · ViewFines · WordPress

Australian National University · Chtrbox · Facebook · Facebook 50,000,000 · Google+ · Health South East · High Tail Hall · Marriott Hotels 383,000,000 · Mount Olympus 188,000 · Orbitz · Quest Diagnostics · Urban Massage · Wonga

Games · Animoto · BookMate · CMS · Grindr · Imgur · Malaysian medical practitioners · Malaysian telcos & MVNOs · MyHeritage · Quora 100,000,000 · RootsWeb · Snapchat · TIO Networks · Viacom · Zomato

Amazon · Careem · Chinese resume leak 202,000,000 · Dell · Firebase 100,000,000 · GovPayNow.com · SVR Tracking · Uber 57,000,000 · Waterly

British Airways · Cathay Pacific Airways · Click2Gov · Disqus · Instagram · Linux Ubuntu forums · Minecraft · Mutuelle Generale de la Police · PayAsUGym · Quest Diagnostics · Swedish Transport Agency · Yahoo

Amazon · Bell · Cellebrite · CEX · DaFont · Equifax 143,000,000 · Hong Kong Registration & Electoral Office · Red Cross Blood Service · Syrian government · Three · Turkish citizenship database · Weebly

Banner Health · Brazzers · ClixSense · Dropbox 68,700,000 · Friend Finder Network 412,000,000 · Interpark · LinkedIn 117,000,000 · Mail.ru · MySpace 164,000,000 · Philippines' Commission on Elections · Telegram · Tumblr · uTorrent · VK 100,000,000 · World Check

Anthem · Australian Immigration Department · Clinton campaign · Dailymotion · Fling · KM.ru & Nival · IRS · Lynda.com · Mossack Fonseca · Securus Technologies 70,000,000 · Premera · Uber · US Office of Personnel Management · Wendy's

Adult Friend Finder · AshleyMadison.com · British Airways · CarPhone Warehouse · Carefirst · Deep Root Analytics 198,000,000 · Experian / T-mobile · Hacking Team · Invest Bank · Kromtech · MSpy · Sanrio · Slack · TalkTalk · Twitch.tv · UCLA Health 4,500,000 · VTech · US Office of Personnel Management (2nd Breach)

Dominios Pizzas · European Central · HSBC Turkey · Japan Airlines · Korea · Neiman Marcus

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Credential stuffing: Automation maximizing breaches

Source: Shape Security

Faster payments, faster fraud
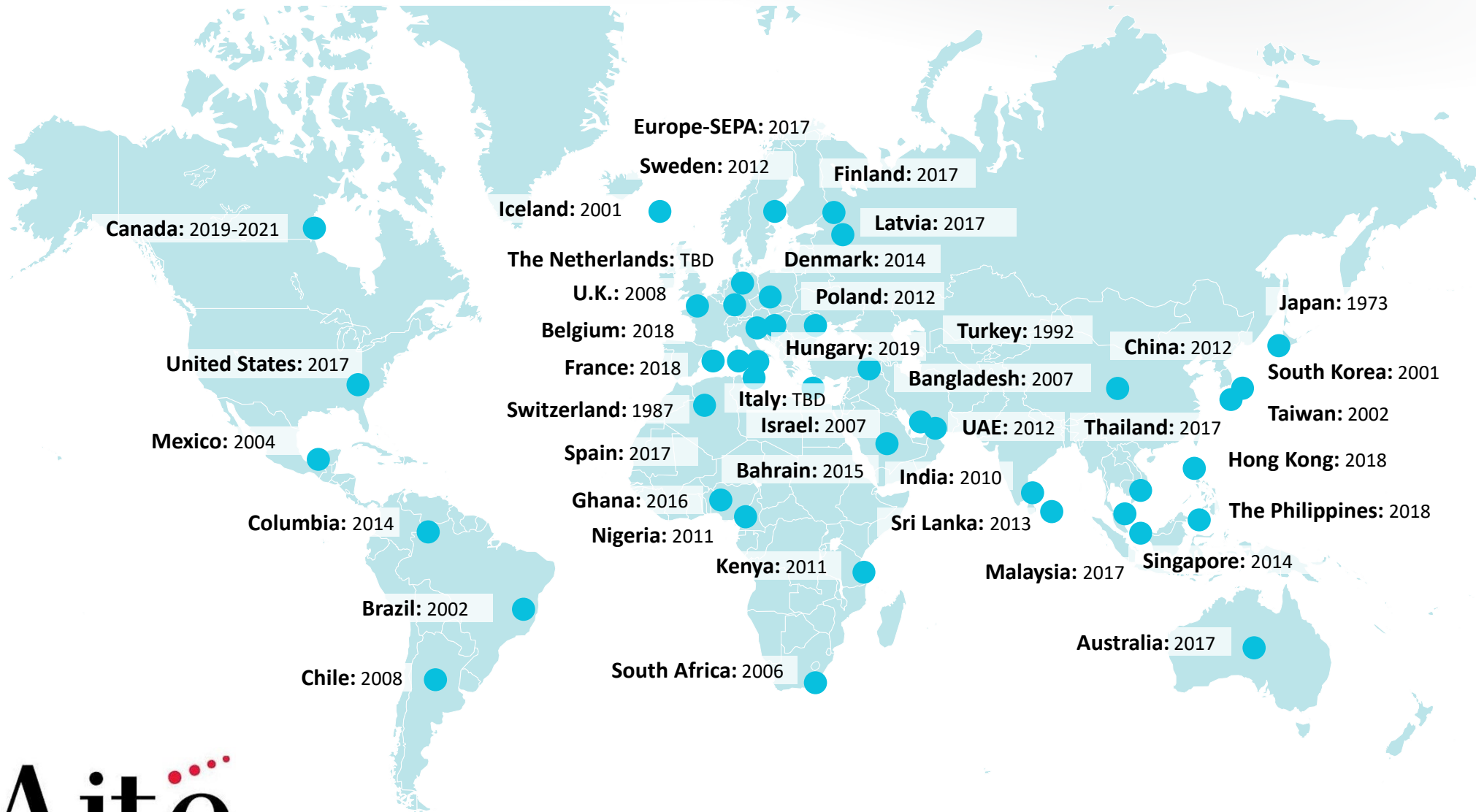
With 42 faster payments systems around the globe and high consumer and business demand for real time, the reality of faster payments has arrived.

