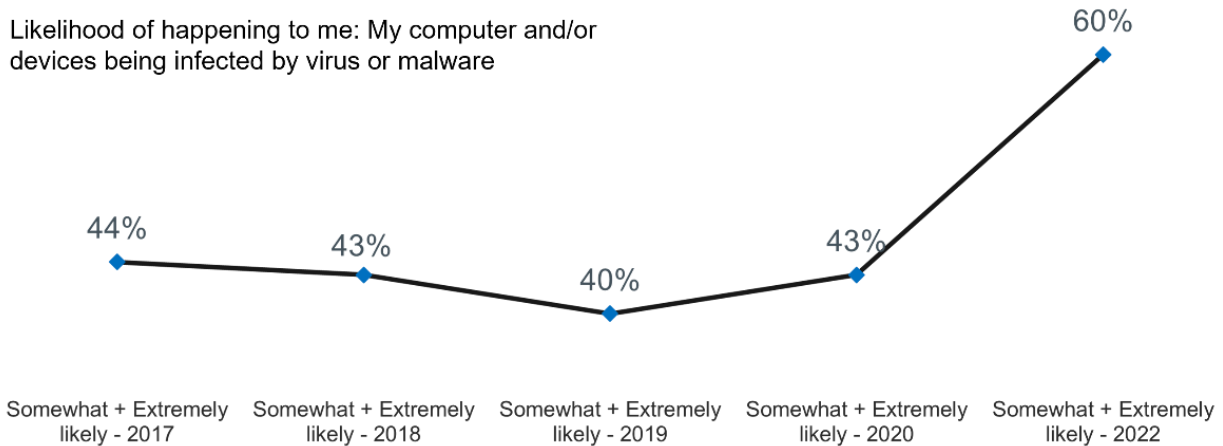# Cybersecurity Awareness Survey
Annex A - CHARTS
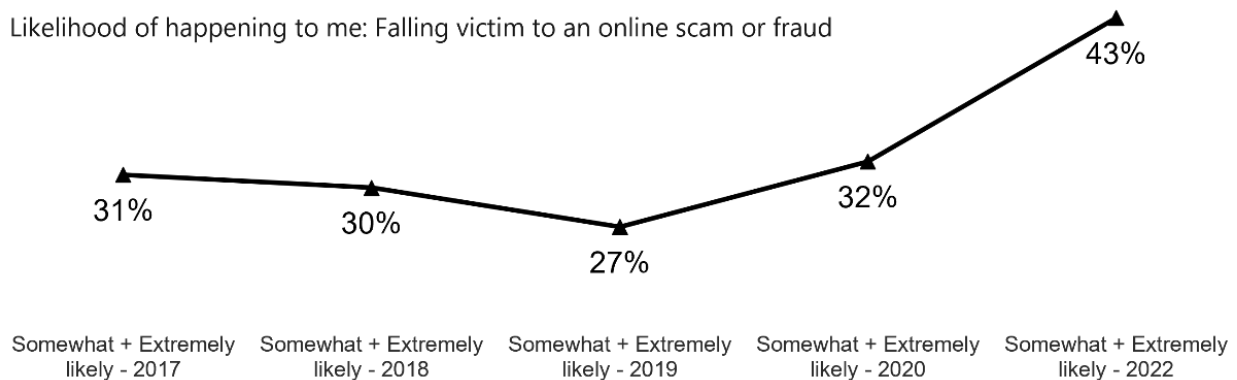
CHART A

