Professional app trends 2022
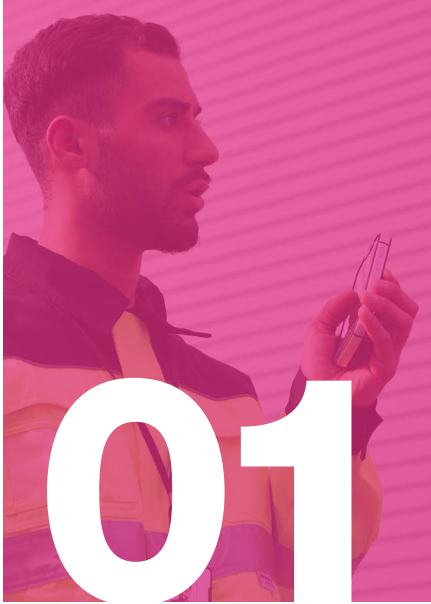
37 things you wish you'd known earlier

AIRBUS

Contents

01

What is the next big thing in professional apps?

Imagine someone using a professional radio today. After their shift, they may look at their smartphone and think: "I could use some of these smart apps in my job. They would make my work a lot easier and more efficient."

Of course, the reality is not so easy. Those who use apps for work (such as police officers, firefighters and business users) need their apps to meet the specific demands of mission-critical and business-focused users and devices.

What are the demands? And what is the next big thing in professional apps?

Users want security with a roadmap to the future

Apps are everywhere in the consumer world. It is obvious that professionals need apps as well. Ideally, professional apps will allow faster reactions and faster operations.

The Covid-19 pandemic has increased the use of professional apps, according to surveys in 2022 and 2021.

Most of the respondents use apps, and the most commonly used are email and/or calendar, group chat, and web browsing. Applications that automate routine tasks and reporting are also popular.

Apps related to Artificial Intelligence, biometric apps, and sharing rich media with groups are also becoming more popular.

Security continues to be the key requirement for apps according to users. They also want to see commitment from their suppliers and a clear roadmap to the future.

"Professionals want to see roadmaps and be sure they have long-term support from apps vendors."

2022 can be the year of user centricity

Application providers have to know the users' needs. The winning apps will support the users' needs better than current solutions do. Interestingly, it is not necessary for an application provider to have a wide portfolio of offerings - it is more important to match the users' needs very accurately.

"

There is a visible trend that organizations are approaching apps adoption in a more structured way. This is in line with the findings from last year's survey. "

Mobile professionals will concentrate on their tasks and not on their communication device. Even though consumers may continually look at their screen, a professional app is a tool for its user. The user needs to use the tool without looking at it constantly. A completely different approach is needed to give a good user experience from professional apps.

Over the last 7 years, professionals have become less likely to download apps to their device from Google Play or Apple AppStore.

There are also two clear upward trends. One is a growing use of printers as an accessory. The other is that many respondents don't know the answer to the question "Does your organization have plans to introduce new professional mobile apps?"

Users like solutions that are easy and fast, and also secure. Users want mission critical apps that solve the challenges faced in real life. Apps that automate repetitive tasks and reporting will be popular, provided they also offer security and allow users to keep control of their data.

They also want the data they collect to be turned into information they can use.

Professional organizations will need support to plan and implement apps. Companies who can present a logical roadmap and commit to long-term support for application users will have a competitive advantage.
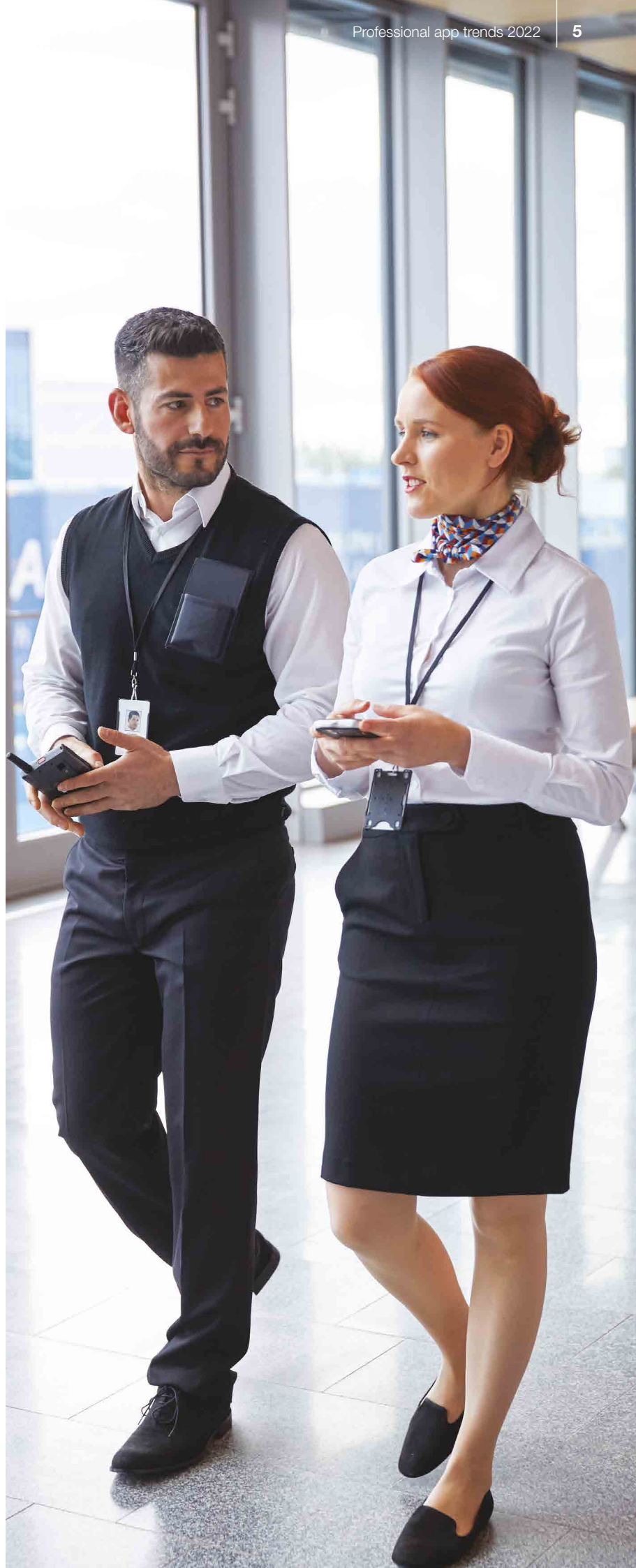
02

A look at survey findings

What are the most important characteristics of mobile apps? What are the most potential use cases for new mobile apps? What does the 2022 survey into the professional apps market say?

To explore these and many other such questions, Airbus has conducted annual surveys of professional mobile users, and this is the seventh in the series*.

Now, take a closer look at these exciting survey findings. Over 500 professionals like yourself from all over the world have shared their insight.

*Find all survey reports since 2016: **securelandcommunications.com/professional-app-trends/archive**

★ Indicates the 37 things you wish you'd known earlier

Which apps do professionals use?

Most of the respondents use apps. The most commonly used are email and/or calendar, group chat, and web browsing. Applications that automate routine tasks and reporting are also popular.
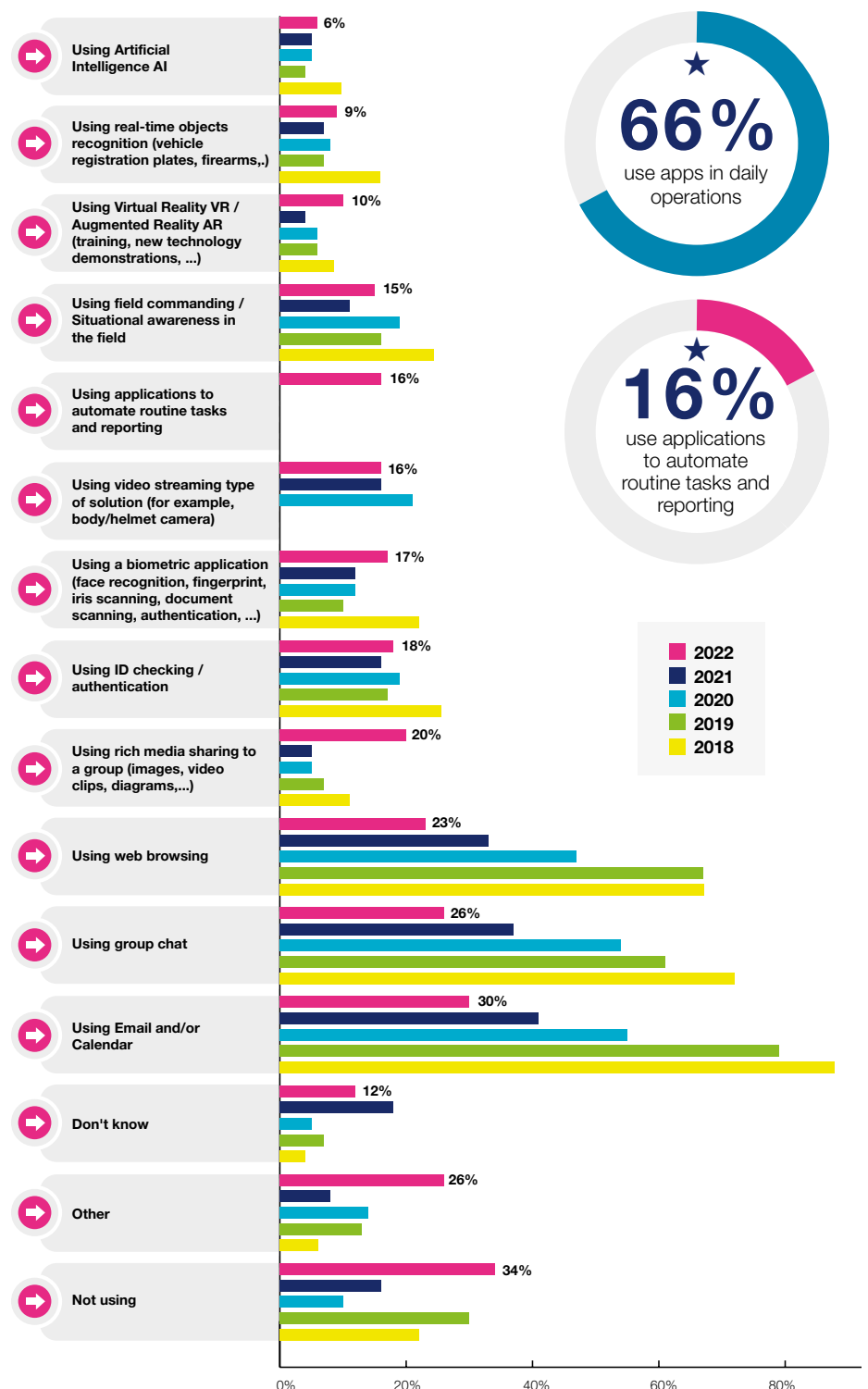
Several apps are becoming more popular. The most notable ones are related to Artificial Intelligence, biometric apps, and rich-media sharing to a group.