Canada: 2019-2021

Europe-SEPA: 2017
Sweden: 2012
Finland: 2017
Iceland: 2001
Latvia: 2017
The Netherlands: TBD
Denmark: 2014
U.K.: 2008
Poland: 2012
Belgium: 2018
Turkey: 1992
China: 2012
Hungary: 2019
France: 2018
Bangladesh: 2007
Switzerland: 1987
Italy: TBD
Israel: 2007
UAE: 2012
Thailand: 2017
Spain: 2017
Bahrain: 2015
India: 2010
Hong Kong: 2018
Ghana: 2016
Sri Lanka: 2013
The Philippines: 2018
Nigeria: 2011
Malaysia: 2017
Singapore: 2014
Kenya: 2011
Japan: 1973
South Korea: 2001
Taiwan: 2002

United States: 2017
Mexico: 2004
Columbia: 2014
Brazil: 2002
Chile: 2008
South Africa: 2006
Australia: 2017

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Social engineering fraud: Growing rapidly, while regulators take note

Attacks as well as budgets are on the rise

Q. What is the rate of growth in the budget for digital channel fraud mitigation? (n=17)
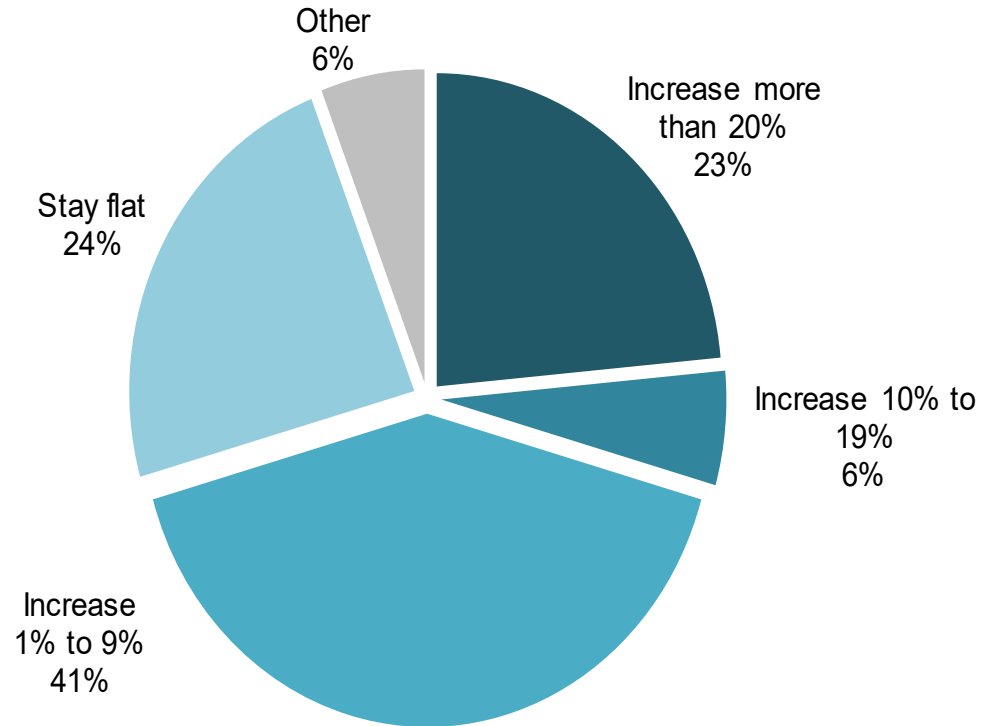
- Other 6%
- Increase more than 20% 23%
- Increase 10% to 19% 6%
- Increase 1% to 9% 41%
- Stay flat 24%

