

The logo for Ping Identity, featuring the word "Ping" in a bold, white, sans-serif font above the word "Identity." in a smaller, white, sans-serif font, all contained within a red square.

Ping
Identity.

THE GREAT TECHNOLOGY WAVE

Overcoming the Fear of Unknowns
for Improved Digital Experiences



CONSUMER SURVEY

Executive Summary



DARRYL JONES
Vice President
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Ping Identity

In a world of constantly evolving technology, consumers face plenty of challenges with their digital experiences. This means brands have many opportunities to adjust their offerings or processes to help consumers have a better digital experience, and in turn increasing customer loyalty. However, to successfully do so, organizations must understand the consumer experience on a deeper level: What do consumers really want? What are their concerns? Their fears? Their must-haves and non-negotiables?

Ping Identity commissioned a global survey of 8,000 consumers across markets to better understand their digital experiences, thoughts about emerging technologies, and concerns about identity security. What we found is that consumers have heightened expectations around logins, passwords, and authentication, and face uncertainty around emerging technologies, such as decentralized identity and artificial intelligence (AI). We also found consumers have increasing concerns about identity security, with identity theft and fraud as a top concern (87%)¹, up 24% from 2023.

The login experience continues to be a top struggle for consumers. In fact, 54% of consumers² have stopped using an account or online service because they became frustrated when trying to login. Many of these frustrations are rooted in password use, with 89% of consumers having complaints about keeping track of their passwords. Despite their struggles, consumer satisfaction with app/website use has increased across vertical industries from 2023 to 2024, with healthcare portal/telehealth apps and banking/financial apps/websites leading the way in year-over-year improvement.

KEY GLOBAL FINDINGS:

- 87%** of consumers³ are concerned about identity fraud, as AI spurs hesitation
- 89%** are concerned about AI impacting their identity security
- 75%** want changes to how they login to apps and websites
- 89%** have complaints about keeping track of their passwords
- 54%**⁴ have stopped using an account or online service because they became frustrated when trying to login
- 97%** have concerns about their personal data being online
- 36%** have been the victim of identity fraud
- 85%** state barriers to adopting a digital wallet on their personal mobile device

Additionally, privacy and security are some of the top concerns that consumers face within their digital experience, with 97% of consumers having concerns about their personal data being online. Making matters worse, 89% of consumers have concerns about AI when it comes to their identity security.

Brands can help improve consumers' digital experiences by requiring authentication features and helping them embrace emerging technologies, such as decentralized identity, where consumers are in control of how much information they share. In this report, we'll dig into consumers' hesitancy when adopting new technologies, like AI and decentralized IDs, so organizations can roll out these features in a way that is gradual, approachable, and ultimately, impactful for the overall digital experience.

Explore "[How to Use CIAM to Elevate the Customer Experience](#)" for more information.

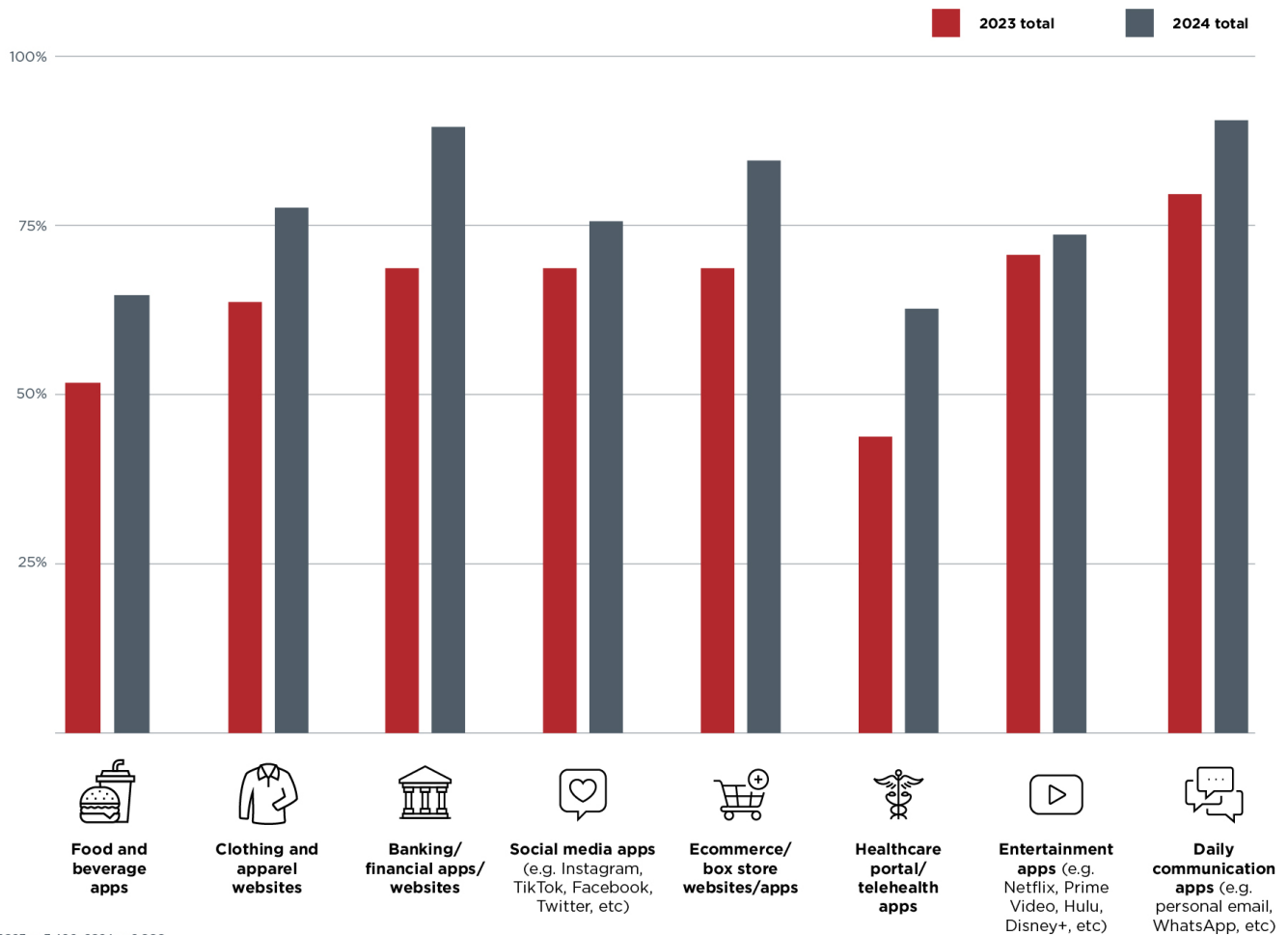
¹ Highly or somewhat concerned
² Either once or on multiple occasions
³ Highly or somewhat concerned
⁴ Either once or on multiple occasions

Consumers have heightened expectations around logins, passwords, and authentication.

