

Users look for secure professional apps

A growing need for structured adoption of apps



AIRBUS

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Current app use highlights a need for security

This report details the findings from the third Airbus survey into the state of the professional mobile apps market. The survey was widely supported by interested parties across industry and from all parts of the world, ranging from those who use apps to improve their daily work to service providers and app developers.

This third report in the series provides more information on how the market for apps is developing and about emerging trends. One of the continuing trends is that of hybrid devices. Respondents have re-emphasized their need for hybrid devices and their tendency to prefer them when making new purchases.

The survey report also contributes to a greater understanding of how professionals use apps, what their demands and concerns are and which opportunities exist for app developers and operators to profitably meet these needs.

In particular, three new findings of note are revealed:

- 1 Security is users' key concern and it is evident throughout the questions**
- 2 The popular use cases are in line with the fact that users prefer hybrid devices**
- 3 The three surveys indicate an upward trend in the use of almost every kind of app**

Learning the lessons

This year, hybrid is an even clearer trend than last year. What's more, there are clear indications that professional users are ready for mobile apps to be part of their operations, and not merely as an add-on, ad hoc solution for individuals or small teams. To realize this, public safety and other professionals need to plan, design and implement apps in the same way as their other communication solutions.

The survey shows that users have not yet recognized the potential of the latest technological developments, such as virtual reality (VR), augmented reality (AR) or artificial intelligence (AI). It is the challenging task of application developers to demonstrate not only their expertise in critical communications and in mobile

apps, but also in new solutions which take advantage of these new technologies.

The survey responses indicate that organizations may be on the brink of realizing that adopting apps needs to be conducted in a controlled and systematic way. According to this year's numbers, most users download their apps from generic app stores. This indicates that apps adoption is not being professionally managed. This clearly needs to change if apps are to support the strategic goals of the organization and not merely act as novelties used only by a small number of staff.

App developers need to understand the importance of security, reliability and the confidentiality of

data. It will take special measures to ensure that the data remains under the control of the organizations that generate it and that it stays within the organization. This may not be easy in a world where apps share data with big companies and platforms such as Apple, Google and Facebook.

The top three characteristics - security, reliability and data confidentiality - have remained constant throughout the history of the survey. Two of them are very different from the expectations of consumers, who as a rule do not think much about their ownership of data. It is clear that consumer apps do not meet these three needs.



Survey results in detail

Responses from across the industry

In total, 112 people responded, including 14 who answered the Mexican Spanish version of the survey. Survey respondents belong to a range of organizations, including police; application developers and solution providers; service providers; ambulance and paramedics; rescue and fire brigades; general industry; transportation companies; defence and border guards; other governmental organizations; and the energy sector.

Police comprised the largest group with 17% of respondents, while around 16% of respondents were application developers or solution providers.

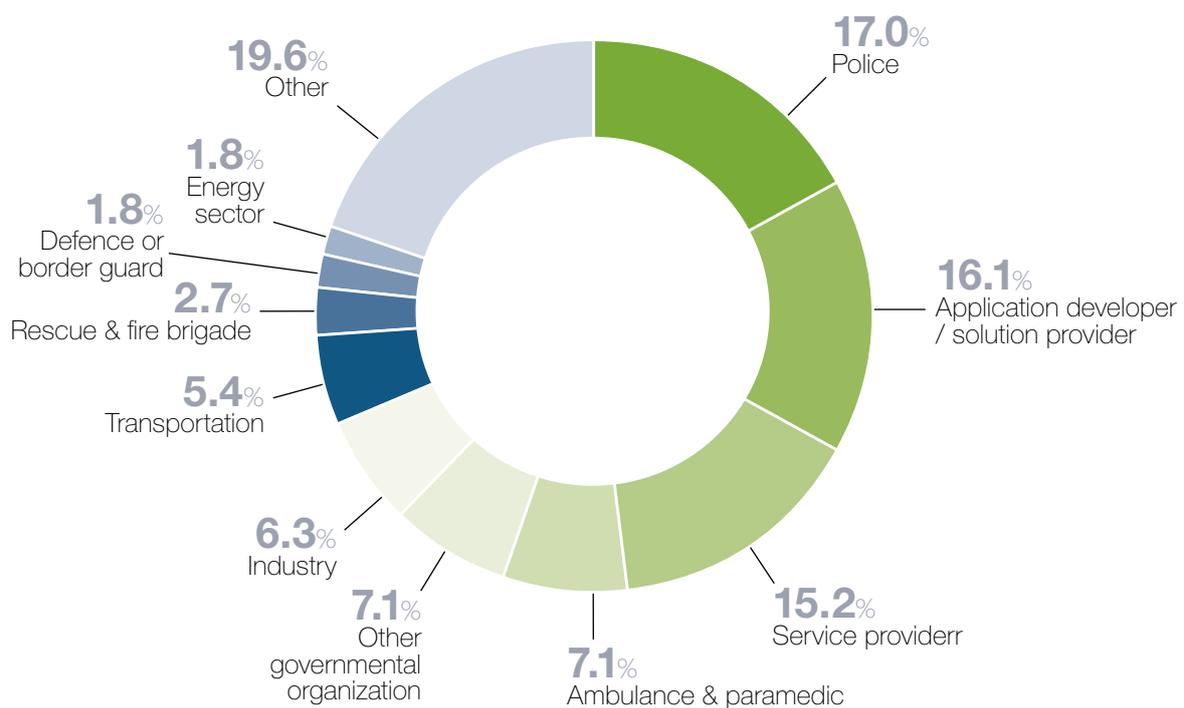
From the user side, ambulance personnel and paramedics were the second largest group with 7% of respondents.