Source: Aite Group interviews with 20 fraud executives from 18 large North American FIs, July to October 2019
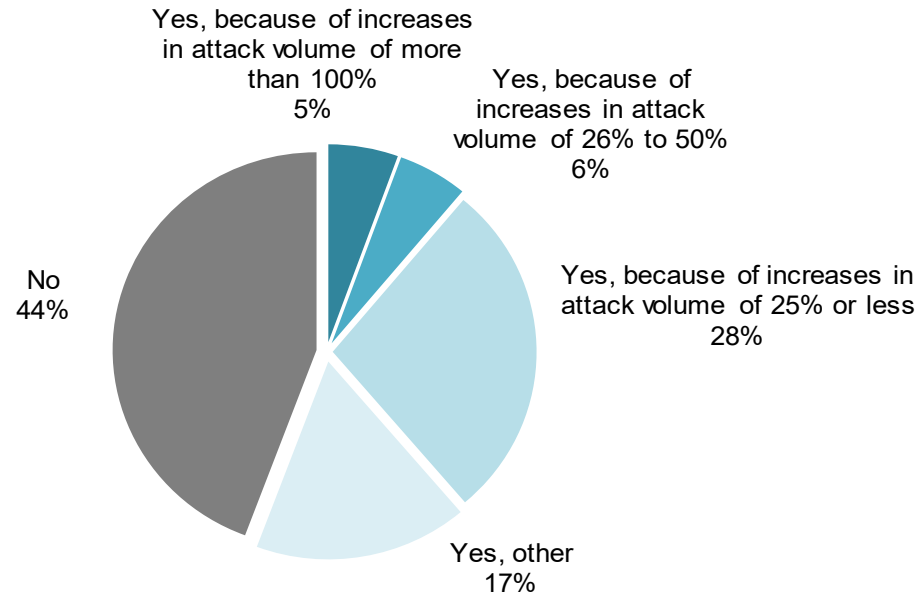
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Customer Experience

Q. In terms of the business case for investing in new or additional authentication controls in the digital channel, how would you rate the amount of influence that reducing friction had versus the amount of influence that reducing fraud losses had? (N=18)

Reducing friction has less weight than loss mitigation
5%

Reducing friction has more weight than loss mitigation
39%

Reducing friction has equal weight as loss mitigation
56%
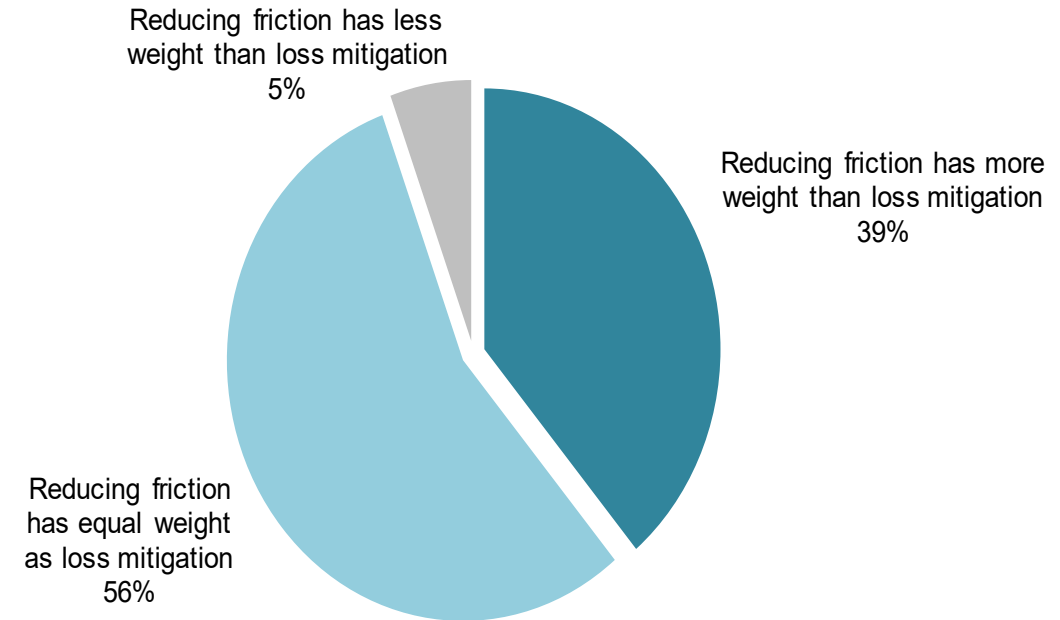
Amid the rising threat environment, CX is still the key business case driver