When it comes to interacting with brands online, consumers' experiences vary greatly depending on the application or website. However, their experiences across verticals have improved year-over-year,⁵ with healthcare portal/telehealth apps and banking/financial apps/websites leading the way in most year-over-year improvement.

How satisfied are you with your experiences on these types of websites or apps?

(% Satisfied or Very Satisfied)



2023 n=3,400; 2024 n=8,000

⁵ Satisfied or Very satisfied



“It’s hard to know if the root cause for this year-over-year improvement is organizations adjusting to meet consumer needs, consumers becoming more familiar with certain apps/websites, such as banking or healthcare, or a combination of both. Regardless, it’s encouraging to see such a significant advancement for consumers’ experiences with apps/websites across verticals. Ultimately, the hope is that this trend is able to continue year-over-year as consumers continue to have more optimal digital experiences.”

DARRYL JONES

Vice President Consumer Strategy, Ping Identity

Consumers list three top concerns⁶ when it comes to their digital experience: security (78%), ease of use (76%), and privacy/consent (69%).

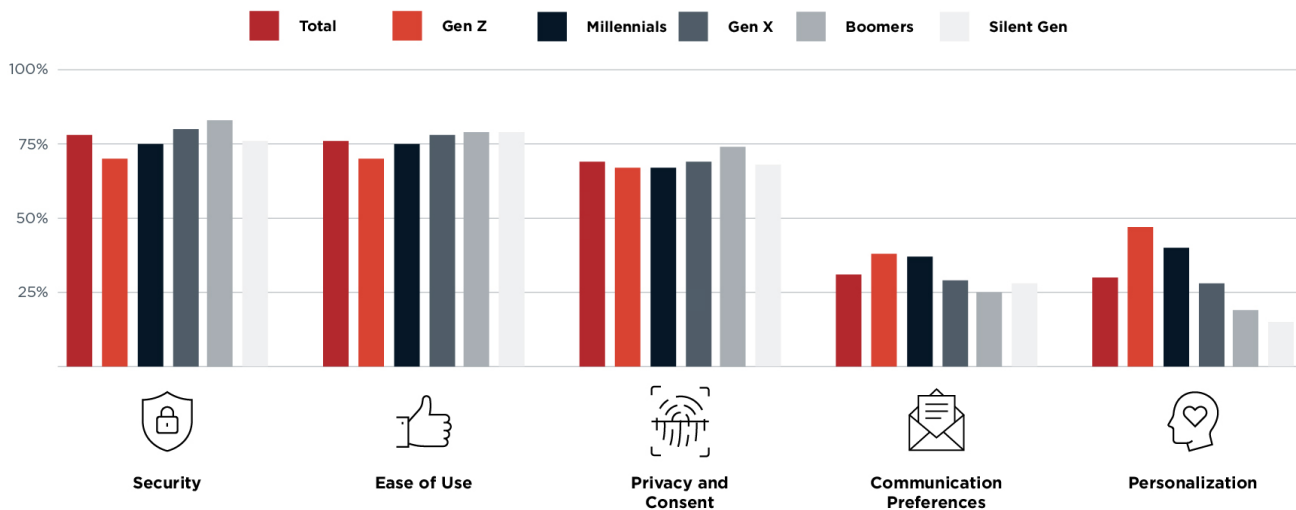


78%

of consumers say that security is important⁷ when interacting with brands

Additionally, younger generations, such as Gen Z (47%) and Millennials (40%), are more likely to say that personalization is important.⁸ However, this preference has decreased year-over-year, with Gen Z (57%) and Millennials (56%) ranking it as a higher preference in 2023.⁹

When interacting with brands, which of the following aspects is most important to your overall experience?¹⁰










Total n=8,000; Gen Z n=1,229; Millennials n=1,874; GenX n=1,875; Boomers n=1,940; Silent/Greatest Gen n=1,081

⁶ Combination of responses ranked first, second, and third
⁷ Combination of responses ranked first, second, and third
⁸ Combination of responses ranked first, second, and third
⁹ Very important and Important
¹⁰ Combination of responses ranked first, second, and third

To help improve their digital experiences, consumers listed login processes (73%), notifications (73%), and password recovery (70%) as specific areas for improvement.¹¹ They also noted¹² the checkout process (70%), personalization of content/experience (69%), and customer feedback (69%) as additional areas of improvement. Regionally, Singapore was the least satisfied across all six areas. Germany was the most satisfied¹³ with the checkout process (59%) and personalization of content/experience (53%).

Overall, how satisfied are you with the following aspects of the websites and applications that you frequently use? (% not fully satisfied)

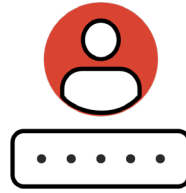
	Total	Login processes: 73% Notifications: 73%	Password recovery: 70% Checkout process: 70%	Personalization of content/experience: 69% Customer feedback: 69%
	US	Login processes: 72% Notifications: 71%	Password recovery: 70% Checkout process: 69%	Personalization of content/experience: 68% Customer feedback: 69%
	UK	Login processes: 71% Notifications: 73%	Password recovery: 69% Checkout process: 71%	Personalization of content/experience: 71% Customer feedback: 71%
	France	Login processes: 73% Notifications: 72%	Password recovery: 68% Checkout process: 68%	Personalization of content/experience: 65% Customer feedback: 64%
	Germany	Login processes: 69% Notifications: 68%	Password recovery: 67% Checkout process: 59%	Personalization of content/experience: 63% Customer feedback: 66%
	Australia	Login processes: 75% Notifications: 77%	Password recovery: 72% Checkout process: 72%	Personalization of content/experience: 71% Customer feedback: 67%
	Singapore	Login processes: 79% Notifications: 80%	Password recovery: 76% Checkout process: 79%	Personalization of content/experience: 73% Customer feedback: 75%