60% of respondents in 2022 felt that the likelihood of their computers and/or devices being infected by viruses or malware was high, compared to between 40-44% from 2017-2020.
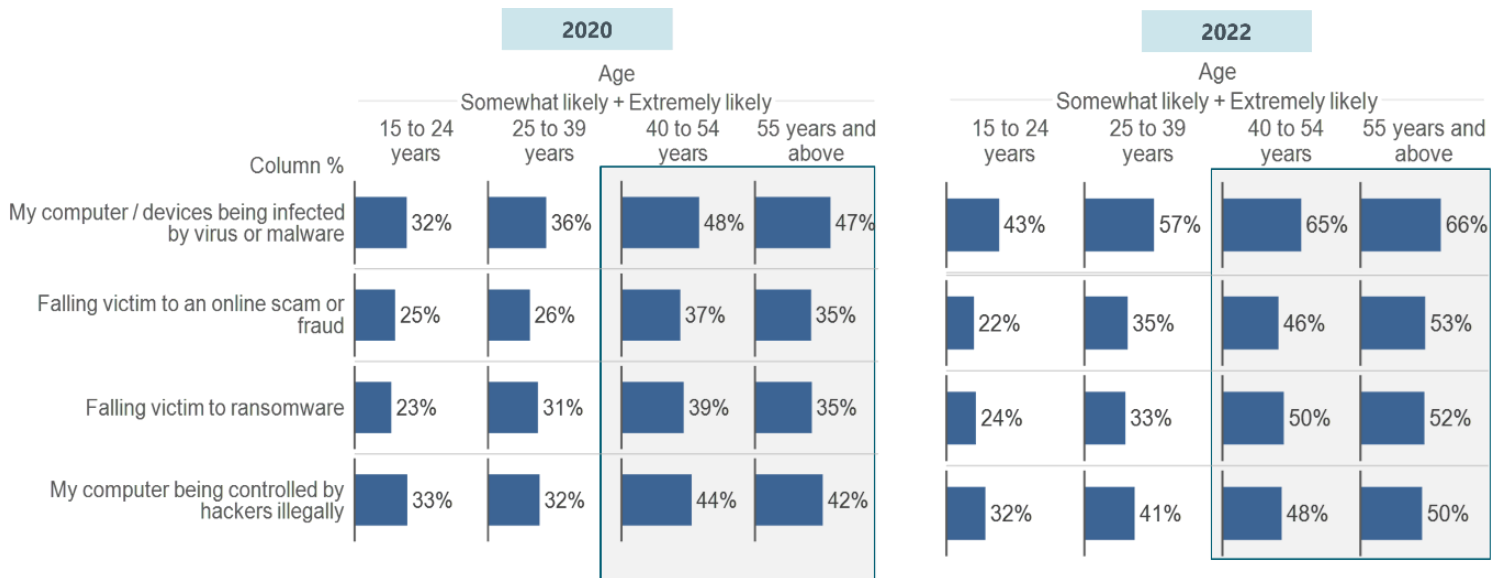
Likelihood of happening to me: My computer and/or devices being infected by virus or malware

Somewhat + Extremely likely - 2017	Somewhat + Extremely likely - 2018	Somewhat + Extremely likely - 2019	Somewhat + Extremely likely - 2020	Somewhat + Extremely likely - 2022
44%	43%	40%	43%	60%

CHART B

43% of respondents in 2022 perceived that they might fall victim to online scams, an increase from 32% and 27% of respondents in 2020 and 2019 respectively.

Likelihood of happening to me: Falling victim to an online scam or fraud

Somewhat + Extremely likely - 2017	Somewhat + Extremely likely - 2018	Somewhat + Extremely likely - 2019	Somewhat + Extremely likely - 2020	Somewhat + Extremely likely - 2022
31%	30%	27%	32%	43%

CHART C

The older the respondents, the higher the perceived likelihood of falling victim to cyber incidents.

	2020 Age — Somewhat likely + Extremely likely				**2022** Age — Somewhat likely + Extremely likely			
Column %	15 to 24 years	25 to 39 years	40 to 54 years	55 years and above	15 to 24 years	25 to 39 years	40 to 54 years	55 years and above
My computer / devices being infected by virus or malware	32%	36%	48%	47%	43%	57%	65%	66%
Falling victim to an online scam or fraud	25%	26%	37%	35%	22%	35%	46%	53%
Falling victim to ransomware	23%	31%	39%	35%	24%	33%	50%	52%
My computer being controlled by hackers illegally	33%	32%	44%	42%	32%	41%	48%	50%

CHART D

About one in three respondents indicated that they fell victim to cyber incidents in 2022.