The 'Other' category included respondents who represented a professional organization not given on the list. Including these in the summary, 40% of all respondents came from a public safety or other professional organization and could be said to represent the user organizations' side.

Key finding

Professionals such as police, ambulance and paramedics, as well as other governmental and public safety organizations, are actively and increasingly interested in digital solutions.

Which organization are you from?



Organizations using mobile apps

The survey asked if user organizations are already using apps in daily operations. The answer was an overwhelming 'yes', with only 22% of respondents not using apps at all.

Messaging was the most common type of application, being used daily (58% of respondents), with public internet services (searching and social media) used by around 37% and multimedia sharing of content (videos and images, for example) by 34% of

respondents. Meanwhile, both reporting and positioning were used by almost one in four of the respondents.

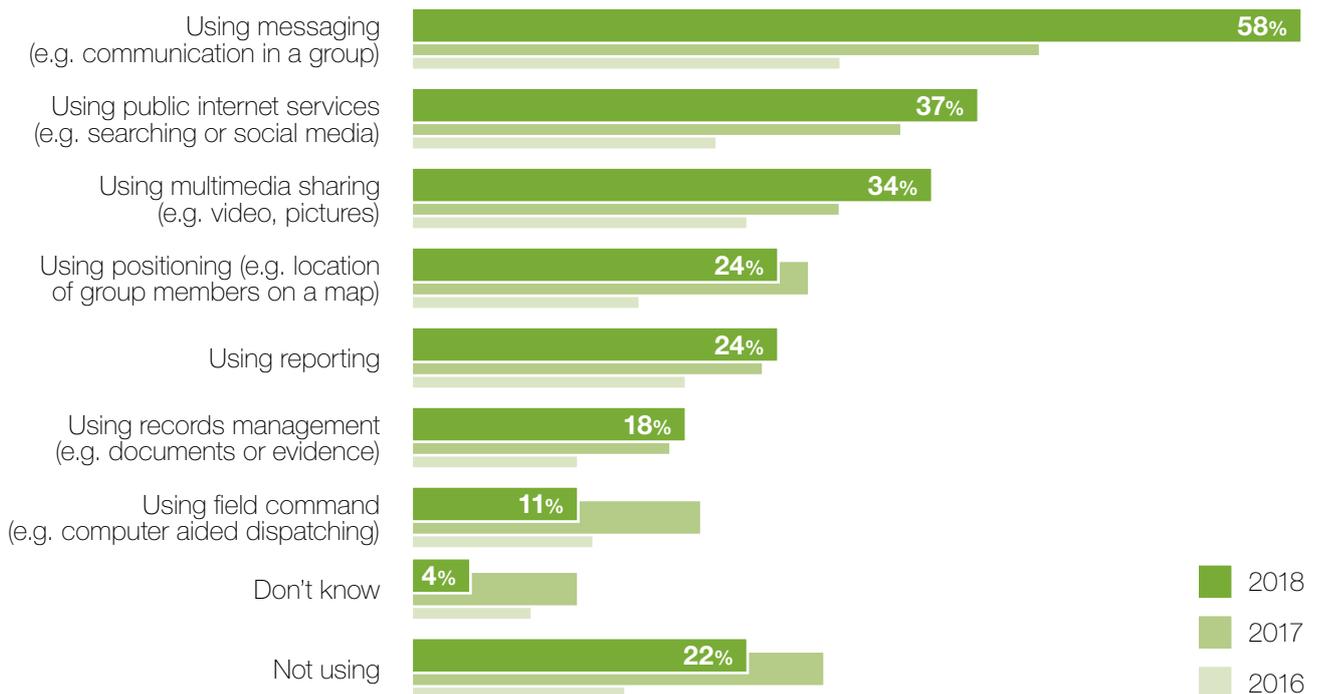
Although messaging was very popular, there was a lower percentage of correspondents using field command apps. This may mean that apps are used as an add-on and not as an integral part of the organizations' operational models.