¹¹ Not fully satisfied

¹² Not fully satisfied

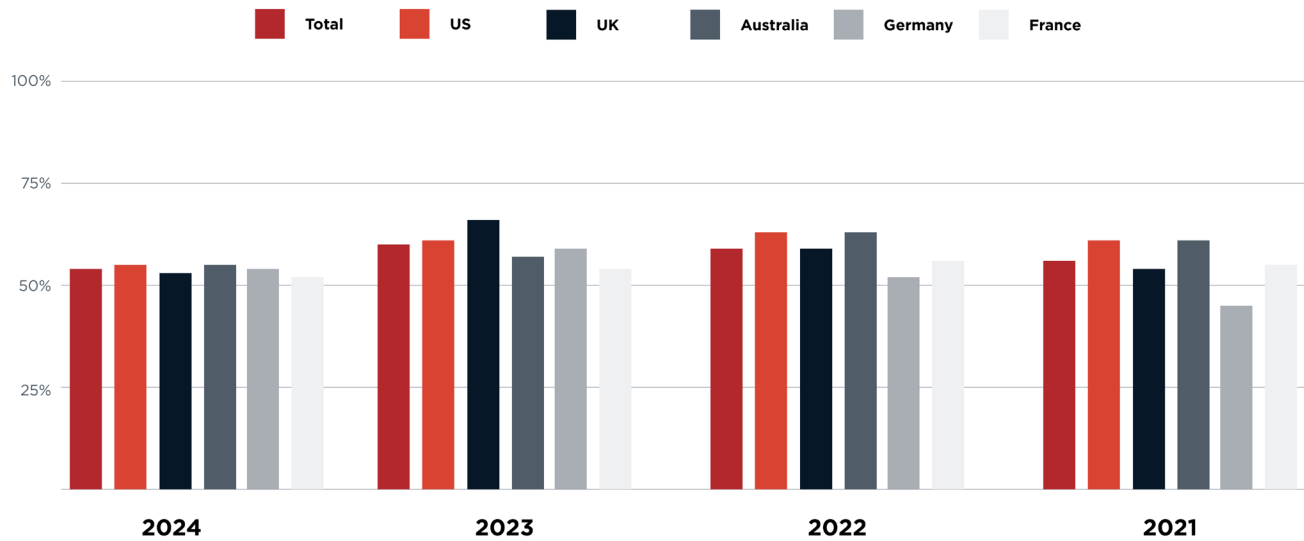
¹³ Not fully satisfied

The login process is particularly frustrating for consumers, with over half (54%)¹⁴ stating they've stopped using an account or online service because they became frustrated when trying to login. While this is down from 60% in 2023¹⁵, it is still a significant percentage of consumers. Additionally, 89% of consumers have complaints about keeping track of their passwords.



54%¹⁶
of consumers have stopped using an account or online service because they became frustrated when trying to login

Have you ever stopped using an account or online service because you became frustrated when trying to login? (% Yes - Multiple Times or Once)



Total n=8,000; US n=2,000; UK n=2,000; France n=1,000; Germany n=1,000; Australia n=1,000

When asked if they could change one thing about the login experience of the websites and applications they frequently use, 75% of consumers confirmed they would change something, with priority given to biometrics (17%), remembering passwords (15%), and a more seamless login experience (12%).



Singapore had the highest preference for biometric logins (26%) compared to the other five countries. Globally, Gen Z (21%) and Millennials (20%) had the highest preference for biometric logins, with the Silent Generation having the least (10%).

¹⁴ Either once or on multiple occasions
¹⁵ Either once or on multiple occasions
¹⁶ Either once or on multiple occasions

If you could change one thing about the login experience of the websites and applications you frequently use, what would it be? (by region)



	TOTAL	US	UK	FRANCE	GERMANY	AUSTRALIA	SINGAPORE
More biometric logins (e.g. face ID, fingerprint, selfie verification)	17%	13%	19%	18%	18%	14%	26%
Remember passwords	15%	17%	16%	16%	16%	15%	11%
A more seamless login experience	12%	14%	13%	10%	10%	14%	17%
More personalized login experience (e.g. features like "remember me" or pre-filling in an email address from a return user)	10%	12%	8%	6%	6%	10%	9%
Add text/email prompt with one-time login	9%	9%	8%	5%	5%	10%	7%
More authentication options to verify the identity of the user (e.g. QR code login)	8%	7%	7%	10%	10%	7%	11%
Remove passwords	3%	3%	3%	3%	3%	3%	5%

If you could change one thing about the login experience of the websites and applications you frequently use, what would it be? (by generation)



	TOTAL	GEN Z	MILLENNIALS	GEN X	BOOMERS	SILENT GEN
More biometric logins (e.g. face ID, fingerprint, selfie verification)	17%	21%	20%	18%	17%	10%
Remember passwords	15%	19%	15%	14%	15%	17%
A more seamless login experience	12%	12%	15%	12%	11%	11%
More personalized login experience (e.g. features like "remember me" or pre-filling in an email address from a return user)	10%	14%	11%	8%	7%	9%
Add text/email prompt with one-time login	9%	9%	7%	9%	11%	11%
More authentication options to verify the identity of the user (e.g. QR code login)	8%	11%	11%	8%	6%	4%
Remove passwords	3%	3%	3%	4%	3%	2%

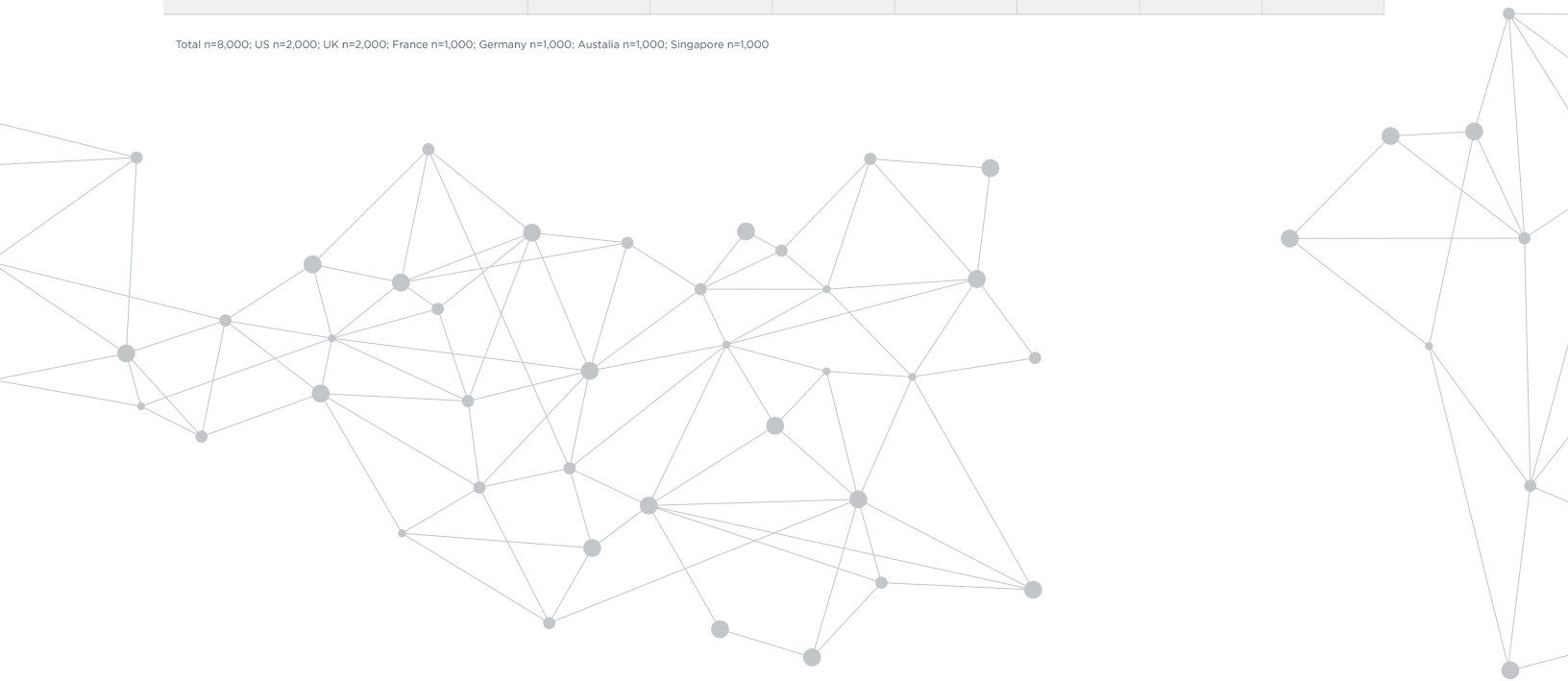
Despite 78% of consumers having security concerns¹⁷, they are reassured by authentication features, with multi-factor authentication (MFA) (50%), biometrics (45%), and text/email prompts with one-time login (41%) ranking highest.