Users are more likely to start using apps which can share rich-media with a group (see page 14).

16% of respondents use applications to automate routine tasks and reporting (a new option in this year's survey). This option got the most mentions in the question "What are the most likely types of apps that your organization would introduce?" as well (see page 14).

Breakdown of app use in professional organizations

Note: Image recognition was renamed 'rich media sharing to a group' this year.

Using Artificial Intelligence AI — 6%

Using real-time objects recognition (vehicle registration plates, firearms,.) — 9%

Using Virtual Reality VR / Augmented Reality AR (training, new technology demonstrations, ...) — 10%

Using field commanding / Situational awareness in the field — 15%

Using applications to automate routine tasks and reporting — 16%

Using video streaming type of solution (for example, body/helmet camera) — 16%

Using a biometric application (face recognition, fingerprint, iris scanning, document scanning, authentication, ...) — 17%

Using ID checking / authentication — 18%

Using rich media sharing to a group (images, video clips, diagrams,...) — 20%

Using web browsing — 23%

Using group chat — 26%

Using Email and/or Calendar — 30%

Don't know — 12%

Other — 26%

Not using — 34%

Legend:
- 2022
- 2021
- 2020
- 2019
- 2018

66% use apps in daily operations

16% use applications to automate routine tasks and reporting

The effect of the pandemic

For the second time, the survey asked if the Covid-19 pandemic had increased the use of professional apps. Most respondents answered "yes," with an increase compared to last year.

The Covid-19 pandemic seems to have forced organizations to create new ways of working. If these have been effective and have saved money, they may be adopted permanently.

Take note ★

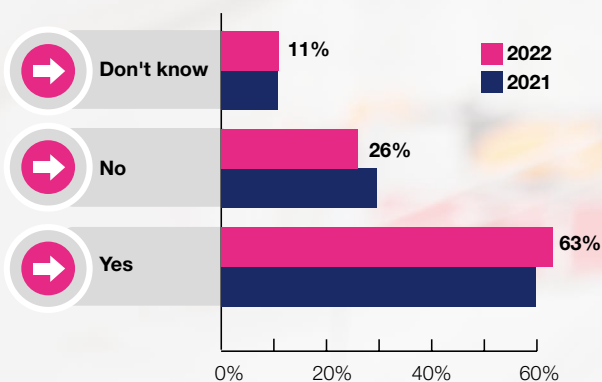Though the Covid-19 pandemic has increased the use of professional apps, only one fifth of respondents had definite plans to introduce new professional mobile apps (see page 23). This may indicate that people are uncertain about the future of apps.

★
63%
use apps more
because of Covid-19
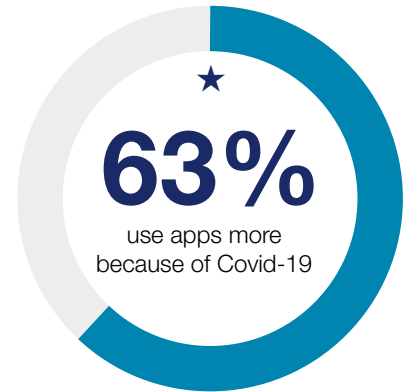
Has Covid-19 increased the use of professional apps?

Don't know — 11%
No — 26%
Yes — 63%

2022
2021

0%   20%   40%   60%

External accessories

The most popular accessories to use with mobile apps continue to be a headset and an earphone.

31% mention the headset and 42% mention the earphone, an option that has been gaining popularity since the 2019 survey.
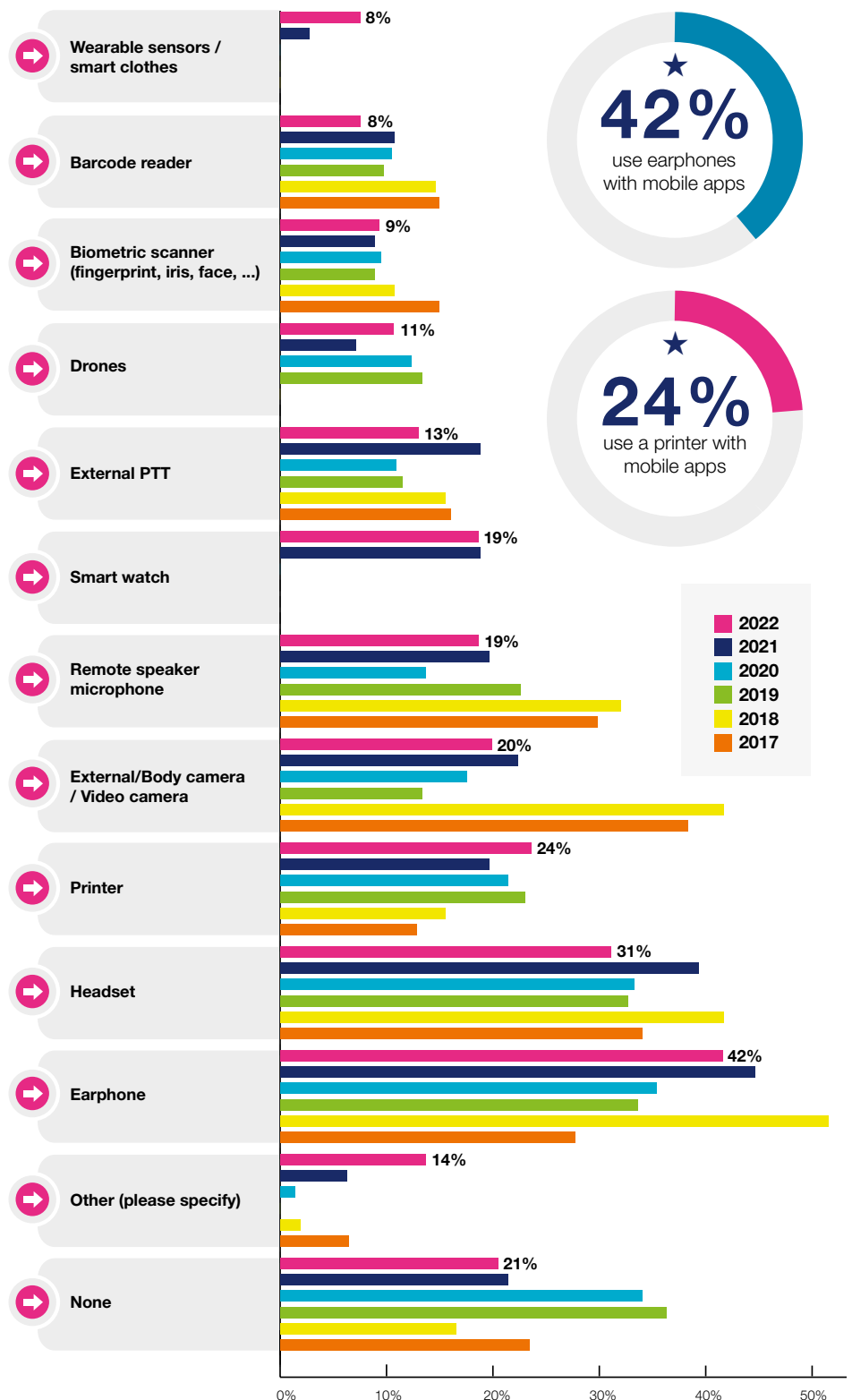
The printer is another accessory that has become more popular in the past few years. This is surprising but could indicate that people in the field print out reports – and that police officers, for example, print citations and tickets right there in the field.

Although only 7.5% use wearable sensors / smart clothes with mobile apps, the option has seen significant growth since last year – the figure has more than doubled!

Take note ★

Earphones and headsets continue to be popular. Professionals seem to use voice with mobile apps as well. After all, their tasks often require both hands, so they will use voice rather than typing.