Key finding

The three surveys indicate an upward trend in the use of every kind of app on the list, except in the use of field command apps such as computer aided dispatching.

A smaller percentage said that they do not know if their organization uses mobile apps.

Does your organization already use mobile apps in daily operations?



The most popular apps and devices

As a new question, the survey investigated which apps people use.

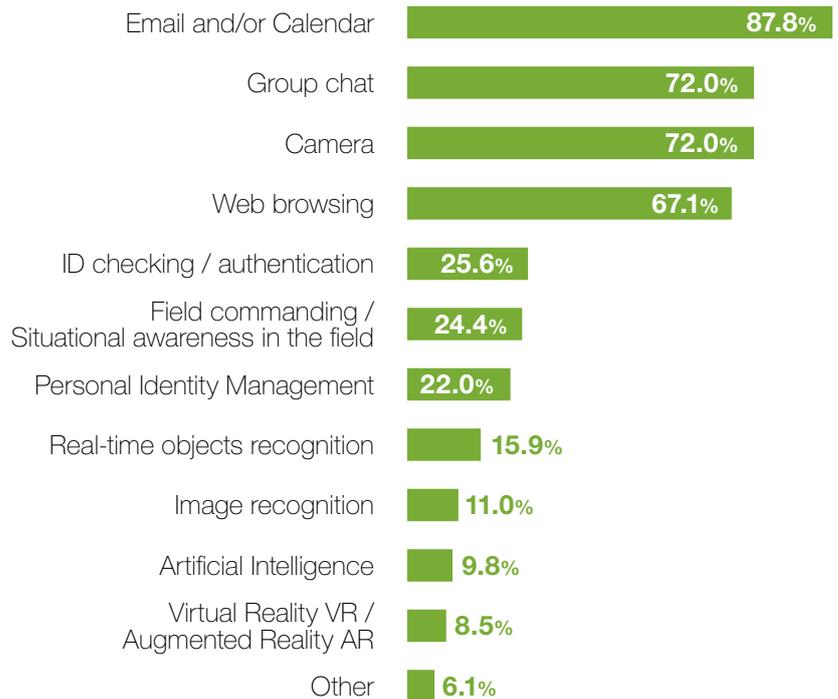
Nearly 90% of the respondents use email and/or calendar and group chat and camera are used by over 70% of the respondents.

The new VR and AR solutions have yet to gain ground.

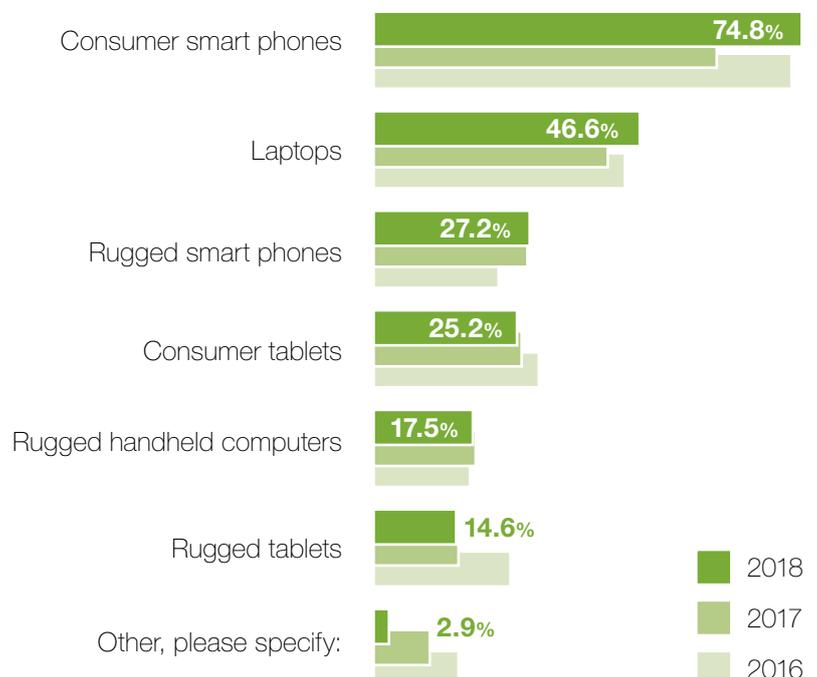
In terms of the types of device in use, consumer smartphones continue to be the most popular – this year, the figure was around 75%, with laptops the next most popular at 47%.