These preferences differ across regions, which is likely due to primary use of different verification methods in each country. For example, Singapore has the highest preference for MFA (63%), while France has the lowest (37%). Singapore also has the highest preference for biometrics (63%), while the US has the lowest (39%). The US has the highest preference for text/email prompts with one-time login (47%), while Germany has the lowest (24%).

Which of the following verification methods, if any, would make you feel more secure or protected against fraud if a business offered it as an additional step to verify your identity?

	TOTAL	US	UK	FRANCE	GERMANY	AUSTRALIA	SINGAPORE
Multi-factor authentication (MFA)	50%	52%	47%	37%	46%	57%	63%
Biometrics (e.g. face ID, fingerprint, selfie verification)	45%	39%	46%	42%	42%	41%	63%
Text/email prompts with one-time login	41%	47%	45%	38%	24%	46%	39%
Retina scans	18%	16%	20%	17%	13%	16%	23%
Voice recognition	15%	15%	17%	15%	10%	15%	15%
QR codes	13%	11%	12%	11%	15%	11%	20%

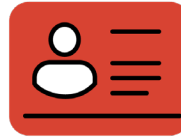
Total n=8,000; US n=2,000; UK n=2,000; France n=1,000; Germany n=1,000; Australia n=1,000; Singapore n=1,000



¹⁷ Combination of responses ranked first, second, and third

Consumers have declining trust in organizations and are most concerned about identity theft and fraud.

Concerns about identity theft and fraud are universal. A significant amount of personally identifiable information is available online about consumers, so it is no surprise that 87% of consumers feel highly or somewhat concerned about identity theft or fraud. This is up 24% from 2023, when 63% of consumers reported feeling concerned about identity theft.



87%

of consumers feel highly or somewhat concerned about identity theft or fraud

Despite the personal nature of the information, consumers feel less vulnerable to identity theft when using government or health services.

Which specific online activities, if any, make you feel most vulnerable to identity theft?



Total
Doing online shopping: 69%
Accessing or using online banking: 65%

Using social media: 62%
Accessing or using online government services: 36%
Accessing or using online health services: 35%



US
Doing online shopping: 71%
Accessing or using online banking: 66%

Using social media: 61%
Accessing or using online government services: 38%
Accessing or using online health services: 35%



UK
Doing online shopping: 65%
Accessing or using online banking: 64%

Using social media: 60%
Accessing or using online government services: 36%
Accessing or using online health services: 34%



France
Doing online shopping: 75%
Accessing or using online banking: 63%

Using social media: 63%
Accessing or using online government services: 33%
Accessing or using online health services: 36%



Germany
Doing online shopping: 69%
Accessing or using online banking: 66%

Using social media: 57%
Accessing or using online government services: 32%
Accessing or using online health services: 36%



Australia
Doing online shopping: 63%
Accessing or using online banking: 58%

Using social media: 63%
Accessing or using online government services: 38%
Accessing or using online health services: 36%



Singapore
Doing online shopping: 72%
Accessing or using online banking: 69%

Using social media: 68%
Accessing or using online government services: 34%
Accessing or using online health services: 38%

Total n=8,000; US n=2,000; UK n=2,000; France n=1,000; Germany n=1,000; Australia n=1,000; Singapore n=1,000



“Here are my tips consumers can implement into their everyday lives to combat fraud and strengthen their personal cybersecurity resilience:

- Keep systems and software up to date
- Be careful when connecting to public Wi-Fi networks
- Set up MFA on all accounts that allow it
- Be cautious about sharing information online, including on social media
- Avoid clicking on links in unsolicited emails or texts
- Be wary of scams that use the faces and even voices of friends, family members, and celebrities — always double-check the source of unusual requests or offers”

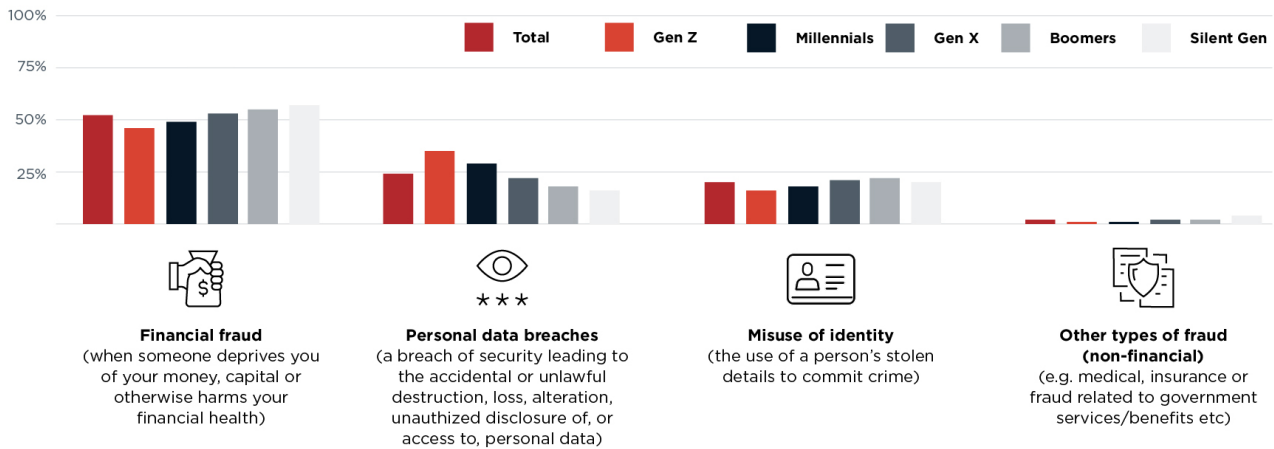
MAYA OGRANOVITCH SCOTT

Senior Product & Solutions Marketing Manager, Ping Identity

Of those who are concerned about identity theft or fraud, 52% are most concerned about financial fraud, 24% are most concerned about personal data breaches, and 20% are most concerned about misuse of identity.