% who fell victim to one of four cyber incidents

■ 2022 ■ 2020

Based on four common cyber incidents
- 29% (2022)
- 32% (2020)
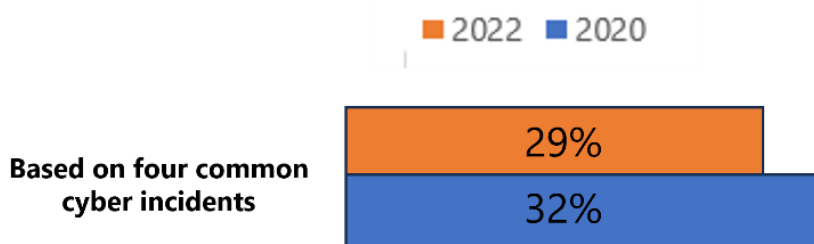
The four cyber incidents are: unauthorized attempts were made to access my accounts, informed by others that my online accounts were used to contact them without my knowledge, instruction or consent, locked out of my online accounts, personal data was stolen.
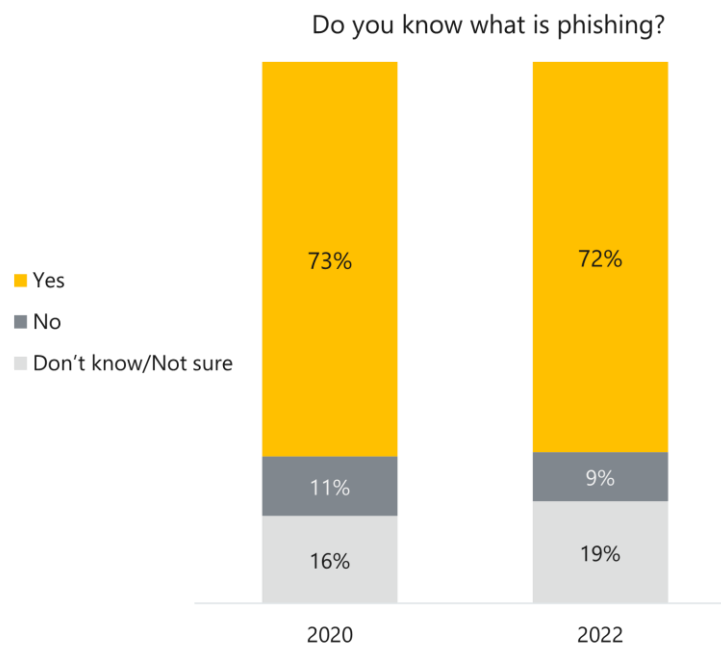
CHART E