Rugged smartphones are also used, with around one in four respondents using them. The use of tablets, either consumer or ruggedized versions, is in decline.

Choose the apps that you already use



Which devices do you use with mobile apps?



Key findings

The decline in the use of tablets may indicate that smartphones with a large screen now meet the needs of users. As websites become more responsive to mobile browsing, there is less need for a portable tablet-sized device.

There may be a market for rugged smartphones with a large display that also can withstand the harsh conditions of daily field use.

External accessories or peripherals

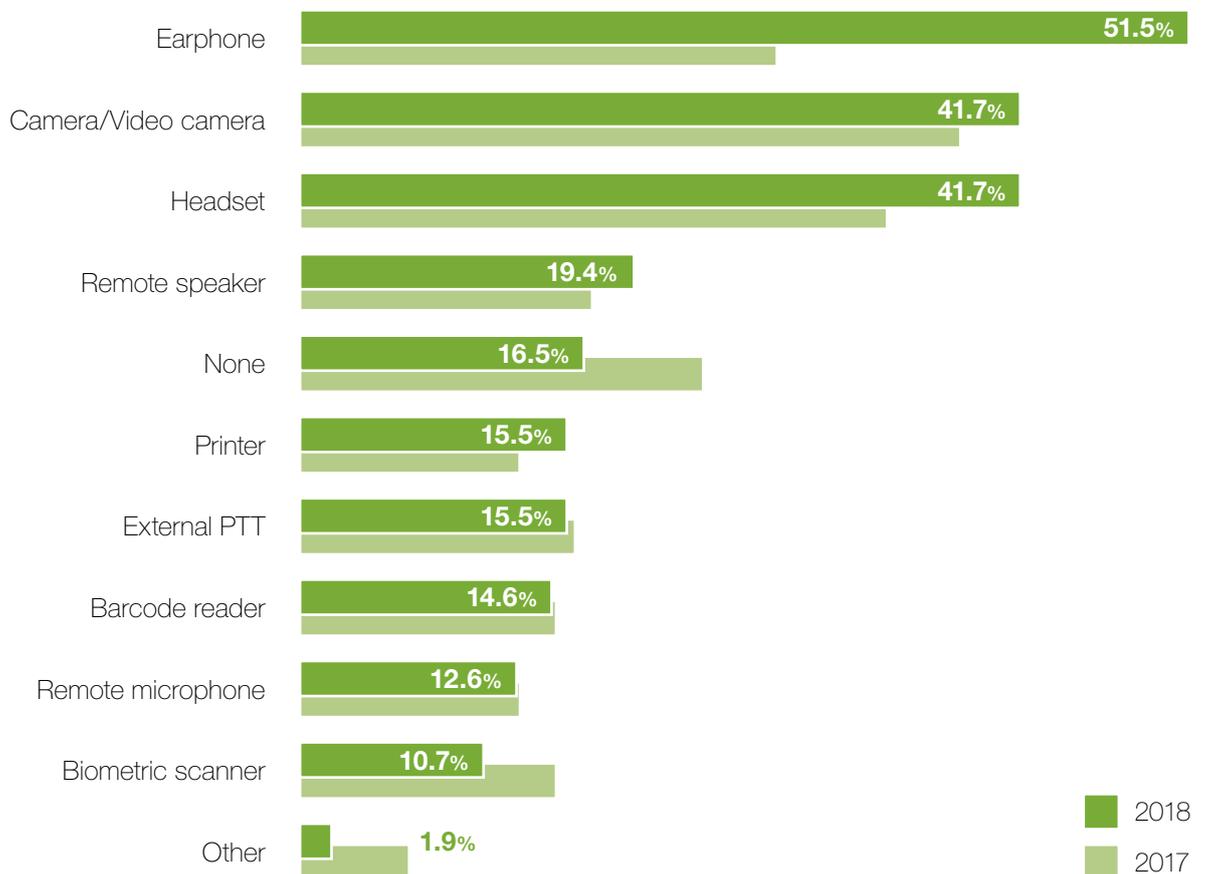
The most popular accessory to use this year with mobile apps was an earphone, with 51% of respondents mentioning this. Camera or video camera and headset were both used by 42% of respondents.