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People: The weakest link in the control framework
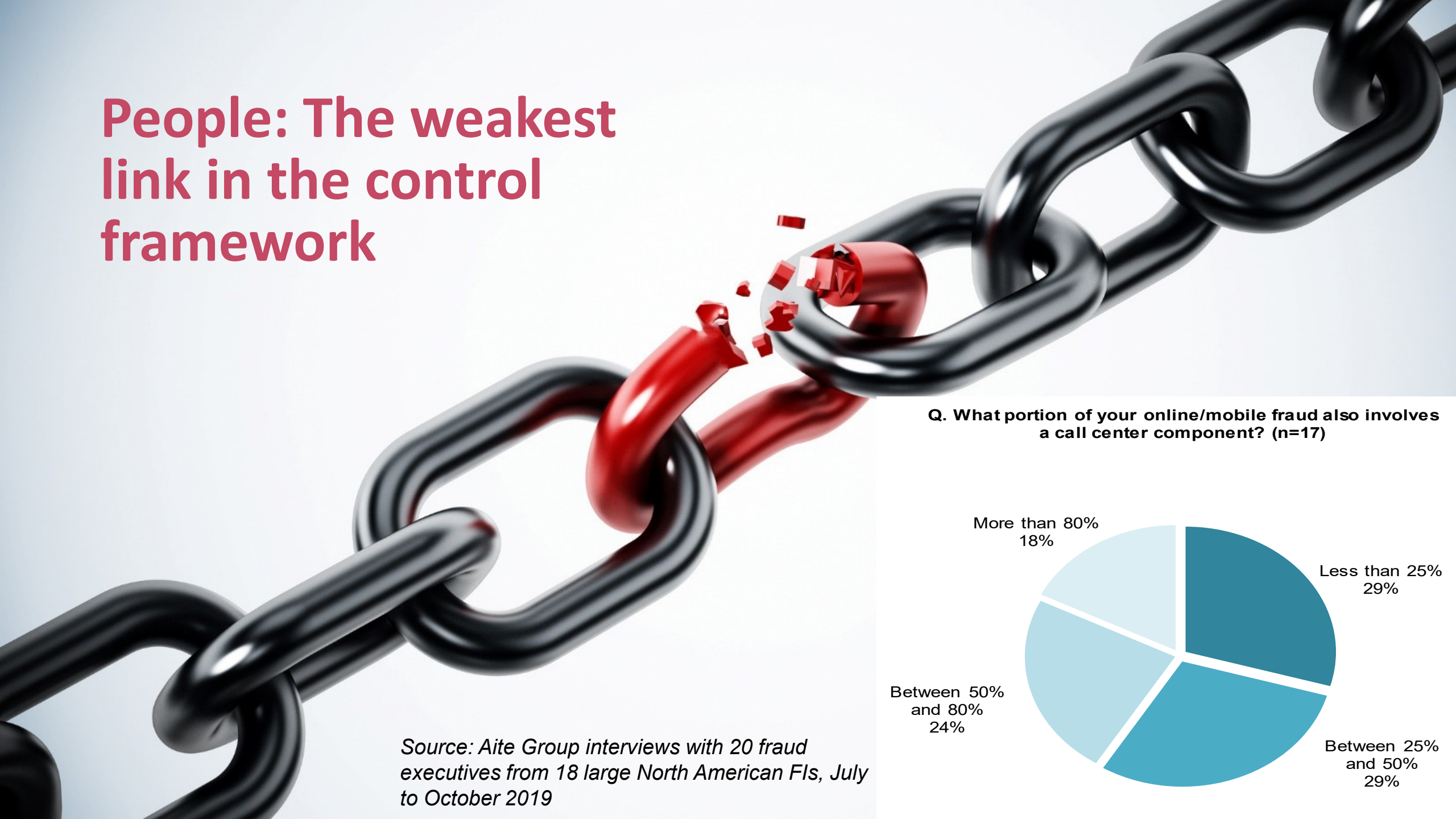
Q. What portion of your online/mobile fraud also involves a call center component? (n=17)
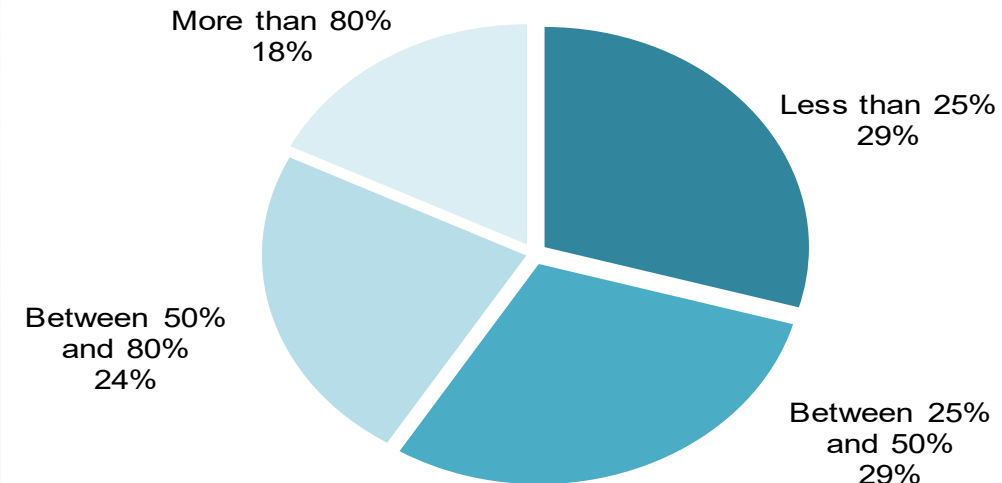
More than 80%
18%