In 2022, more younger respondents (15-39 years old) fell victim to cyber incidents (in terms of incidence rates) compared to older respondents aged 40 and above.
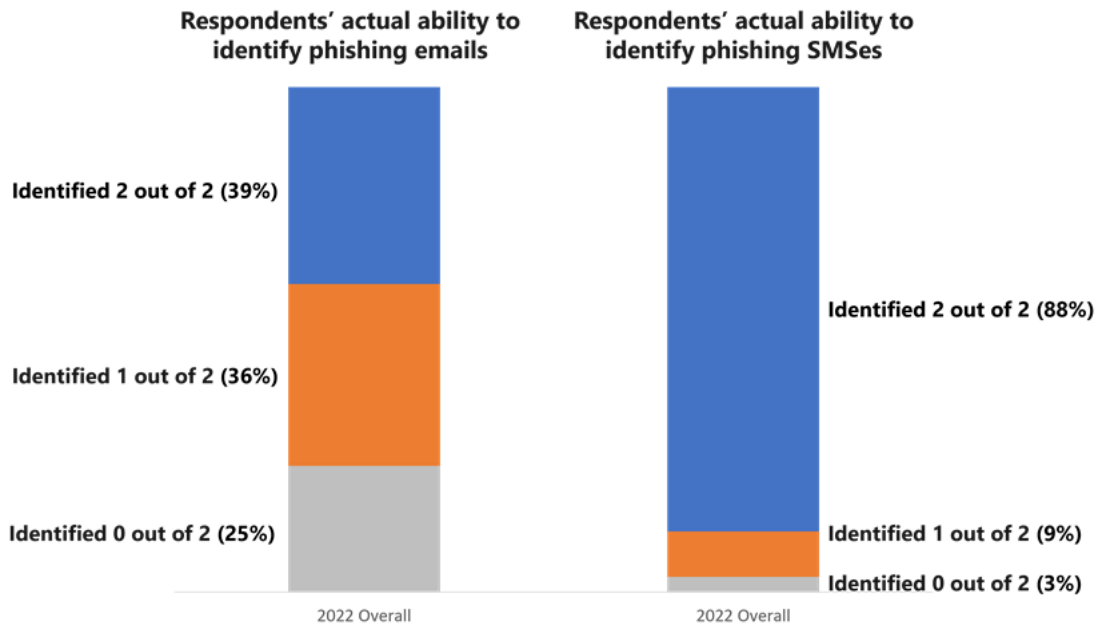
	15 to 24 years	25 to 39 years	40 to 54 years	55 years and above
■ Fell victim to 1 or more cyber incidents	37%	34%	31%	20%
■ Did not fall victim to any cyber incidents	63%	66%	69%	80%
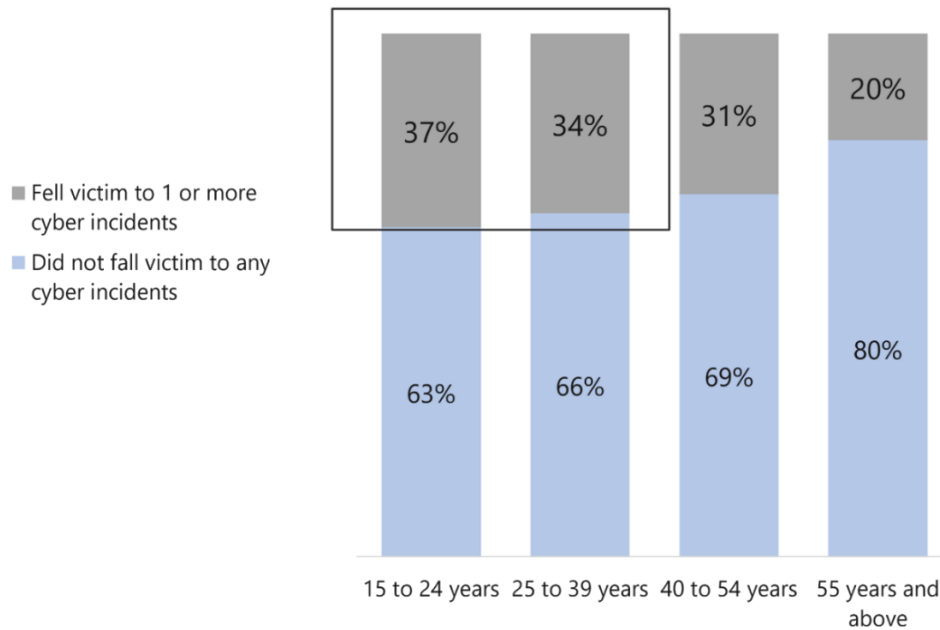
CHART F

Awareness of phishing remained unchanged at over seven in 10 between 2020 and 2022.

Do you know what is phishing?