Which external accessories / peripherals do you use with mobile apps?

Accessory	2022
Wearable sensors / smart clothes	8%
Barcode reader	8%
Biometric scanner (fingerprint, iris, face, …)	9%
Drones	11%
External PTT	13%
Smart watch	19%
Remote speaker microphone	19%
External/Body camera / Video camera	20%
Printer	24%
Headset	31%
Earphone	42%
Other (please specify)	14%
None	21%

Legend:
- 2022
- 2021
- 2020
- 2019
- 2018
- 2017

42% use earphones with mobile apps

24% use a printer with mobile apps

Chatbots and virtual assistants

The survey asked if professionals use chatbots, virtual assistants or voice assistants (such as Alexa or Siri). These use artificial intelligence (AI) to mimic human conversations.

More than one in four respondents answered "yes", which is 7%-points more than last year. One in ten respondents are planning to adopt chatbots, virtual assistants or voice assistants. AI has started to offer real benefits for professional organizations.

Take note ★

Professionals are beginning to adopt conversational interfaces. These are used alongside traditional graphical and touch based user interfaces. Like certain accessories (see page 9), voice enabled virtual assistants leave the user's hands free and keep their eyes on the task. Users want solutions that solve the challenges faced in real life.

★
28%
use chatbots, virtual or voice assistants

★
10%
are planning to use chatbots, virtual or voice assistants

Do you use chatbots and virtual or voice assistants?

	2022	2021
No, but we are planning to	10%	
Yes	28%	
No	56%	
Don't know	6%	

0% 10% 20% 30% 40% 50% 60%
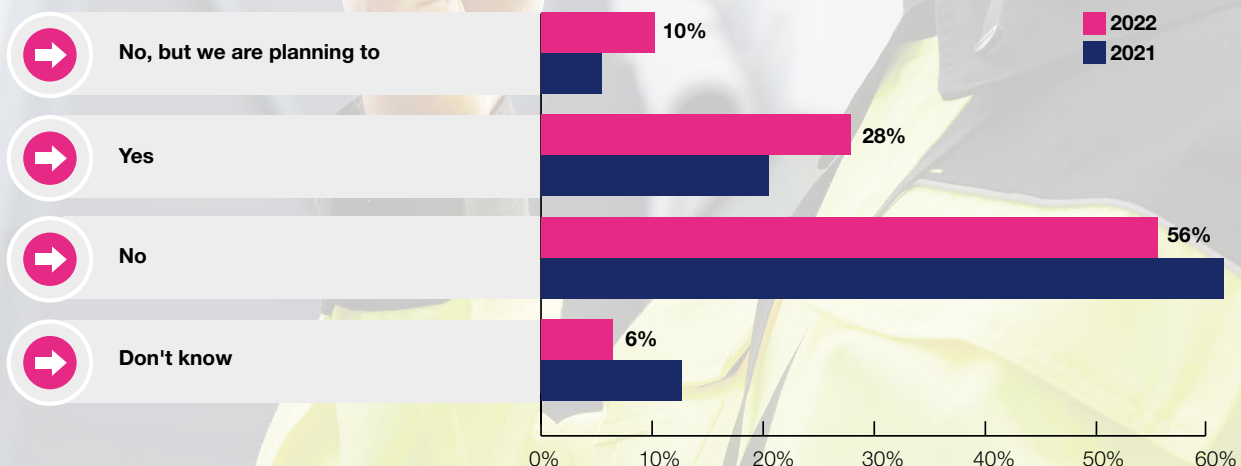
Pushed or downloaded?

Around 60% of respondents download apps to their device from Google Play or Apple AppStore. Downloads from Google Play are decreasing, while AppStore downloads are increasing.
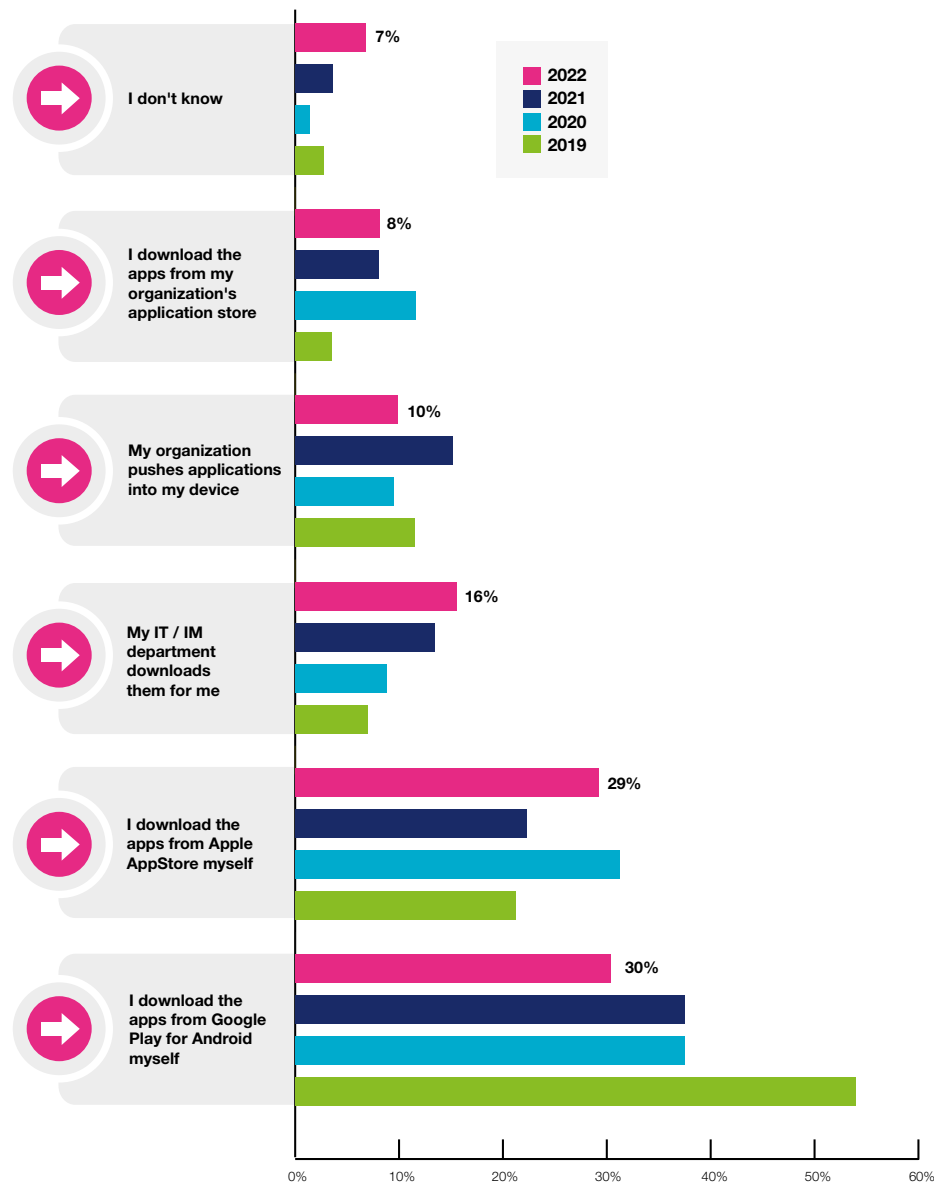
This is about the same as in 2021 and around 16%-points less than in 2019.
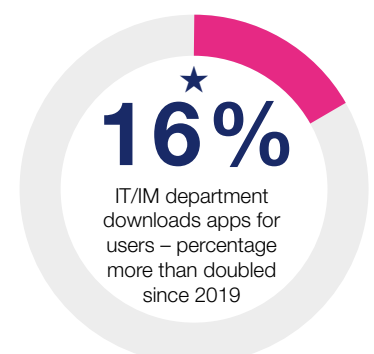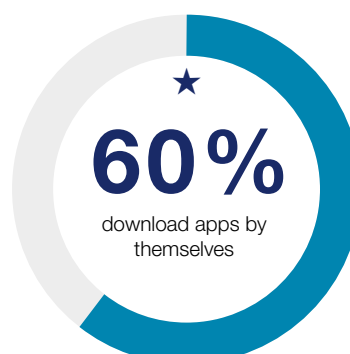
Take note ★

Android is the most popular operating system among respondents (see page 13). Android users are not downloading apps on their own, and their IT department is increasingly downloading the apps for them. With people less interested in searching for new apps on their own (see page 17), you can see a trend for organizations to take a more structured approach to adopting apps. This is in line with the findings from last year's survey.*

★ The fact that more people report that they download apps from AppStore could mean that the number of users of iOS apps is rising.

*Find all survey reports since 2016:
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How do you get the applications into your device?

Legend:
- 2022
- 2021
- 2020
- 2019

I don't know — 7% (2022)

I download the apps from my organization's application store — 8% (2022)

My organization pushes applications into my device — 10% (2022)

My IT / IM department downloads them for me — 16% (2022)

I download the apps from Apple AppStore myself — 29% (2022)

I download the apps from Google Play for Android myself — 30% (2022)

(x-axis: 0% 10% 20% 30% 40% 50% 60%)

★ **60%** download apps by themselves

★ **16%** IT/IM department downloads apps for users – percentage more than doubled since 2019

How satisfied people are with apps?

Over two in five respondents are either extremely or very satisfied with their organization's selection of apps. Fewer than one in five were not satisfied (not so satisfied or not at all satisfied).