Less than 25%
29%

Between 50% and 80%
24%

Between 25% and 50%
29%

Digital attacks wreak havoc in the call center

Q. Are digital fraud attacks creating cost and/or volume pressures on other channels, specifically the contact center? (n=17)
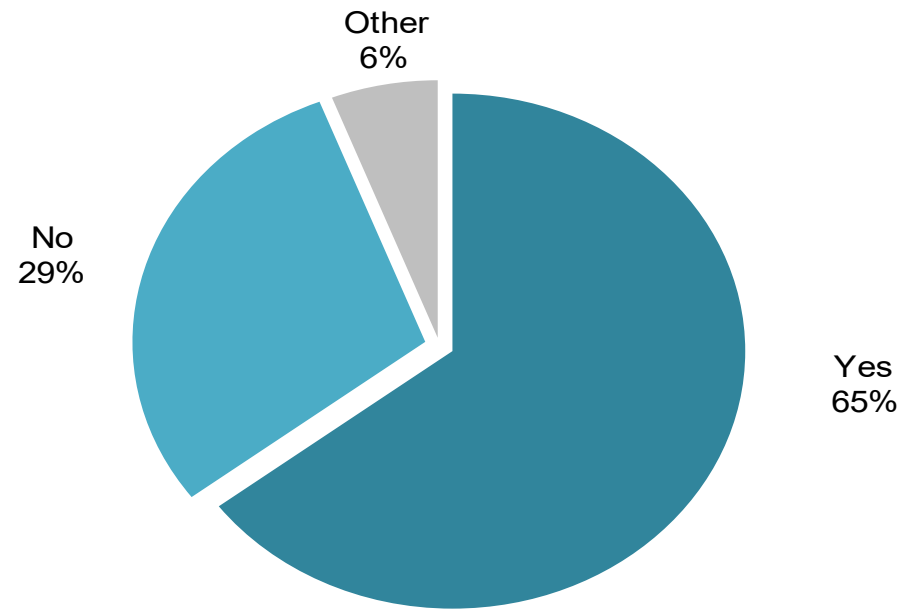
Other
6%

No
29%

Yes
65%

Source: Aite Group interviews with 20 fraud executives from 18 large North American FIs, July to October 2019

Passwords: Not dead yet (unfortunately)

Q. Does your FI plan to phase out passwords in the next 2 to 3 years or less for online, mobile, or both? (n=17)

No, we have no plans to change how we use passwords 29%

Yes 18%

Not in the next 3 years, but probably in the next 5 to 10 years 53%
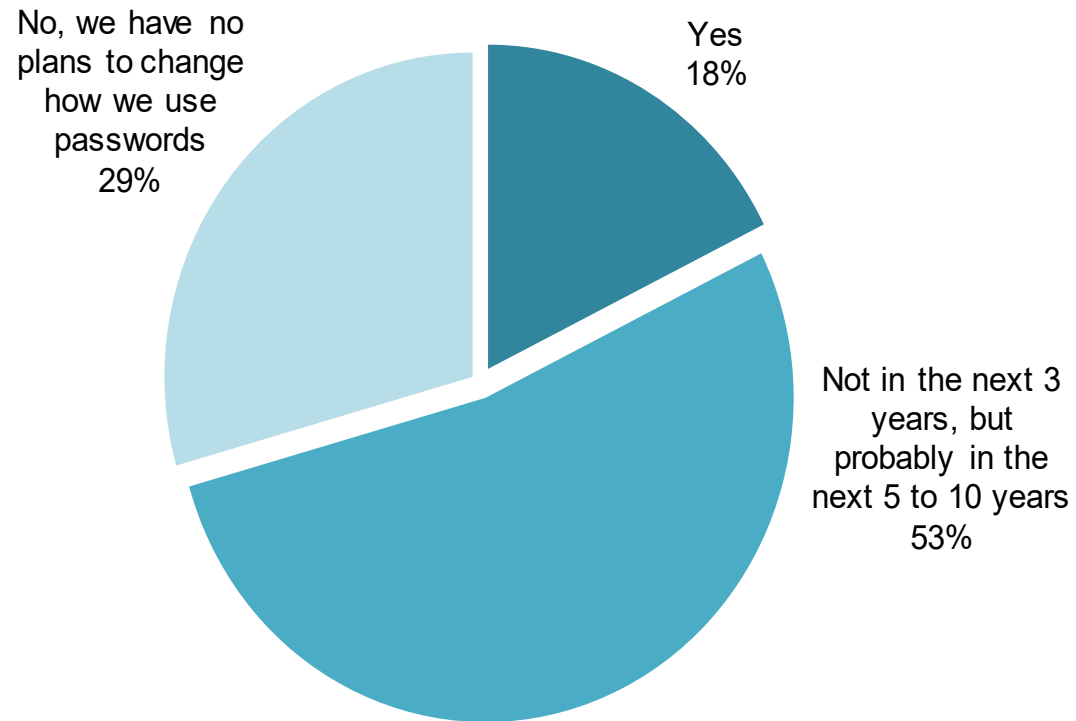
Q. Have you had to make changes to your use of OTP due to SIM swapping, SMS interception, or social engineering? (N=18)
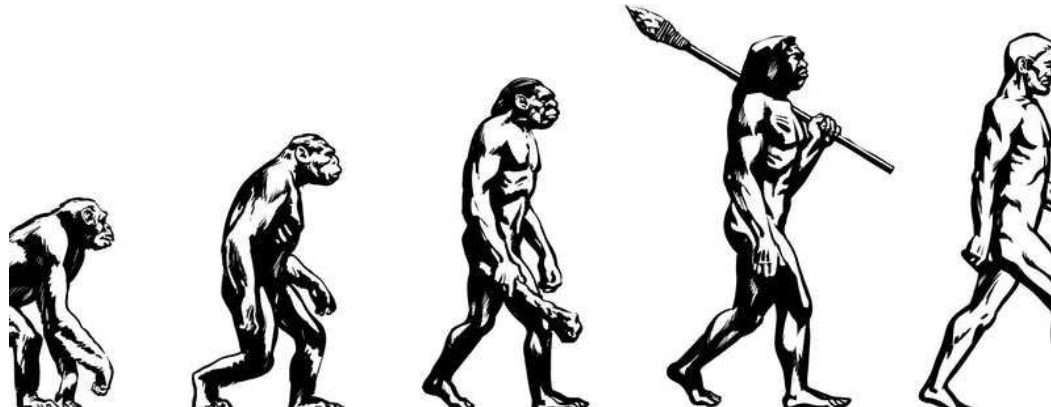
Yes, because of increases in attack volume of more than 100%
5%