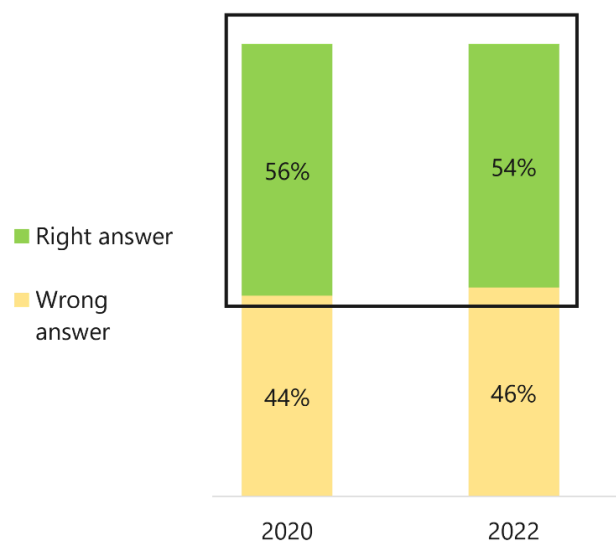|	2020	2022
■ Yes	73%	72%
■ No	11%	9%
□ Don't know/Not sure	16%	19%

CHART G

More than seven in 10 respondents were able to identify at least one of two phishing emails. More than nine in 10 respondents were able to correctly identify at least one phishing SMS.

Respondents' actual ability to identify phishing emails

Identified 2 out of 2 (39%)

Identified 1 out of 2 (36%)

Identified 0 out of 2 (25%)

2022 Overall

Respondents' actual ability to identify phishing SMSes

Identified 2 out of 2 (88%)

Identified 1 out of 2 (9%)

Identified 0 out of 2 (3%)

2022 Overall

CHART H

Slightly more than half of respondents were able to identify the strongest password from a list of passwords in 2022, a drop of two percentage points from 2020.
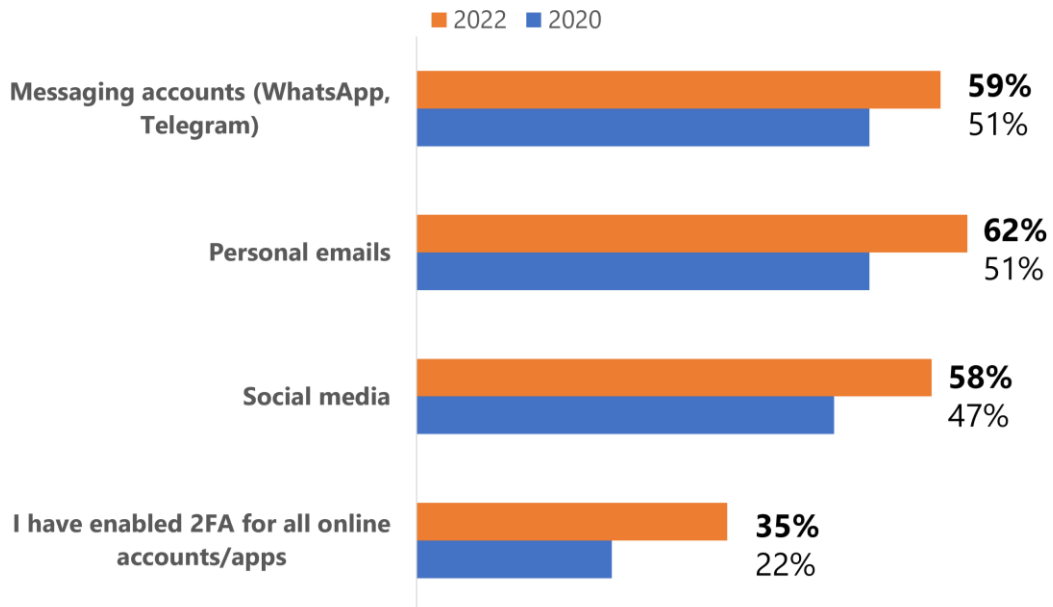
% of respondents able to identify the strongest password