Generationally, financial fraud is a top concern across the board¹⁸, but older generations are more concerned about it than their younger counterparts, with 55% of Boomers and 57% of the Silent Generation listing it as a top concern, and only 46% of Gen Z. The opposite is true when it comes to concerns about personal data breaches¹⁹, with Gen Z having the most concern at 35% and the Silent Generation having the least at 16%.

What specific aspects of identity security are most concerning to you?²⁰



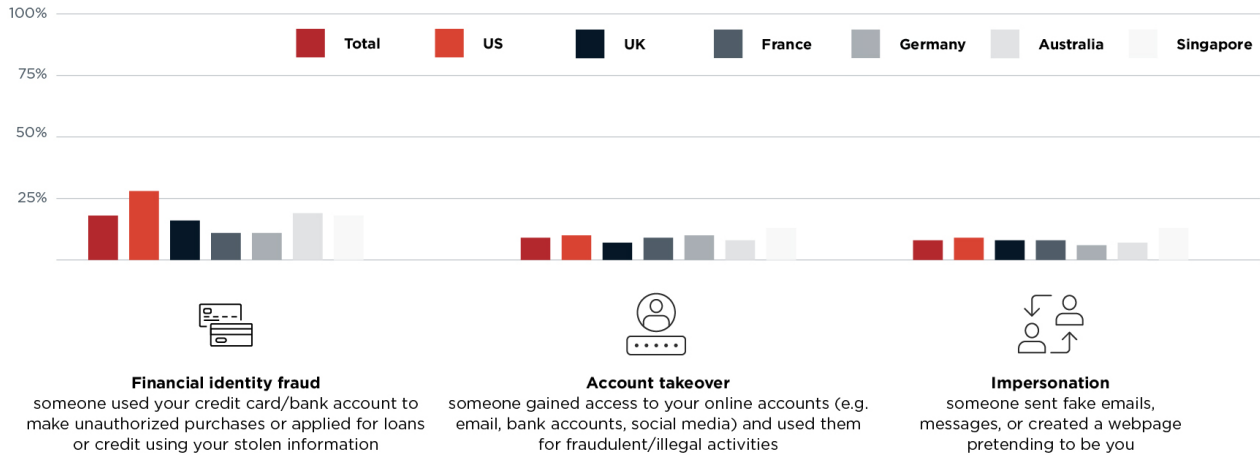
Total n=7,790; Gen Z n=1,189; Millennials n=1,817; GenX n=1,819; Boomers n=1,903; Silent/Greatest Gen n=1,061

While any amount of identity fraud is unacceptable, it should be noted that the fear of being a victim of identity fraud is much higher than the number of actual victims, with only about 1 in 3 (36%) consumers reporting they’ve experienced identity fraud.

¹⁸ Respondents have some concern about identity theft or fraud
¹⁹ Respondents have some concern about identity theft or fraud

The top three types of identity fraud consumers have experienced include financial identity fraud (18%), account takeover (9%), and impersonation (8%). This varies across regions, with the US experiencing the highest amount of financial identity fraud (28%), and France (11%) and Germany (11%) experiencing the lowest. Singapore experienced the highest amount of account takeover (13%) and impersonation (13%).

Have you ever been the victim of any type of identity fraud?



Total n=8,000; US n=2,000; UK n=2,000; France n=1,000; Germany n=1,000; Australia n=1,000; Singapore n=1,000



“[Fraud] made me stressed and frustrated, as someone used my account and the worst is, it was used in another country. I didn’t get the money returned and I was disappointed in my bank, as they didn’t manage to trace it and asked me to call the entity where the card had been used.”

Female, Millennial, Employed

VICTIM OF ACCOUNT TAKEOVER

“Someone impersonating a bank official called to report that my bank account had been hacked. [They] gained access to my [...] old information then ordered a credit card for themselves. The actual bank stopped that from going forward.”



Male, Baby Boomer, Retired

VICTIM OF FINANCIAL IDENTITY FRAUD

“Someone opened an account in my name, I had no idea until I decided to use the app myself. [...] The company could have used a thumbprint [to prevent this]. I have no idea how this account was opened.”



Female, Baby Boomer, Houseperson/Homemaker

VICTIM OF IMPERSONATION

Emerging technologies spark uncertainty for consumers, yet fuel potential.

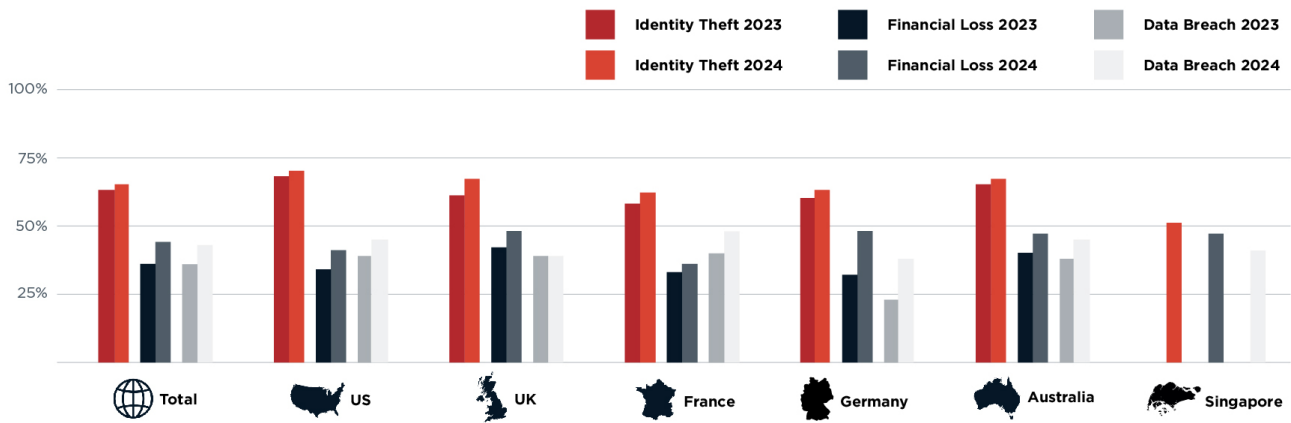
Today, data is collected about everything, including, and perhaps most especially, about individuals. As such, it is no surprise that 97% of consumers have concerns about their personal data being online, with identity theft (65%), financial loss (44%), and data breaches (43%) being their top concerns.²¹ All three areas have seen a year-over-year increase across regions, likely due to the rising use of technology in our day-to-day lives.