Take note ★

Most respondents said they are satisfied with their selection of apps. However, many respondents say it is difficult to find the right app to meet their needs (see page 17). The situation may not be as straightforward as this question might make it seem.

How satisfied are you with your organization's current selection of apps?

Extremely satisfied	16%	
Very satisfied	27%	
Somewhat satisfied	41%	
Not so satisfied	11%	
Not at all satisfied	5%	

★ **43%** are extremely or very satisfied
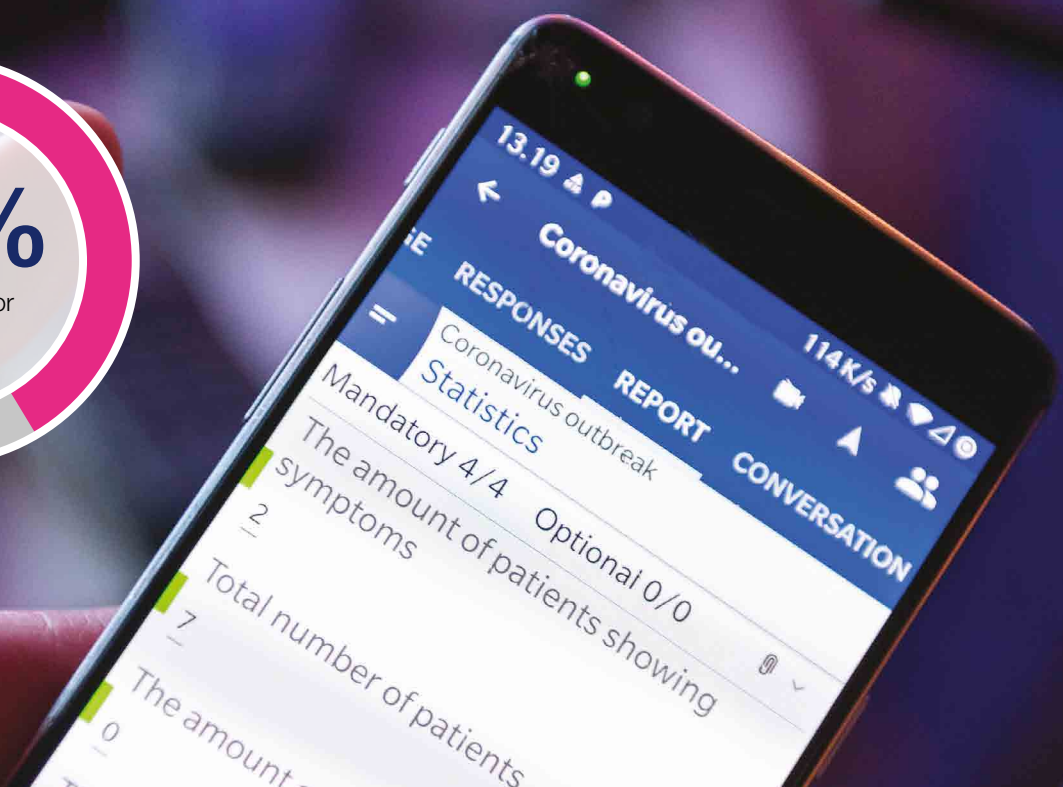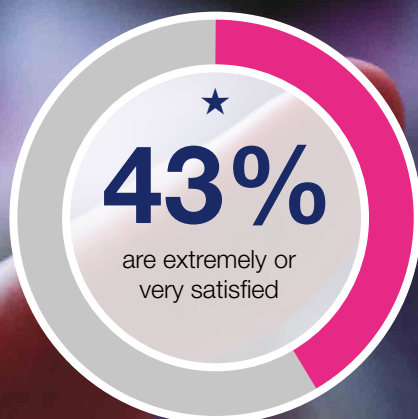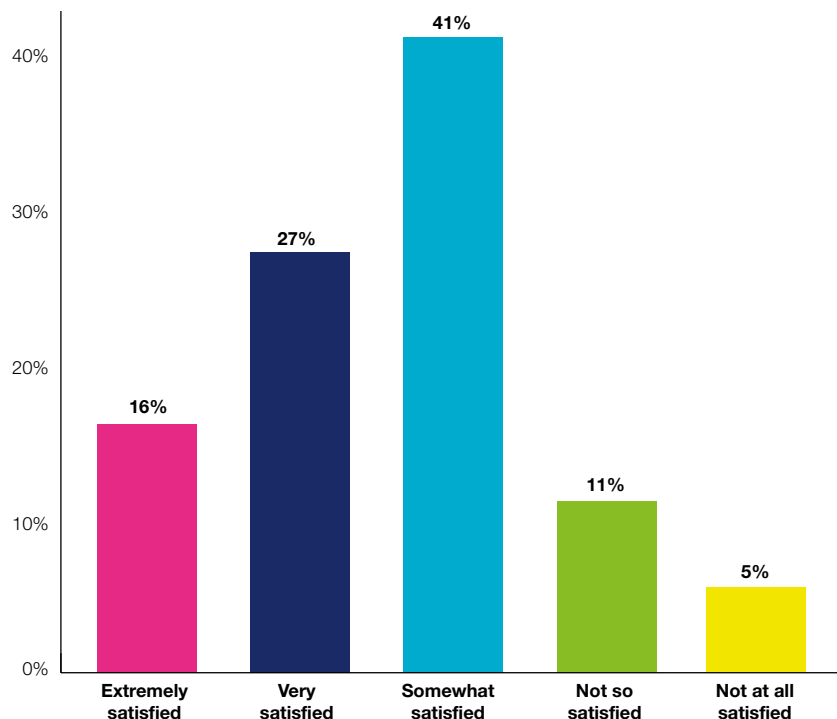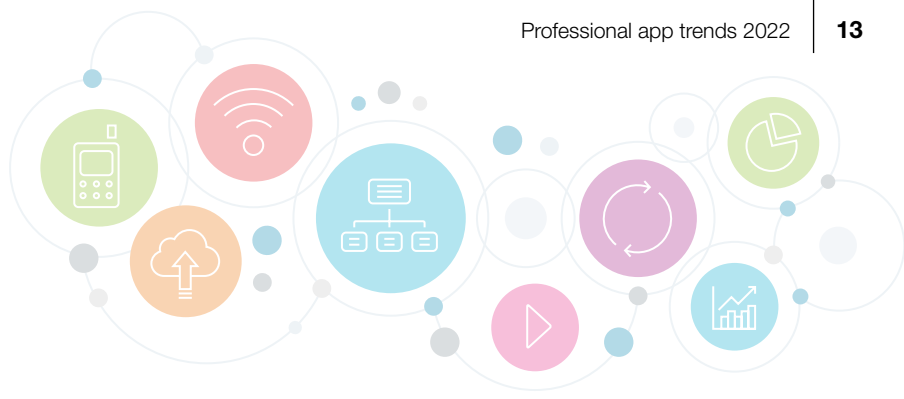
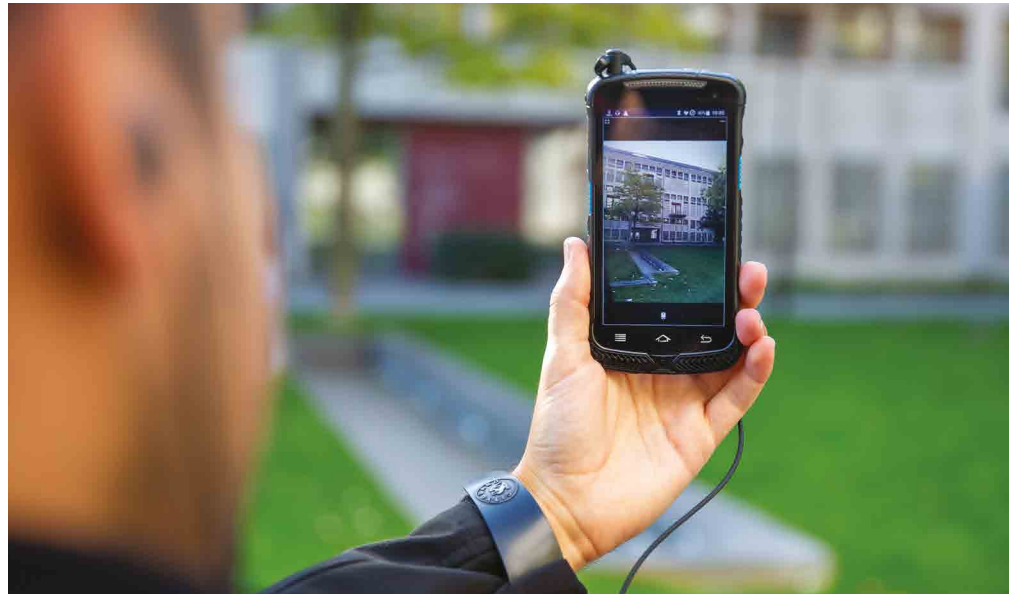# Which operating systems are used?

Android is clearly the most popular operating system among the respondents. The share of Apple users may be on the rise: the Apple iOS is the second most popular operating system. Around 29% of respondents said (on page 11) they download the apps from Apple AppStore.

Almost two in five respondents use a tablet device with mobile apps (Windows on tablet, Chrome OS or iPadOS). This is a lot and 34%-points more than last year.

Which operating systems do you use with professional mobile apps?

Note: The option "Windows on tablet" appeared as "Windows 10 on tablet" in the previous survey.