■ Right answer

■ Wrong answer
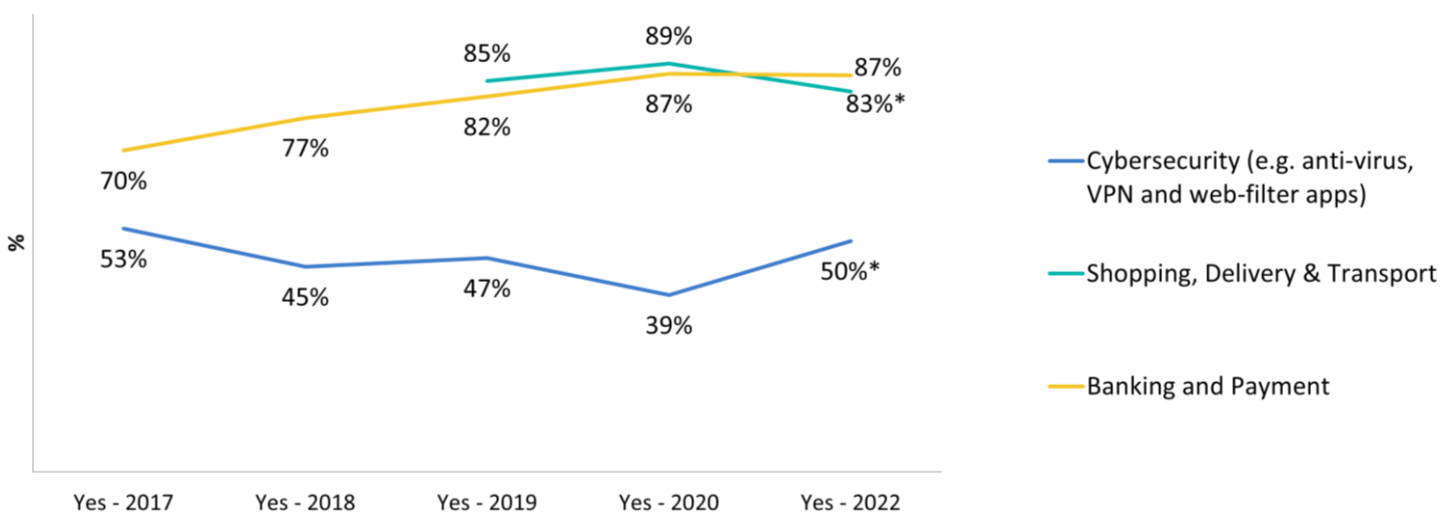
56%   54%

44%   46%

2020   2022

CHART I

There were increases in respondents who enabled 2FA in messaging accounts, personal emails and social media between 2020 and 2022.

Respondents who enabled 2FA, by account type

■ 2022 ■ 2020

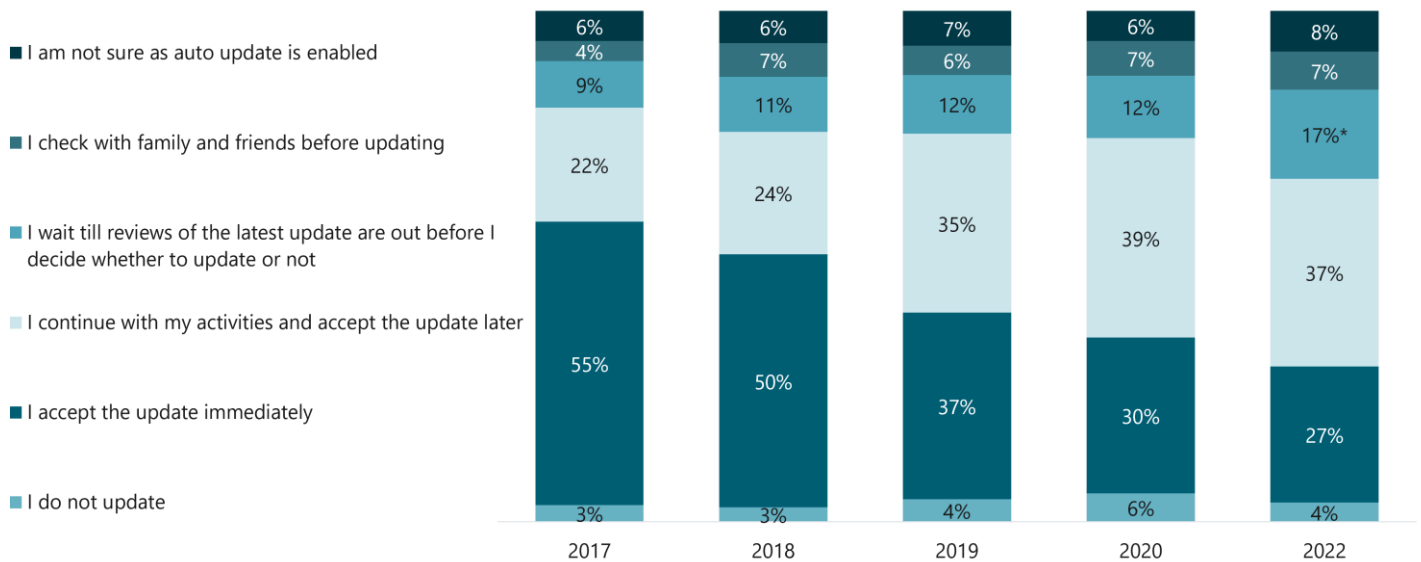| Account type	2022	2020
Messaging accounts (WhatsApp, Telegram)	**59%**	51%
Personal emails	**62%**	51%
Social media	**58%**	47%
I have enabled 2FA for all online accounts/apps	**35%**	22%

