2023 Online Authentication Barometer

October 2023

What's the latest in consumer habits, trends and adoption of authentication technologies across the globe?

To find out, the FIDO Alliance conducted its third annual survey of 10,000 consumers in the U.S., U.K., France, Germany, Australia, Singapore, Japan, South Korea, India and China.

Key Findings

- **Password usage without two-factor authentication (2FA) is still dominant across use cases** – consumers enter a password manually nearly 4 times a day, or 1,280 times a year.

- **When given the option, users want other authentication methods** – biometrics is both the preferred method for consumers to log-in and what they believe is most secure, while awareness of passkeys continues to grow.

- **Online scams are becoming more frequent and more sophisticated, likely fuelled by AI** – over half (54%) have seen an increase in suspicious messages and scams, while 52% believe they have become more sophisticated.

- **The impact of legacy sign-in methods is getting worse** – the majority of people are abandoning purchases and giving up accessing services online - this is 15% more likely than last year at nearly four times per month per person.

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The Data

Entering a password manually without any form of additional authentication was the most commonly used authentication method across the use cases tracked.

The ways people have logged into their accounts with passwords and no 2FA in the past 60 days

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Financial Services	31%	30%	30%	25%	33%	37%	30%	25%	35%	32%	38%
Work Computer or Account	37%	37%	29%	31%	36%	39%	38%	37%	42%	36%	42%
Social Media	26%	19%	18%	18%	27%	23%	28%	28%	31%	30%	40%
Streaming accounts such as Netflix or Spotify	25%	22%	18%	19%	28%	21%	28%	18%	28%	31%	35%
Smart Home Devices	17%	14%	11%	10%	20%	13%	17%	11%	20%	25%	30%

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People enter a password manually nearly four times a day on average, or around 1,280 times a year.

The number of times that people enter a password each day and each year

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Average (mean) per day	3.5	3.86	3.49	3.38	4.49	3.7	3.39	2.66	3.17	4.19	2.63
Average (mean) per year	1277.5	1408.9	1273.85	1233.7	1638.85	1350.5	1237.35	970.9	1157.05	1529.35	959.95

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Despite this, biometrics is both the preferred method for consumers to sign-in.

People's most preferred ways to sign-in to online accounts, apps and smart devices

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Biometrics (e.g. fingerprint or face scan)	27%	33%	20%	23%	23%	22%	41%	25%	34%	22%	27%
Using a complex password that only I will remember	17%	15%	21%	22%	17%	19%	10%	16%	21%	14%	14%
A One Time Passcode (OTP) sent to my handset or tablet	14%	16%	10%	10%	12%	16%	22%	8%	8%	22%	11%
A browser's auto form-fill to enter my password	9%	9%	12%	12%	12%	10%	6%	11%	7%	6%	6%
Authentication application (e.g. Authy, Duo, Microsoft or Google Authenticator)	8%	5%	6%	6%	10%	7%	8%	5%	8%	10%	15%
A password manager	8%	8%	7%	8%	10%	10%	5%	6%	6%	10%	6%
QR code	4%	2%	3%	5%	2%	2%	3%	4%	4%	6%	11%
Physical security key (e.g. Yubikey, Google Titan)	4%	3%	3%	3%	4%	3%	3%	2%	5%	6%	8%
Other	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%
I don't know	9%	8%	17%	11%	8%	11%	3%	24%	7%	3%	1%

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They also see biometrics as the most *secure* method for sign-in.

The methods people believe are the most secure way to sign-in to your online accounts, apps and smart devices

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Biometrics (e.g. fingerprint or face scan)	28%	33%	23%	28%	22%	23%	35%	29%	32%	22%	30%
Using a complex password that only I will remember	16%	16%	18%	18%	16%	16%	12%	15%	21%	13%	12%
A One Time Passcode (OTP) sent to my handset or tablet	15%	16%	10%	11%	14%	17%	24%	8%	11%	25%	9%
Authentication application (e.g. Authy, Duo, Microsoft or Google Authenticator)	10%	7%	6%	9%	14%	10%	12%	7%	6%	10%	17%
A password manager	7%	6%	7%	7%	10%	9%	5%	3%	6%	9%	6%
A browser's auto form-fill to enter my password	5%	3%	7%	7%	7%	3%	3%	6%	6%	4%	6%
Physical security key (e.g. Yubikey, Google Titan)	5%	3%	6%	3%	4%	5%	4%	3%	5%	5%	11%
QR code	4%	3%	3%	4%	3%	2%	2%	3%	4%	8%	7%
Other	0%	0%	1%	0%	1%	1%	0%	0%	1%	0%	0%
I don't know	11%	12%	20%	14%	10%	15%	3%	26%	9%	3%	2%

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This is a trend that has grown year over year.

The percentage of people that think biometrics are the most secure method of authentication

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
2022	26%	32%	23%	25%	21%	21%	28%	31%	26%	21%	30%
2023	28%	33%	23%	28%	22%	23%	35%	29%	32%	22%	30%

The percentage of people that prefer biometrics to authenticate themselves

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
2022	24%	32%	21%	22%	19%	19%	33%	26%	26%	19%	28%
2023	27%	33%	20%	23%	23%	22%	41%	25%	34%	22%	27%

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Awareness of other stronger, more user-friendly alternatives like passkeys also continues to grow.