Operating system	2022
iPadOS	9%
Chrome OS	12%
Windows on tablet	19%
Apple iOS	29%
Android	69%
Other	15%
Don't know	4%

Legend: ■ 2022 ■ 2021

69% use Android

40% use tablets
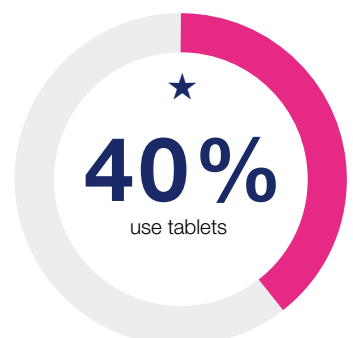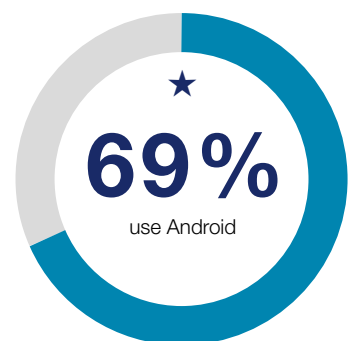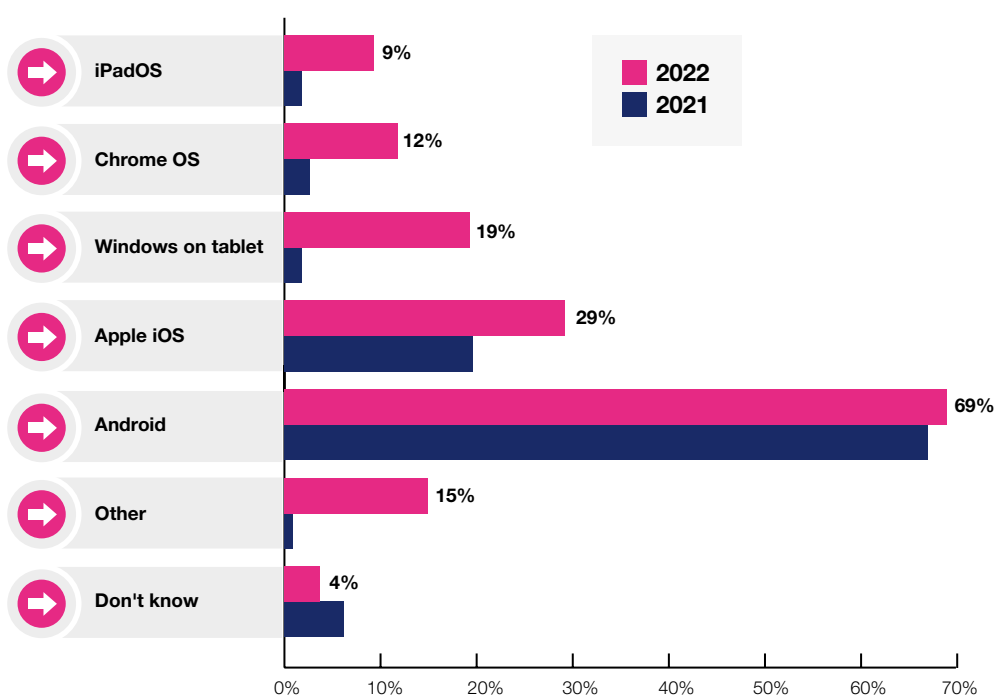
Which use cases have the most potential?

Group chat and email are among the most popular mentions in all the app surveys.* These show a similar decreasing trend as the responses to "Does your organization already use mobile apps (on smart phones/tablets/ laptops) in daily operations? What type of apps?" on page 7.

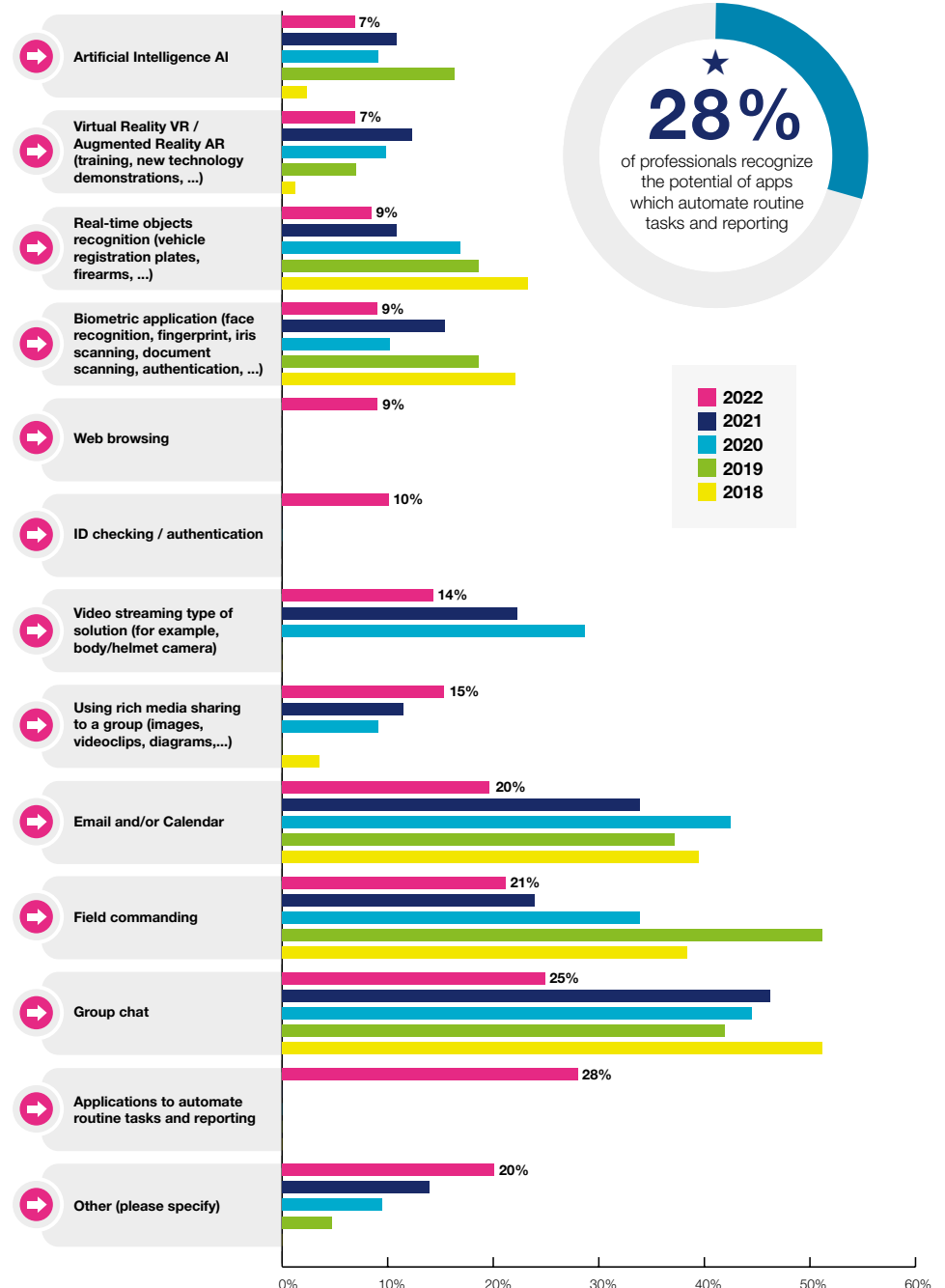Professionals want convenience: the new response option in this year's survey 'Applications to automate routine tasks and reporting' got the largest number of mentions. Reporting seems to be important for professionals - the findings in the accessories related responses are in line with this (see page 9).

What are the most potential use cases for new mobile apps in your organization?

★ **28%** of professionals recognize the potential of apps which automate routine tasks and reporting

Legend:
- 2022
- 2021
- 2020
- 2019
- 2018

Artificial Intelligence AI — 7%
Virtual Reality VR / Augmented Reality AR (training, new technology demonstrations, ...) — 7%
Real-time objects recognition (vehicle registration plates, firearms, ...) — 9%
Biometric application (face recognition, fingerprint, iris scanning, document scanning, authentication, ...) — 9%
Web browsing — 9%
ID checking / authentication — 10%
Video streaming type of solution (for example, body/helmet camera) — 14%
Using rich media sharing to a group (images, videoclips, diagrams,...) — 15%
Email and/or Calendar — 20%
Field commanding — 21%
Group chat — 25%
Applications to automate routine tasks and reporting — 28%
Other (please specify) — 20%

Note: Image recognition was renamed 'Rich media sharing to a group' and Group messaging was renamed 'Group chat' this year. 'Applications to automate routine tasks and reporting', 'ID checking / authentication' and 'Web browsing' were new answer options this year.

*Find all survey reports since 2016:
securelandcommunications.com/professional-app-trends/archive

Which apps are seen to deliver value?

People gave free-form answers to the question "Which operations or tasks would you prefer to perform with an app instead of your current way of working?"

Reporting emerges as the killer app - respondents want to make reporting and administrative tasks easier and do them while on the move. They need mobility, a fact that was also clear from last year's survey.

In addition, they want to get actionable insights from all the data that their systems collect. These include actions such as analyzing data or reports remotely; better management of communications; and improved monitoring of operations.

Group chat/communication is another killer app. The respondents want to have push-to-talk (PTT) on their smartphones. They recognize that smartphones and

professional apps can help them be more efficient. Professional apps can also give them many new opportunities. For example, they can allow them to work beyond the coverage of their existing narrowband communication network – if their broadband connection works.