CHART J

More than eight in 10 reported that they have common utility apps (e.g. banking, commerce, transport) installed in their smartphones. Five in 10 installed cybersecurity and anti-virus apps, an increase from about four in 10 in 2020.

Cybersecurity (e.g. anti-virus, VPN and web-filter apps): 53%, 45%, 47%, 39%, 50%*

Shopping, Delivery & Transport: 85%, 89%, 83%*

Banking and Payment: 70%, 77%, 82%, 87%, 87%

Yes - 2017   Yes - 2018   Yes - 2019   Yes - 2020   Yes - 2022

CHART K

Since 2017, there has been a decline in respondents accepting updates immediately as more preferred to continue with their activities and accept later.
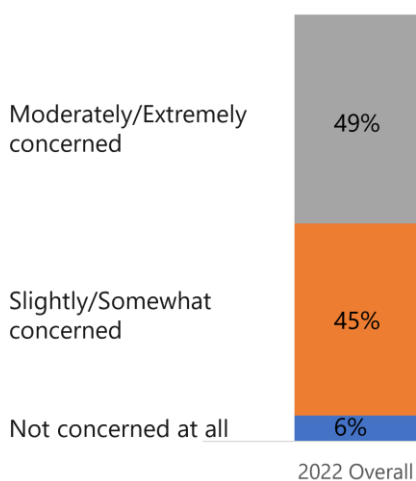
Which of the following best describes what you do when an update is available for your mobile devices?
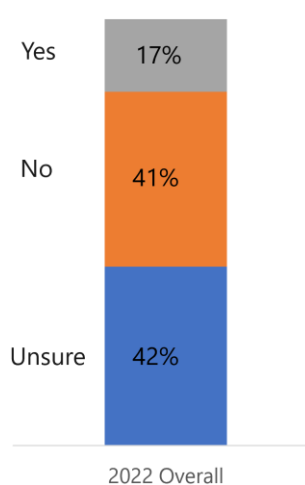
- ■ I am not sure as auto update is enabled
- ■ I check with family and friends before updating
- ■ I wait till reviews of the latest update are out before I decide whether to update or not
- ■ I continue with my activities and accept the update later
- ■ I accept the update immediately
- ■ I do not update

	2017	2018	2019	2020	2022
I am not sure as auto update is enabled	6%	6%	7%	6%	8%
I check with family and friends before updating	4%	7%	6%	7%	7%
I wait till reviews of the latest update are out	9%	11%	12%	12%	17%*
I continue with my activities and accept later	22%	24%	35%	39%	37%
I accept the update immediately	55%	50%	37%	30%	27%
I do not update	3%	3%	4%	6%	4%

CHART L

A large majority (84%) of respondents owned and/or used one or more IoT devices. Almost half of all respondents (49%) expressed moderate to extreme concern about their devices being hacked. Less than 1 in 5 of all respondents (17%) were confident that they knew of the steps to take to secure IoT devices.