Those familiar with the concept of "passkeys" to access apps and online accounts

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Very familiar - I have heard of them and understand the concept	21%	17%	10%	9%	37%	14%	17%	8%	10%	47%	40%
Somewhat familiar - I have a rough understanding	31%	34%	18%	24%	26%	28%	42%	26%	34%	33%	45%
Unsure	17%	19%	19%	21%	11%	19%	18%	18%	22%	9%	12%
Not very familiar - I can hazard a guess at what they are, but I'm not familiar	12%	13%	10%	16%	10%	15%	12%	17%	17%	6%	3%
Not familiar at all - I have never heard of this concept, and have no idea what it is	19%	17%	44%	31%	16%	24%	11%	30%	17%	5%	0%
% Very / somewhat familiar	52%	51%	27%	33%	63%	42%	59%	35%	45%	80%	85%

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AI is likely driving both an increase in suspicious messages and scams and making them even more sophisticated.

Those that have detected a change in the number of suspicious messages or scams online in the last few months

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Yes – significant increase	21%	17%	19%	11%	32%	25%	30%	8%	9%	40%	21%
Yes – somewhat increase	33%	32%	31%	29%	26%	34%	42%	21%	35%	35%	46%
No change	31%	39%	33%	43%	27%	31%	21%	41%	34%	15%	24%
No – somewhat decrease	4%	3%	4%	5%	4%	3%	3%	5%	6%	4%	5%
No – significant decrease	2%	1%	2%	1%	2%	2%	0%	2%	3%	2%	1%
Not sure	9%	8%	11%	11%	8%	7%	4%	24%	13%	5%	4%
% Increase	54%	49%	51%	40%	58%	59%	72%	29%	44%	75%	66%

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AI is likely driving both an increase in suspicious messages and scams and making them even more sophisticated.

Those that have noticed a change in the sophistication of suspicious messages or scams online in the last few months

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Yes – significant increase	20%	15%	16%	12%	29%	20%	27%	7%	11%	39%	20%
Yes – somewhat increase	32%	30%	30%	26%	24%	34%	44%	19%	33%	35%	46%
No change	33%	42%	38%	45%	32%	35%	23%	45%	35%	15%	23%
No – somewhat decrease	3%	2%	3%	3%	3%	2%	2%	4%	5%	4%	4%
No – significant decrease	2%	2%	1%	1%	3%	1%	0%	2%	2%	2%	1%
Not sure	11%	9%	13%	13%	9%	9%	5%	24%	14%	5%	5%
% Increase	52%	45%	46%	38%	54%	54%	71%	26%	44%	73%	66%

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Passwords are causing the majority of people to abandon purchases and give up accessing services online.

The number of times people have abandoned a purchase because they couldn't remember your password in the last month

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Mean	1.57	1.36	1.58	1.24	2.1	1.31	1.49	0.96	1.4	2.66	1.56
Never	57%	59%	61%	64%	53%	61%	57%	73%	55%	39%	50%
1 to 2	24%	25%	21%	21%	22%	22%	25%	16%	29%	29%	29%
3 to 5	12%	10%	10%	10%	13%	11%	13%	7%	13%	19%	16%
6 to 10	5%	4%	5%	4%	6%	5%	4%	3%	3%	8%	5%
11 to 15	1%	1%	1%	1%	3%	1%	2%	0%	1%	3%	1%
More than 15	1%	1%	2%	0%	2%	0%	1%	1%	1%	2%	0%

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Passwords are causing the majority of people to abandon purchases and give up accessing services online.

The number of times people have given up accessing an online service because they couldn't remember your password in the last month

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
Mean	2.11	1.8	1.9	1.74	2.66	1.87	2.02	1.49	1.9	3.45	2.23
Never	41%	46%	48%	49%	39%	47%	39%	55%	36%	23%	27%
1 to 2	33%	31%	31%	29%	30%	29%	36%	28%	39%	35%	42%
3 to 5	18%	18%	14%	15%	16%	16%	19%	12%	20%	24%	22%
6 to 10	5%	4%	4%	4%	8%	5%	4%	3%	4%	10%	7%
11 to 15	1%	0%	1%	1%	3%	1%	1%	1%	1%	3%	1%
More than 15	2%	2%	3%	1%	3%	1%	2%	2%	1%	4%	0%

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And this problem has gotten significantly worse compared to last year.

The number of times per day that the average person abandoned a purchase AND gave up accessing an online service because they couldn't remember your password

	Overall	UK	France	Germany	US	Australia	Singapore	Japan	South Korea	India	China
2022 average	3.18	2.54	2.65	2.31	3.71	2.58	3.41	2.35	3.29	6.16	2.87
2023 average	3.68	3.16	3.48	2.98	4.76	3.18	3.51	2.45	3.3	6.11	3.79
% yearly increase	15.72%	24.41%	31.32%	29.00%	28.30%	23.26%	2.93%	4.26%	0.30%	-0.81%	32.06%

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Research Overview and Methodology

- The survey was conducted among 10,010 consumers across the U.K., France, Germany, U.S., Australia, Singapore, Japan, South Korea, India and China.

- At an overall level results are accurate to ± 1.0% at 95% confidence limits assuming a result of 50%.

- The interviews were conducted online by Sapio Research in August 2023 using an email invitation and an online survey.

View the results from the 2021 and 2022 Barometers.

Learn more at
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