Yes, because of increases in attack volume of 26% to 50%
6%

No
44%

Yes, because of increases in attack volume of 25% or less
28%

Yes, other
17%

Source: Aite Group interviews with 20 fraud executives from 18 large North American FIs, July to October 2019

Q. Has your FI reduced the use of KBA in the past 2 years? (n=17)

Yes, by more than 75%	12%
Yes, by 51% to 75%	12%
Yes, by 26% to 50%	18%
Yes, by 25% or less	12%
No, we have not reduced the use of KBA, but we plan to	35%
No, we have no plans to reduce the use of KBA	6%
No, we don't use KBA	6%
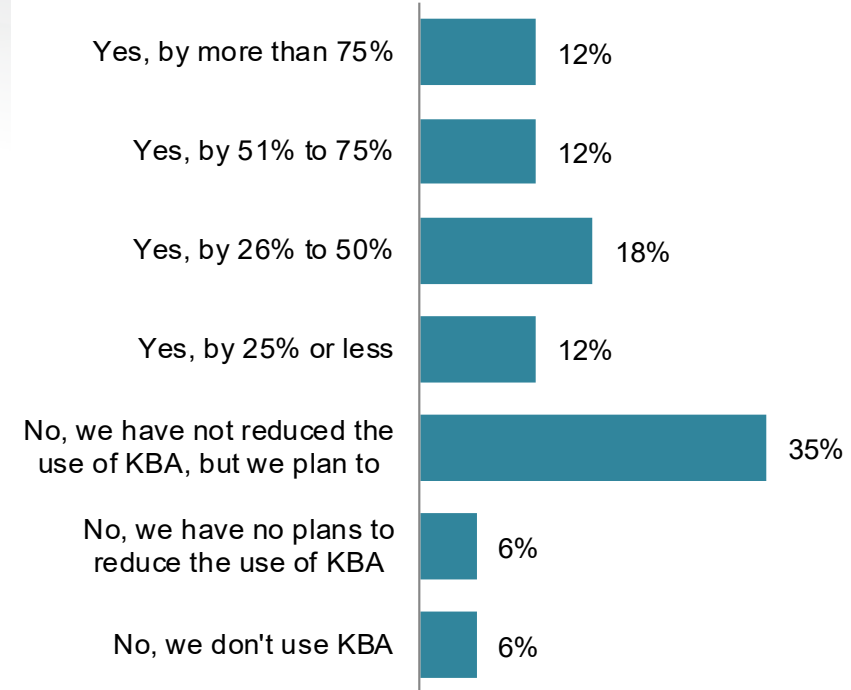
Continual evolution of the control framework is essential

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A layered approach is essential

Q. Have you added any of the following controls to your authentication control framework in the last two years? (Select all that apply; n=17)
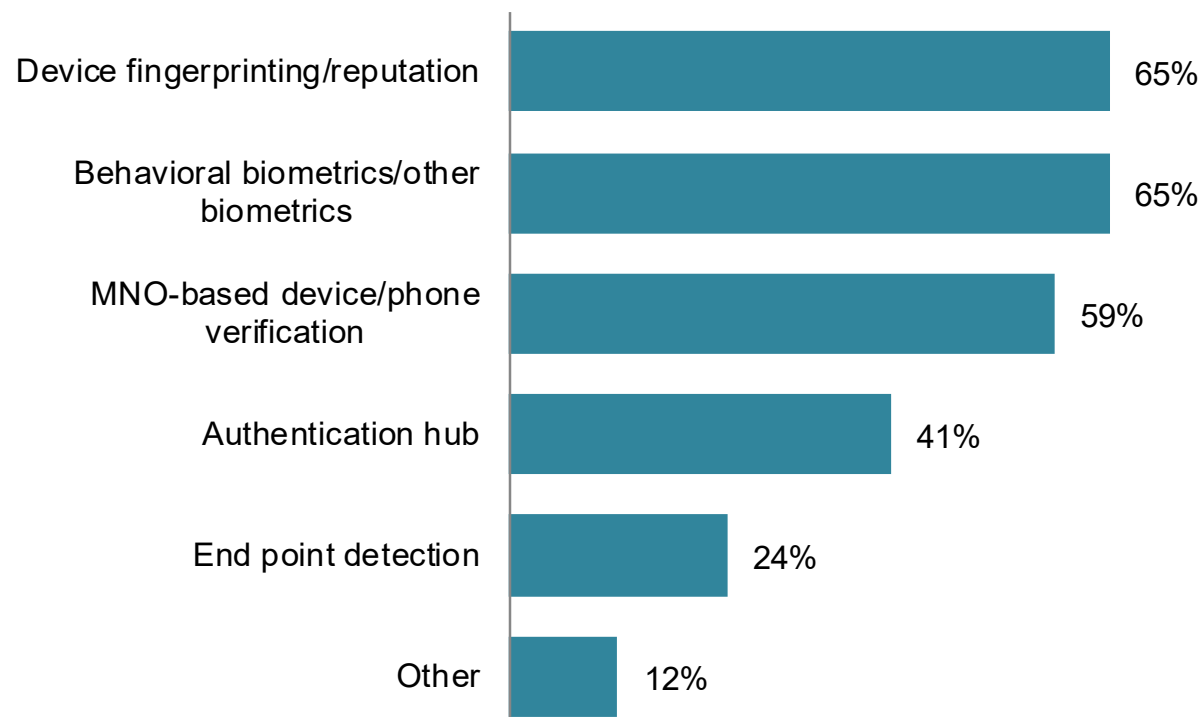