How concerned are you that IoT devices may be hacked?

	2022 Overall
Moderately/Extremely concerned	49%
Slightly/Somewhat concerned	45%
Not concerned at all	6%

Do you know of any steps you can take to secure IoT devices?

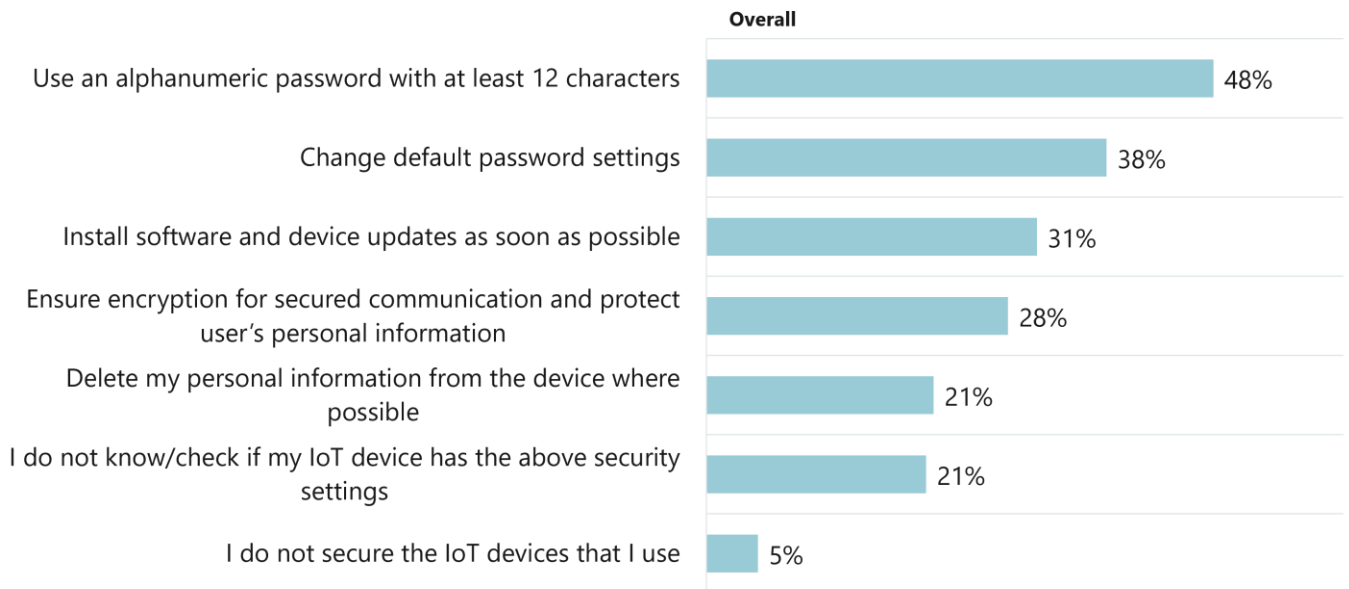|	2022 Overall
Yes	17%
No	41%
Unsure	42%

CHART M

Of the 84% who owned and/or used one or more IoT devices, half replied that they use an alphanumeric password with at least 12 characters, while about four in 10 said that they changed the default password.

Which of the following do you do to secure your IoT device(s)?

Overall

Use an alphanumeric password with at least 12 characters	48%
Change default password settings	38%
Install software and device updates as soon as possible	31%
Ensure encryption for secured communication and protect user's personal information	28%
Delete my personal information from the device where possible	21%
I do not know/check if my IoT device has the above security settings	21%
I do not secure the IoT devices that I use	5%

- End -