There was a clear decrease in responses of “none” – only 17%, whereas last year, almost one in four of the respondents did not report using any accessories.

Key findings

Respondents use voice a lot of the time, and also with mobile apps, since earphones and headsets are so popular. And, even though cameras and video cameras are very common accessories, situational awareness / field commanding apps are not nearly as popular, at least with those who responded. This raises the question of whether images and video are used offline rather than for sharing information on a situation or incident.

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



Plans to adopt new devices for mobile apps

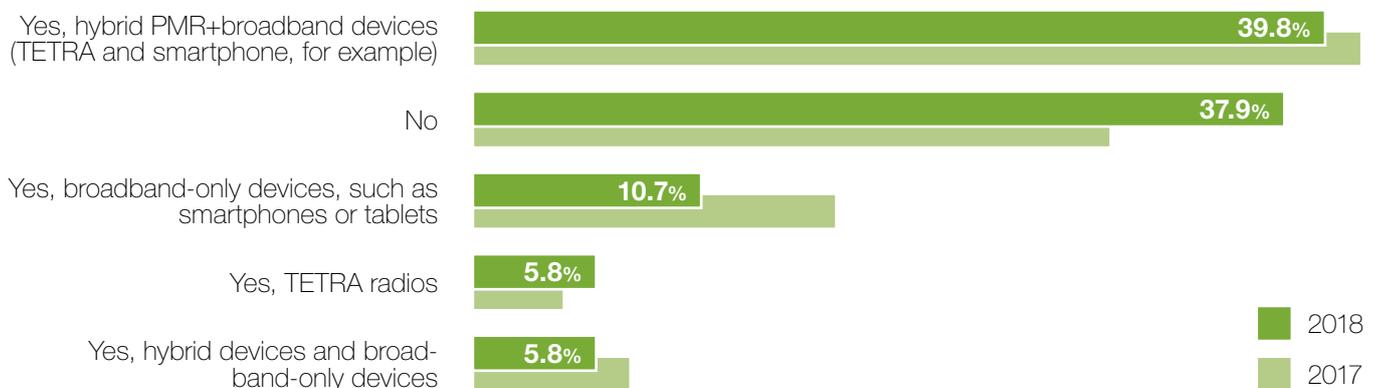
Put together, nearly 60% of respondents have plans to adopt broadband-capable devices. This is a slightly lower figure than last year, but a clear majority all the same.

A clearly smaller percentage of respondents planned to adopt broadband-only devices than last year, and only around 6% reported that they had plans to adopt TETRA radios.

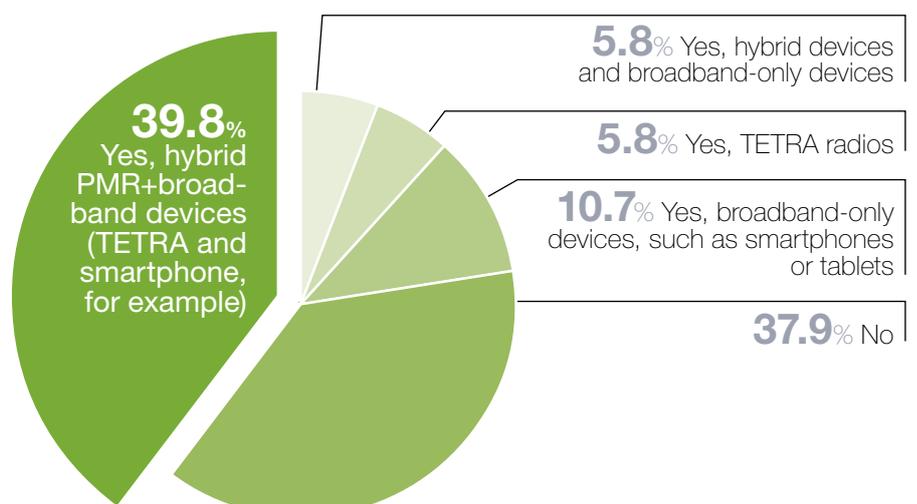
Key findings

Hybrid devices are the route to broadband. People want a hybrid device – it has remained the most popular type of device for two consecutive years. The message from the users is clear: give us hybrid devices.