Important in an app

Professionals continue to value three characteristics: Security and ownership of data, High reliability and availability of the service, and Easy to use. The top three characteristics have been the same since the very first survey.

Fewer respondents are downloading apps on their own, with more IT departments downloading apps for the respondents (see page 11). These indicate that the adoption of apps is becoming more organized. Despite this, users do not seem to appreciate support for operational models and integration with control rooms. On the contrary, these characteristics are showing a declining trend.
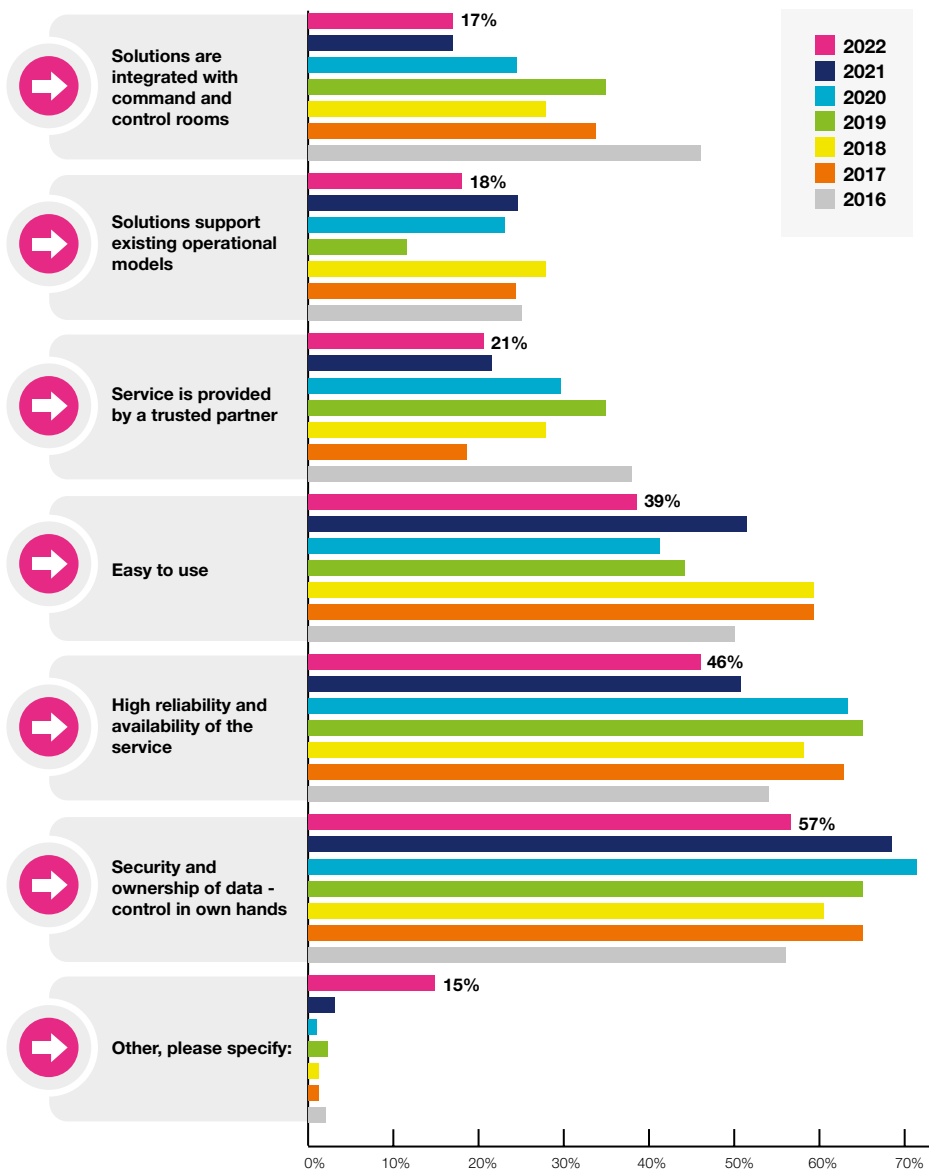
The characteristic "Service provided by a trusted partner" has also become less important than in 2019. This could be because users are not satisfied with their current service provider's execution.

Take note ★

Developers offering innovative apps have a big opportunity, because users do not place all value on an established, well-known player. Users would rather have a good solution that solves the challenges that they face in real life.

What are the most important characteristics of professional mobile apps?

Legend:
- 2022
- 2021
- 2020
- 2019
- 2018
- 2017
- 2016

Solutions are integrated with command and control rooms — 17%

Solutions support existing operational models — 18%

Service is provided by a trusted partner — 21%

Easy to use — 39%

High reliability and availability of the service — 46%

Security and ownership of data - control in own hands — 57%

Other, please specify: — 15%

57% of professionals value security and control

*Find all survey reports since 2016:
**securelandcommunications.com/
professional-app-trends/archive**

How do people learn about apps?

Most respondents report that they learn about new applications at conferences and events. This is intriguing, as so few in-person events have taken place during the Covid-19 pandemic.

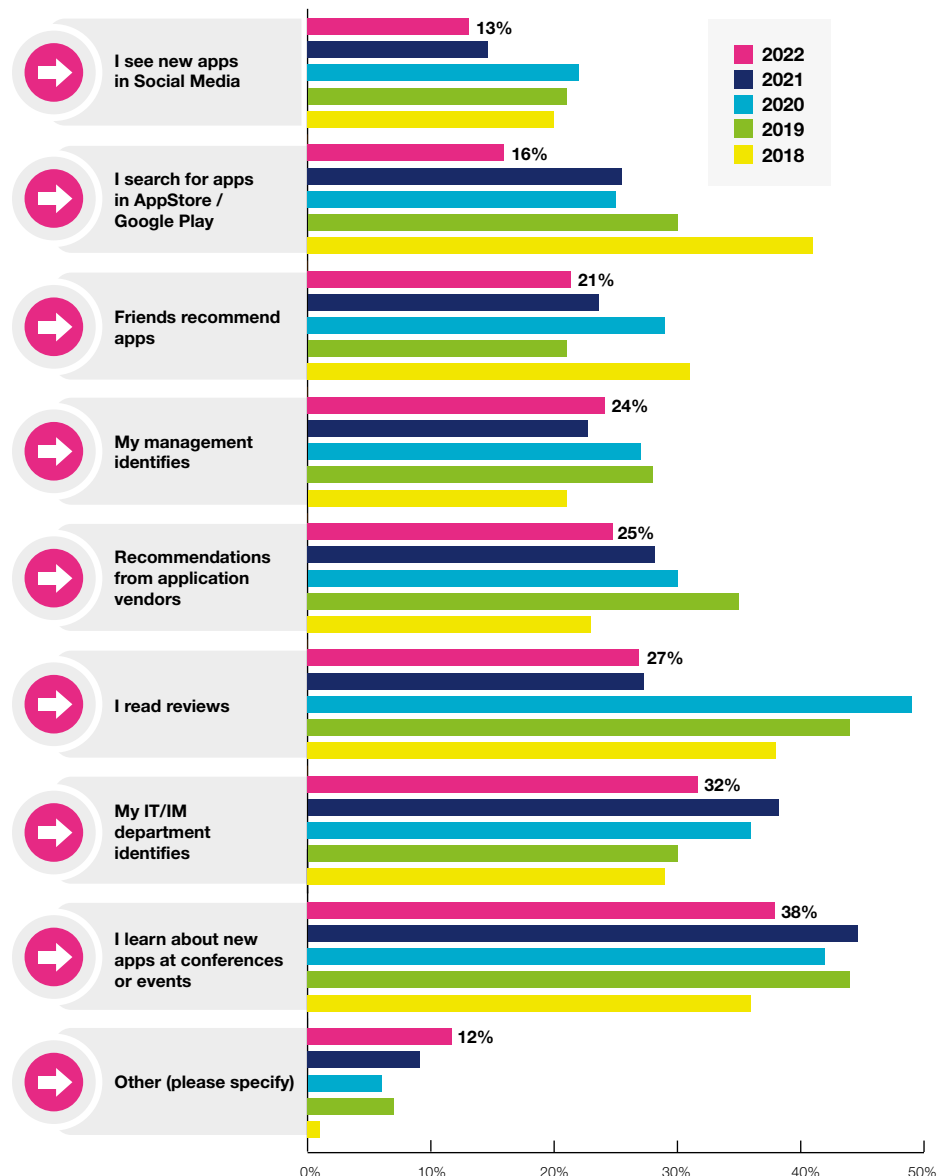The respondents' IT departments also offer ideas for applications.

Recommendations from application vendors and written reviews have suffered a strong decline compared to previous years. Based on the numbers, users do not believe that they could find potential apps from AppStore, Google Play or social media either.

Take note ★

People don't search for apps on their own. There is also the question of how the apps get into the devices - more IT departments are pushing apps into the users' devices (see page 11). These are weak signals of the industrialization of apps.

How do you identify potential applications for professional use?

Category	2022
I see new apps in Social Media	13%
I search for apps in AppStore / Google Play	16%
Friends recommend apps	21%
My management identifies	24%
Recommendations from application vendors	25%
I read reviews	27%
My IT/IM department identifies	32%
I learn about new apps at conferences or events	38%
Other (please specify)	12%

Legend:
- 2022
- 2021
- 2020
- 2019
- 2018

38%
Conferences and events give ideas

Important in the solutions provider

Professional users have three main requirements of a broadband solutions provider:

1. Provide the service and support they need
2. Deliver apps that can be used on the latest smart devices/platforms
3. Have proven experience in critical communications.