Control	Percentage
Device fingerprinting/reputation	65%
Behavioral biometrics/other biometrics	65%
MNO-based device/phone verification	59%
Authentication hub	41%
End point detection	24%
Other	12%

Source: Aite Group interviews with 20 fraud executives from 18 large North American FIs, July to October 2019

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The hub has emerged as a key area of focus
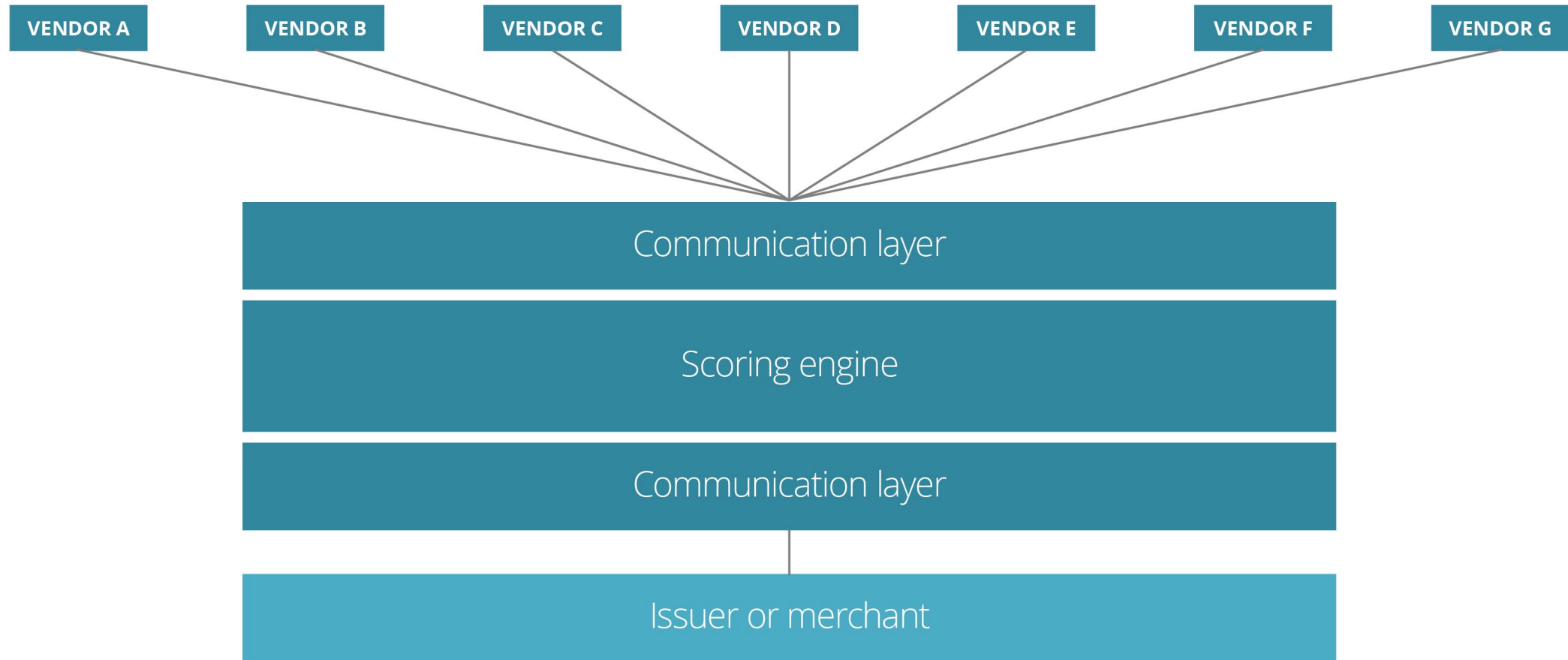
Key trends driving interest in hubs
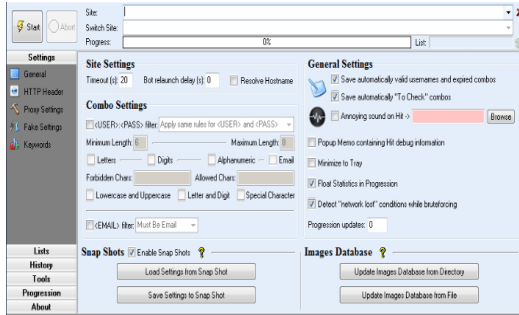
- **Automation of attacks:** Criminals are using bots to help speed their path to monetization of stolen data.
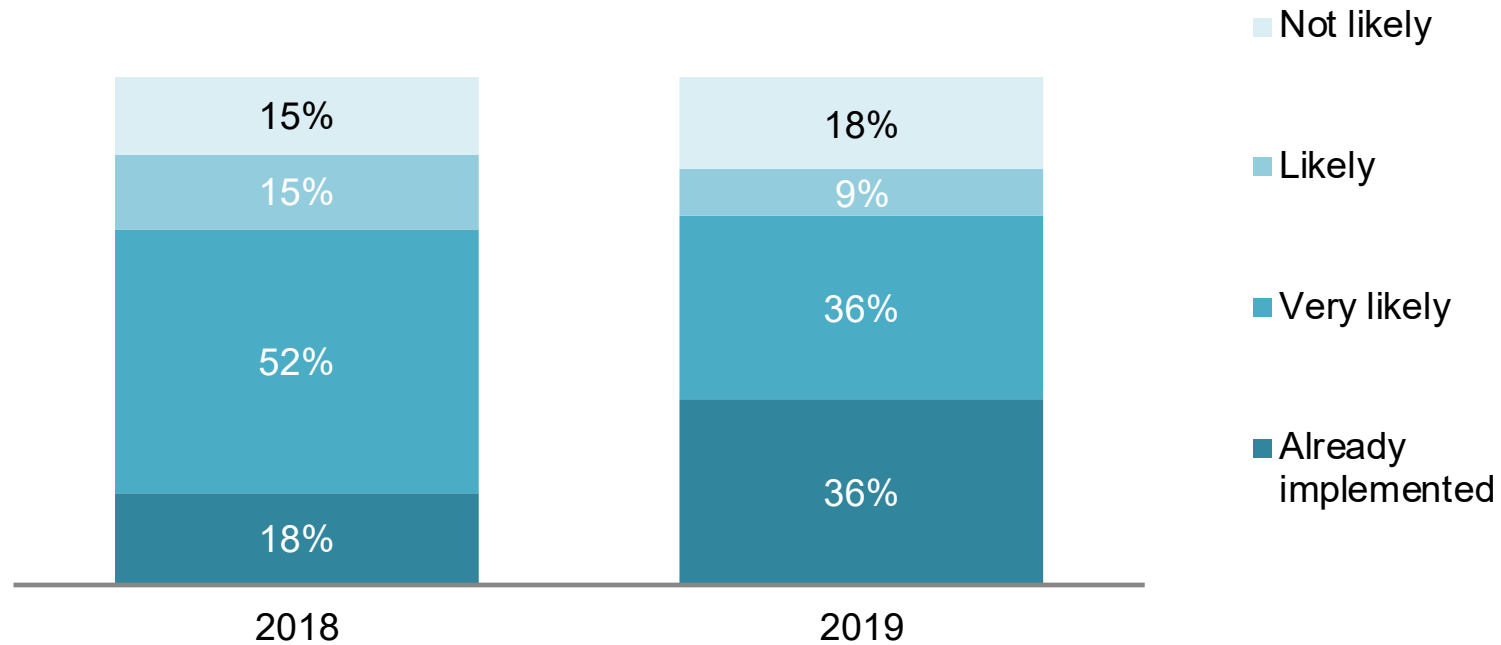
- **FIs struggle to respond nimbly:** Business cases, IT resource queues, and vendor risk management processes all slow FIs' ability to quickly adjust their fraud and authentication routines.

- **Pressure to reduce friction:** Amid the rising threat environment, customer experience remains the #1 business case driver.

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The hub: New tables stakes

Q. How likely is your FI to implement an orchestration hub in the next 1 to 2 years? (n=22)

Legend:
- Not likely
- Likely
- Very likely
- Already implemented

2018:
- Not likely: 15%
- Likely: 15%
- Very likely: 52%
- Already implemented: 18%

2019:
- Not likely: 18%
- Likely: 9%
- Very likely: 36%
- Already implemented: 36%

Source: Aite Group

Key takeaways

- Faster payments requires faster decisioning—and interdiction
- Banks need to invest to protect the customer from themselves as social engineering attacks continue to scale.
- FIs need to get more nimble—hubs can help
- Collaboration is also key—the bad guys collaborate the good guys need to do so as well

Related recent and upcoming Aite Group research

- Upcoming:
  - Mule Activity Trends and Mitigation Efforts, Q1 2020
  - Real-time Payments Fraud in Business Payments, Q1 2020

- Recent:
  - *Digital Channel Fraud Mitigation: Market Trends Influencing FI Strategies,* December 2019
  - *Fraud, Authentication, and Orchestration Hubs: A Path to Greater Agility,* December 2019
  - *Customer Safety 360: The Guide to Effective Fraud Controls,* November 2019
  - *Best Practices to Thwart Fraud in Real-Time Payments,* October 2019