97%

of consumers have concerns about their personal data being online

What are your top concerns, if any, when it comes to having your personal information online?



2024: Total n=8,000; US n=2,000; UK n=2,000; France n=1,000; Germany n=1,000; Australia n=1,000; Singapore n=1,000
 2023: Total n=3,400; US n=1,000; UK n=600; France n=600; Germany n=600; Australia n=600;



8%

of consumers have full trust in organizations that manage their identity data

When considering their digital footprint, consumers' trust has decreased slightly since last year, with less than half (44%) of consumers saying they have "some trust" in the organizations that manage their identity data (e.g., email address, home address, phone number, age, workplace, etc.), down from 51% in 2023. Additionally, only 8% have full trust in organizations that manage their identity data, down from 10% in 2023.

To combat these concerns and distrust, decentralized identity is becoming more prevalent in identity security. However, there is still room for improvement and a need for greater consumer awareness, as consumers who are at least somewhat familiar²² with the concept decreased from 49% in 2023 to 35% in 2024.

²¹ Combination of responses ranked first, second and third



WHAT IS DECENTRALIZED IDENTITY?

Decentralized identity is an approach to identity management that allows users to control their identity information. Sometimes referred to as “identity on the network edge” or self-sovereign identity, it eliminates the need for users to provide unnecessary amounts of personal information in order to access a service. Do you really need to hand over your driver’s license, which includes your home address, just to prove your age?

Organizations issue users a verifiable digital credential that is stored in a digital wallet. Users present their credentials to organizations that can verify the information instantly without having to contact the issuer.

USE CASE

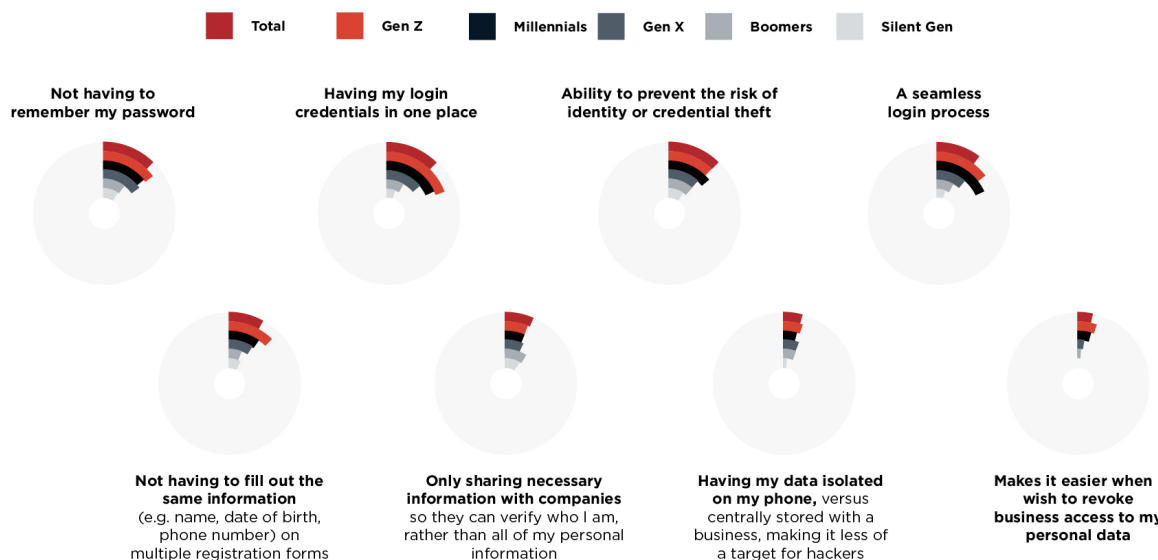
DECENTRALIZED IDENTITY IN ACTION

Last year, California became the latest state to launch a mobile driver’s license (mDL) program powered by decentralized identity. The pilot was originally scoped to cover just 0.5% of the state’s licensed drivers, but rapidly grew to meet demand.²³



Decentralized identity can include digital wallets or ID cards that are kept on personal mobile devices. This option appeals to 74% of consumers. However, despite the appeal, consumers are not super comfortable with the concept. Only 32% of consumers feel extremely or very comfortable using a digital wallet, and only 26% of consumers feel extremely or very comfortable using a digital ID card.

Which of the following benefits of a digital wallet on your personal mobile device would be the most appealing to you, if any?



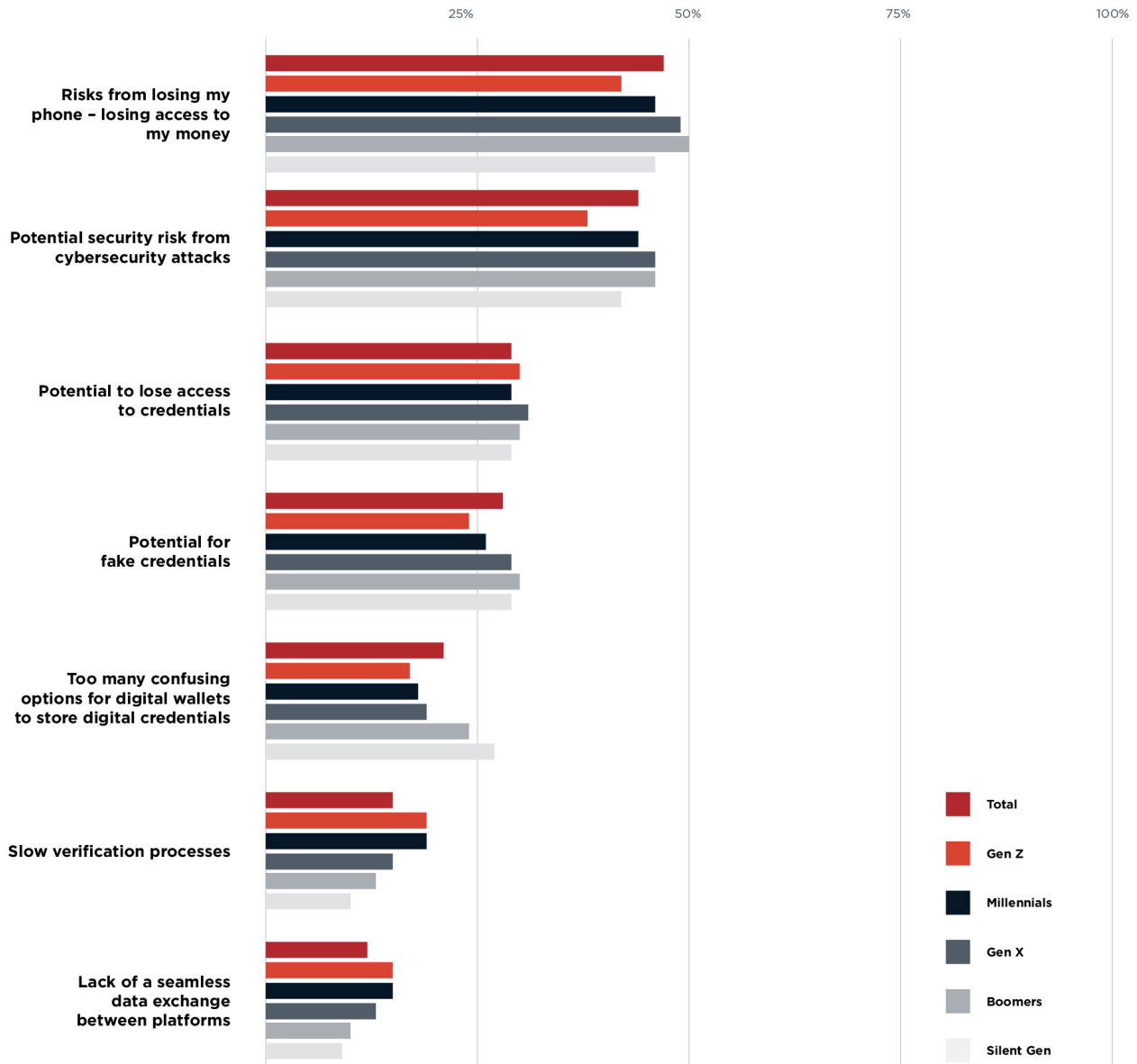
Total n=8,000; Gen Z n=1,229; Millennials n=1,874; GenX n=1,875; Boomers n=1,940; Silent/Greatest Gen n=1,081