This compares to 2021 when the top demand was 'Deliver apps that work end to end'. Demands 2 and 3 have swapped position from last year.

'The vendor is committed to providing the service and support we need' was a new answer option this year and received the most mentions.

A large offering of different apps has been one of the least appreciated requirements throughout the survey's history.*

The least appreciated requirement is 'Their offices/teams are near our own offices/teams' (new option). Many people have got used to working remotely during the Covid-19 pandemic. This perhaps makes physical proximity and face-to-face meetings not as important as before.

Take note ★

App developers should look at this as an opportunity. Professionals do not expect their vendor to deliver a wide variety of apps. They do not expect the vendor to be physically close either – it is much more important that the vendor delivers the right app. Solve a key user problem with the app and, if the app works end-to-end, users will appreciate it.

*Find all survey reports since 2016: **securelandcommunications.com/professional-app-trends/archive**

What are the most important criteria to choose the vendor/provider of mobile broadband solutions?

32%
★
want the vendor to provide the service and support they need

Legend:
- 2022
- 2021
- 2020
- 2019
- 2018
- 2017
- 2016

Criteria	2022
Their offices/teams are near our own offices/teams	4%
We prefer in-house development	8%
Large offering of different apps	10%
Uses agile methodology in application development	12%
Experience in working with governmental organizations	12%
Demonstrated long-term partnership	15%
Experience in mobile apps	18%
Long life-cycle of solutions	22%
Vendor can deliver apps which work end to end	23%
Proven experience in critical communications solutions	26%
Apps can be used on the latest smart devices/platforms (Android, iOS, Windows)	28%
The vendor is committed to providing the service and support we need	32%
Other, please specify:	10%

What do professionals expect from 5G?

5G broadband technologies promise great possibilities for public safety and other professionals. This year's survey asked the respondents about how 5G will affect the applications that their organizations will use.

There are still not many 5G adopters, especially in the professional apps market. Many respondents mention faster speeds – they seem to expect that apps will be more or less the same as today, only faster.

Many of them mentioned more and richer data, such as videos – also in real time – and the completely new opportunities. They expect more efficient, more advanced apps related to the Internet of Things and mission-critical push-to-talk on broadband, for example.

Do professionals trust the cloud?

When asked if they would trust their critical data being stored on an external cloud service or not, respondents were almost equally split – 44% said "yes, they would trust," and 39% said "no, they would not".

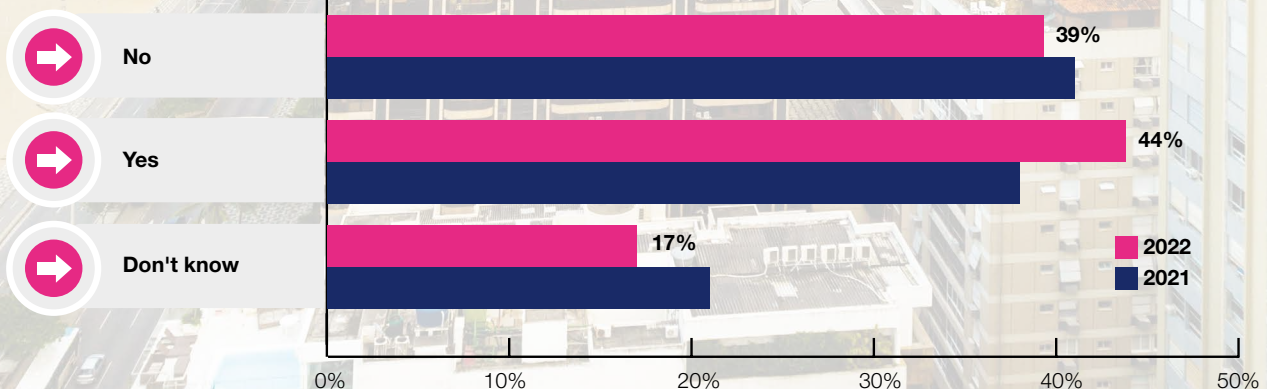Interestingly, the share of trusting respondents is more than 16% bigger this year compared to last year. This may indicate users being increasingly open to cloud-based applications. However, 57% of professionals value the characteristic of security and control in their apps (page 16). This indicates that respondents will not trust just any cloud. They need a secure cloud.

Take note ★

Professionals are becoming increasingly open to cloud-based applications, provided that they are secure.

★

44%

would trust a cloud
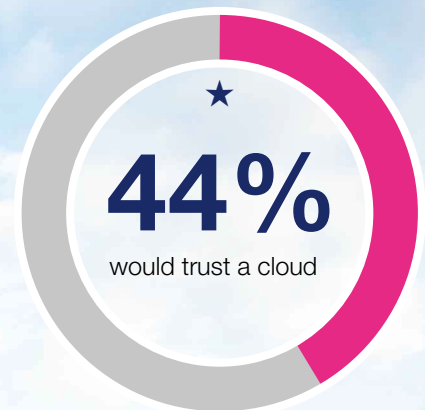
Can the cloud be trusted for critical data?

No
39%

Yes
44%

Don't know
17%

■ 2022
■ 2021

0%   10%   20%   30%   40%   50%

Security, future, and continuity

Security continues to be the largest challenge mentioned by respondents in comments.

Although users say security is the key requirement for apps, they also recognize it as the biggest challenge. This means that things are not perfectly executed – a lot needs to be done to ensure the security that professionals need.

An emerging trend this year are the mentions of future and continuity. Respondents want to see roadmaps and long-term commitment from vendors.

Other popular mentions include availability and reliability. They are closely related to security. The many mentions are interesting because they become noticeable only when they do not work.

Respondents also mention difficulties in getting the right app to meet their needs as well as meeting demands for user-friendliness, budget, cost, and price.

The many mentions of interoperability or consistency show that professionals need an easy way to communicate and cooperate together. They want this to work with any technology they use.
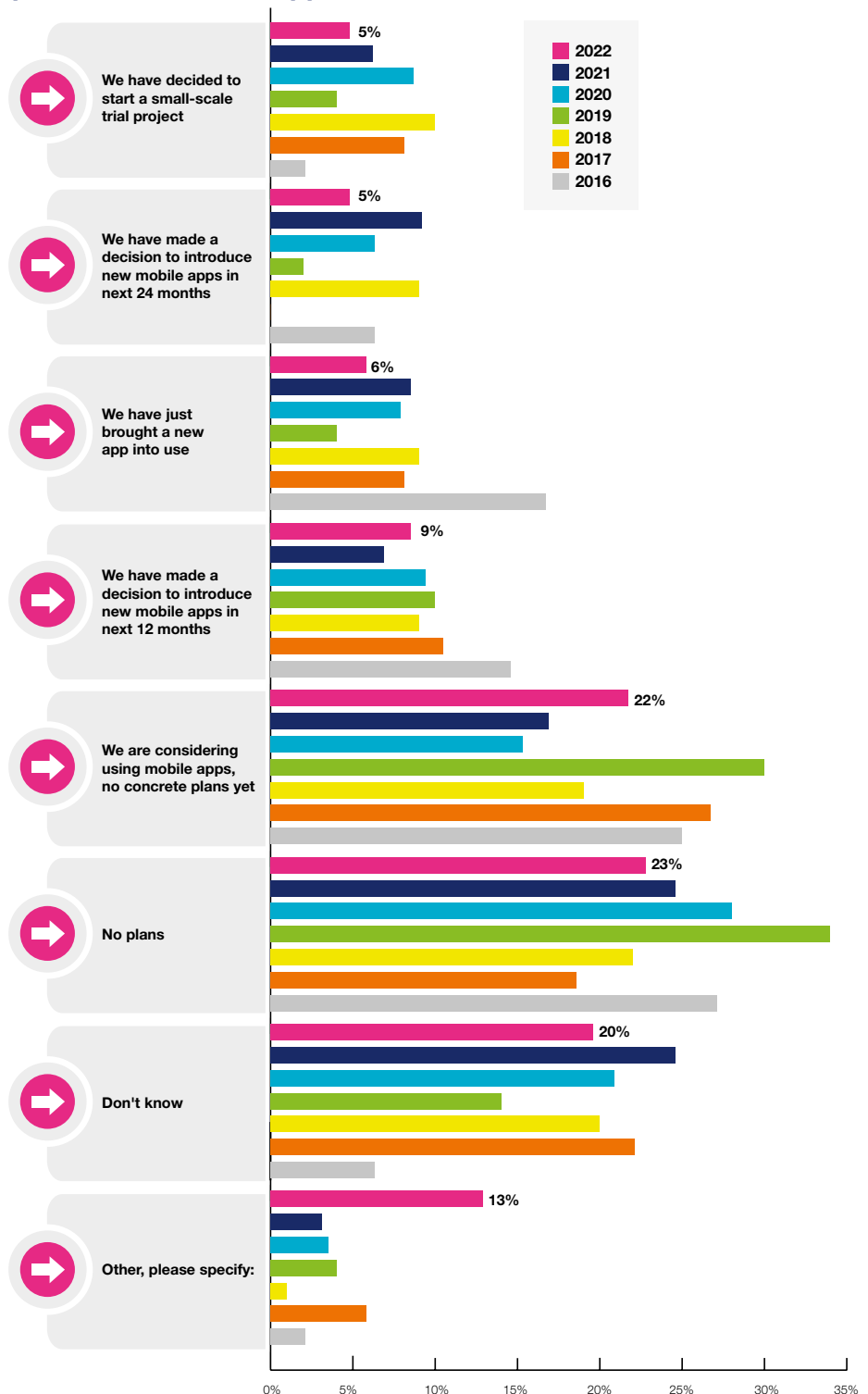
What are the plans?

Around one quarter of respondents had definite plans or decisions, which is about 7%-points fewer than last year. Very few respondents reported that they were trialing anything.

One in five respondents did not have any plans or did not know about any plans. These numbers may indicate that people are uncertain about the outcomes of broadband adoption. The Covid-19 pandemic may be another reason. Many professionals have been working overtime to deal with the pandemic. They have probably not had much time for planning new developments.

24%
Definite plans or decisions

20%
Uninformed about plans

Does your organization have plans to introduce new professional mobile apps?

Legend:
- 2022
- 2021
- 2020
- 2019
- 2018
- 2017
- 2016

We have decided to start a small-scale trial project — 5%

We have made a decision to introduce new mobile apps in next 24 months — 5%

We have just brought a new app into use — 6%

We have made a decision to introduce new mobile apps in next 12 months — 9%

We are considering using mobile apps, no concrete plans yet — 22%

No plans — 23%

Don't know — 20%

Other, please specify: — 13%

0% 5% 10% 15% 20% 25% 30% 35%

03

The opportunities to focus on

Our latest survey brought up important opportunities for both app vendors and app users. Below, app developers can find five tips on marketing their products, while users can read advice on how to bring them into use effectively.

5 tips for apps providers

★ If you work in a smaller apps company, you will be happy to know that users do not place all value on an established, well-known player. They do not expect a vendor to deliver a wide variety of apps or to be physically close either.

★ Create an app that meets users' real-life needs. Professionals want convenience, and they prefer to have their eyes and hands free for the real task at hand.

★ Remember that professionals value security above all.

★ Make sure you can show people a picture of the future, too – a credible roadmap and commitment will help you win customers. Secure and easy to use applications that offer availability, reliability, and interoperability will gain most interest from your potential customer.

★ When you want to get your app in front of your potential customer, do not rely on being found in social media posts. Also, don't expect them to find it by searching GooglePlay or AppStore. It is best to showcase it at an event or conference. Remember that the event must be targeted at your prospects, not for you.

Got a great idea for a professional app or accessory – but no access to the mission-critical market?

Team up with a strong partner: join the SmarTWISP programme from Airbus.

SmarTWISP helps you develop professional apps and accessories for Tactilon Agnet, which brings instant group communications into smartphones and for the award-winning Tactilon Dabat, the world's first smartphone and TETRA radio in one device.

Join the growing community of innovative developers and start developing your professional app or accessory now: **https://www.securelandcommunications.com/developers**

3 tips for user organizations

★ Although your organization needs professional apps that meet users' needs, do not forget security. Security gets the most mentions when professionals are asked about their biggest challenge. It is also the most often mentioned key characteristic for apps.

★ Consumer apps are not usually required to ensure that users keep control of their data. This means that mainstream apps will not meet the users' key needs.

★ You will want to set up processes that help your organization plan, design, and implement apps in a structured way, just as you do with other communication solutions.

> " Security was a key characteristic in an app for a clear majority of respondents. Security was also mentioned the most often as their biggest challenge. Clearly, apps vendors need to do more to provide the levels of security that professionals require. "

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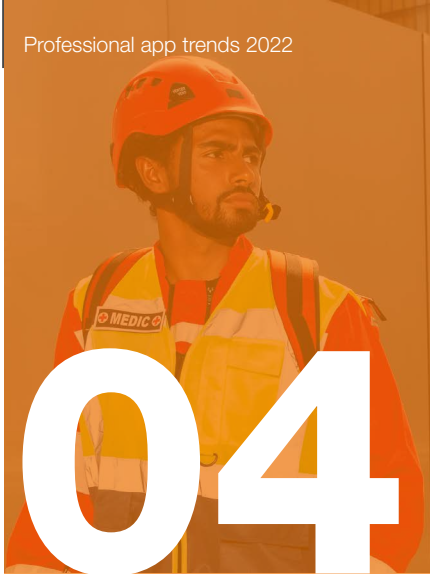
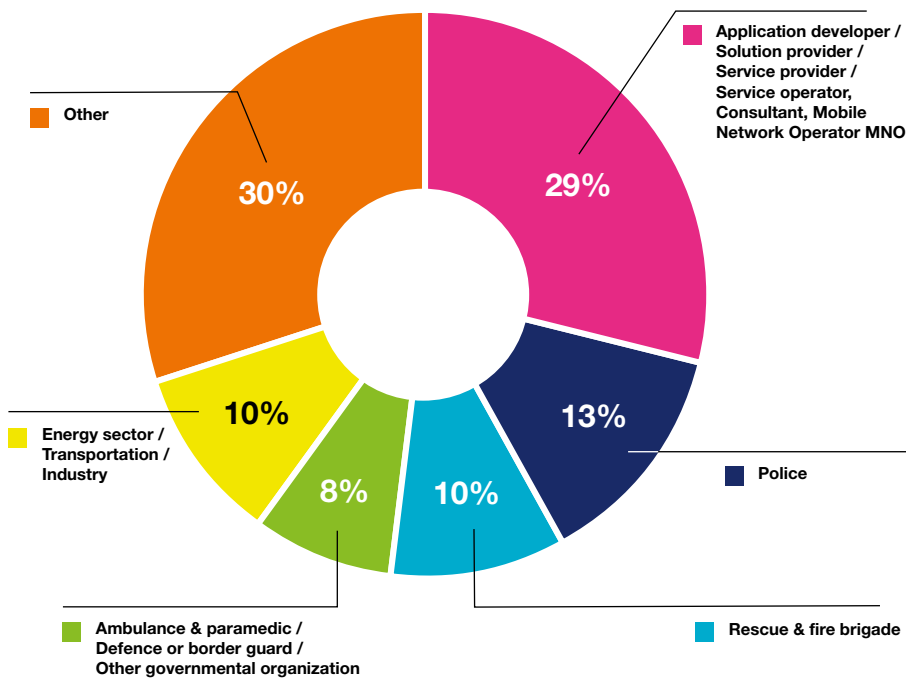# Demographics and survey methodology

Airbus conducted this seventh annual survey on mobile apps between 11 November 2021 and 31 January 2022. In total, 511 people responded from across the world, and the largest segment (31%) comprised respondents working in public safety and security organizations such as police, fire and rescue, ambulance services and paramedic teams.

Another third were application developers, consultants, service providers, and MNOs (mobile network operators).

Many respondents were from transport, airports or airlines, the energy sector, and other industries. The rest either chose not to categorize themselves or did not find a suitable category.

31%
members of public service organizations

29%
app developers, consultants, service providers and MNOs

10%
energy, transportation, general industries
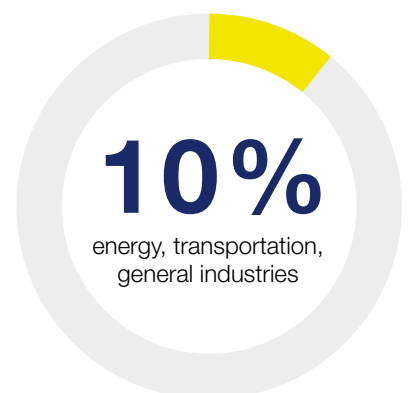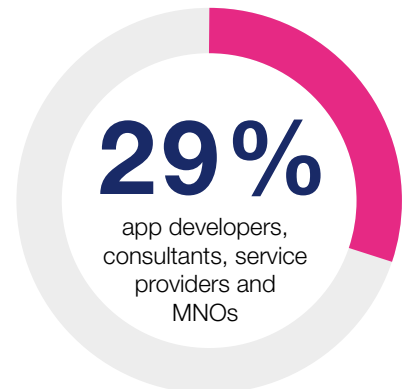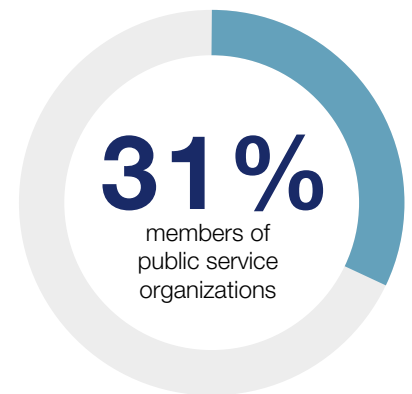
Profile of survey participants

- Other — 30%
- Application developer / Solution provider / Service provider / Service operator, Consultant, Mobile Network Operator MNO — 29%
- Police — 13%
- Rescue & fire brigade — 10%
- Ambulance & paramedic / Defence or border guard / Other governmental organization — 8%
- Energy sector / Transportation / Industry — 10%

The survey was made available online, with participants able to pre-subscribe to this report as an incentive to answer the questions (no other incentives were offered).

The survey was available in English, French, German, Spanish, and Mexican Spanish.

Promotion of the survey was through the Airbus / Secure Land Communications website, via The Mission Is Critical blog, and through Facebook, Twitter, LinkedIn, email, and paid Search and social media campaigns on the Twitter, LinkedIn and Facebook channels.

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