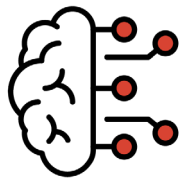
²² Very familiar, Moderately familiar, or Somewhat familiar

²³ <https://www.govtech.com/magazines/mobile-drivers-licenses-other-digital-credentials-poised-to-grow>

In addition to lack of comfort with decentralized identity, 85% of consumers said there are or would be barriers to them adopting a digital wallet on their personal mobile device, with common barriers revolving around accessibility/lack of backup options and cybersecurity risks.

What, if anything, might hold you back from adopting a digital wallet on your personal mobile device?



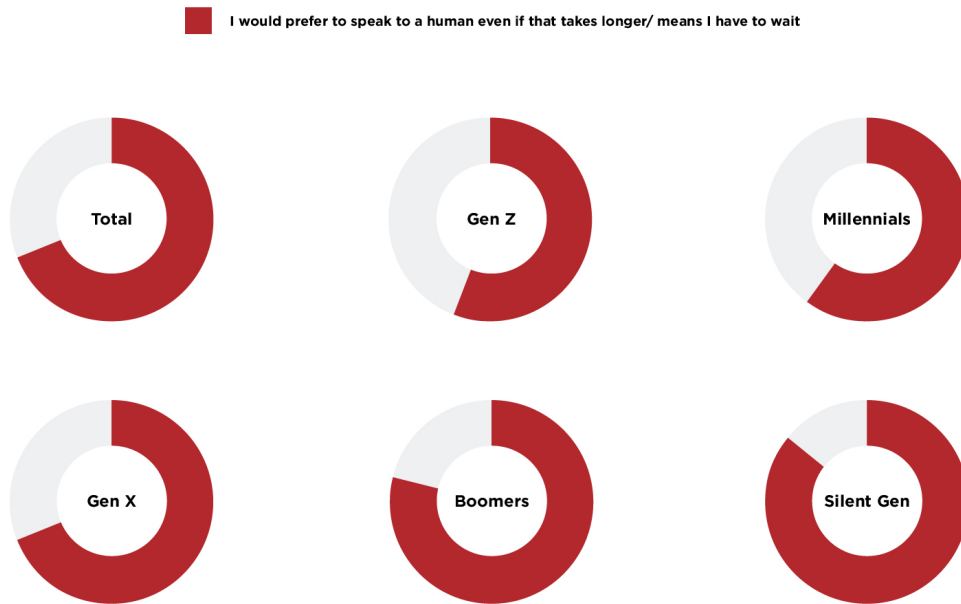
 **41%** of consumers use AI in their personal life, at work, or both

Consumers are more familiar with AI than decentralized identity, which is unsurprising given the proliferation of AI stories in the media and across the web. Additionally, 41% of consumers use AI in their personal life, at work, or both, providing them with greater insight and experience into the technology, something many are likely lacking with decentralized identity.

Despite their greater familiarity with AI, 69% of consumers would still prefer to speak to a human when gaining additional support from a business or organization. This preference increases with each generation, with Gen Z having the lowest preference (56%) and the Silent Generation having the highest (86%).

While many factors may be involved, this may be somewhat attributed to the experience each generation has with emerging technologies. For example, younger generations are often required to learn newer technologies in school and throughout entry-level jobs, whereas older generations are less likely to have the same requirements in their tenured positions.

What is your preferred way or means to gain additional support from a business/organization?



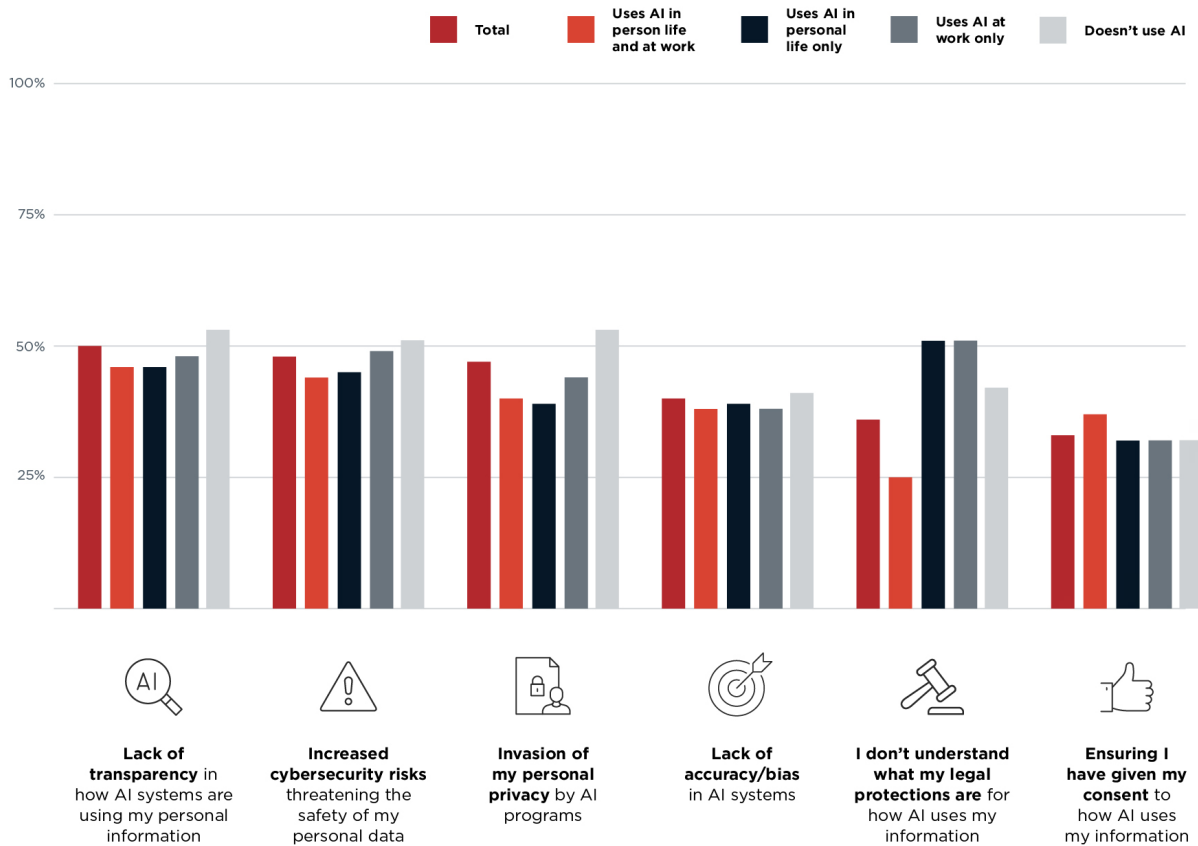
Total n=8,000; Gen Z n=1,229; Millennials n=1,874; GenX n=1,875; Boomers n=1,940; Silent/Greatest Gen n=1,081



89%
of consumers have concerns about AI with regards to identity security

When it comes to identity security, the majority of consumers (89%) have concerns about AI. For those who don't use AI in their personal or professional lives, the specific concerns are even higher than those who do.

What are your concerns about AI with regards to identity security, if any?



Total n=8,000; Uses AI in personal life and at work n=1,275; Uses AI in personal life only n=1,496; Uses AI at work only n=535; Doesn't use AI n=4,310



“Humans often feel an innate fear towards things they don’t know or don’t understand. AI is no different. As consumers become more familiar with the technology, whether that be personally, professionally, or both, they become more comfortable using AI and identity security. To help consumers prepare for new technology, organizations can help their own employees embrace the technology within their work environment to help improve familiarity both in and out of the workplace.”

DARRYL JONES

Vice President Consumer Strategy, Ping Identity

Conclusion

Consumers around the world struggle with brands' digital experiences, although they've noticed improvements since last year. Many have concerns regarding the safety and accessibility of their data, and they do not readily accept new technology as a result. As such, organizations have the potential to integrate more familiar safety processes, such as one-time login prompts, MFA, and biometrics, or educate consumers on new technologies, such as decentralized identity, to ensure they feel supported and safe throughout their consumer journey.

WHAT'S NEXT?

As organizations go forward with the knowledge from this survey, they should consider the following best practices to retain customers through improved digital experiences:

1. Provide consumers with a more seamless login experience aligned to their preferences like passwordless authentication and/or biometrics.
2. Implement passive fraud signals to reassure consumers of security without adding friction to their experience. Consumer preferences include MFA, biometric authentication, and text/email prompts with one-time login.
3. Generate awareness and accessibility for decentralized identity, including through digital wallets or ID cards.
4. Share how your organization uses and secures consumers' data to relieve fears of identity theft/fraud.

Explore "[How to Use CIAM to Elevate the Customer Experience](#)" for more information.



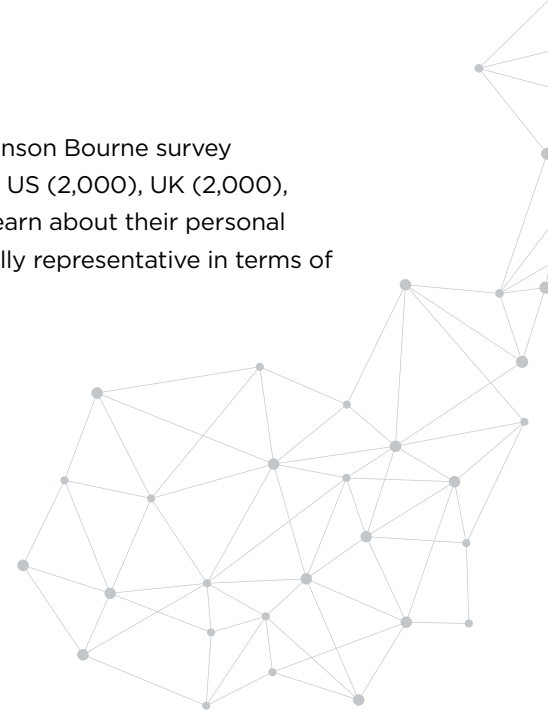
"This year's survey provides organizations with actionable insights by highlighting difficulties consumers face with the login experience, privacy and security concerns, and uncertainty around decentralized identity and AI. By focusing on these areas of improvement, brands can help elevate consumers' digital experiences in a gradual, approachable, and impactful manner."

DARRYL JONES

Vice President Consumer Strategy, Ping Identity

About the Study

The findings detailed in this report are based on responses collected from a Vanson Bourne survey during summer 2024. Vanson Bourne interviewed 8,000 consumers across the US (2,000), UK (2,000), France (1,000), Germany (1,000), Australia (1,000), and Singapore (1,000) to learn about their personal experiences and beliefs surrounding identity security. Consumers were nationally representative in terms of age and gender.



ABOUT PING IDENTITY:

Ping delivers unforgettable user experiences and uncompromising security. We make crafting digital experiences simple for any type of user—partners, customers, employees, and beyond. We are anti-lock-in. That means integration with existing ecosystems, clouds, and on-prem technologies is simple. Out-of-the-box templates let businesses leverage our identity expertise to give their users frictionless experiences. Whether they're building a foundation of modern digital identity, or out-innovating their competitors with cutting-edge services like digital credentials, AI-driven fraud prevention and governance, Ping is the one-stop shop for game-changing digital identity.

ABOUT VANSON BOURNE:

Vanson Bourne is an independent specialist in market research for the technology sector. Its reputation for robust and credible research-based analysis is founded upon rigorous research principles and its ability to seek the opinions of senior decision makers across technical and business functions, in all business sectors and all major markets.

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