Do you have plans to adopt new devices for using mobile apps?



2018



Mobile apps for hybrid devices

Camera and field commanding figure in more than 60% of the respondents' plans and email and/or calendar as well as group chat also gained more than 50% of the respondents' votes.

The graph looks surprisingly similar to the one that asked people to choose which apps they already use.

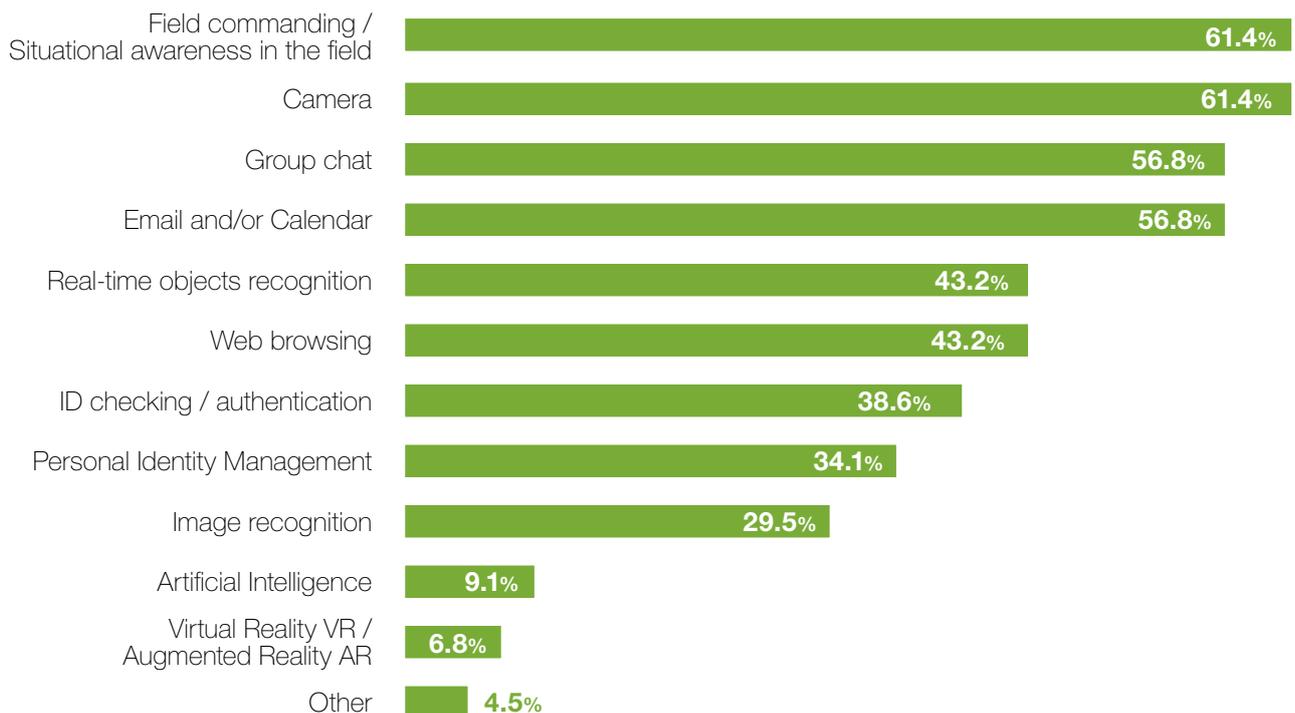
But there are differences. Field commanding / situational awareness is not nearly as widely used as is expected with hybrid devices. Also, a larger percentage of people who plan to adopt hybrid devices expect to use real-time objects recognition and image recognition. Where only around 10% of respondents currently have such apps in use, three times as many expect to use those apps with hybrid devices.

Key findings

Those planning to adopt hybrid devices list apps complemented by the device. These use cases include group chat, which clearly benefits from access to the PMR side. After all, it is logical that users will want to text chat in the same groups as they talk to on the PMR side. Sharing images within that same team also makes sense.

Situational awareness overall is a clear use case for a hybrid PMR plus broadband device when there are professional apps used as part of professional operations.

Choose the apps that you plan to use on hybrid devices



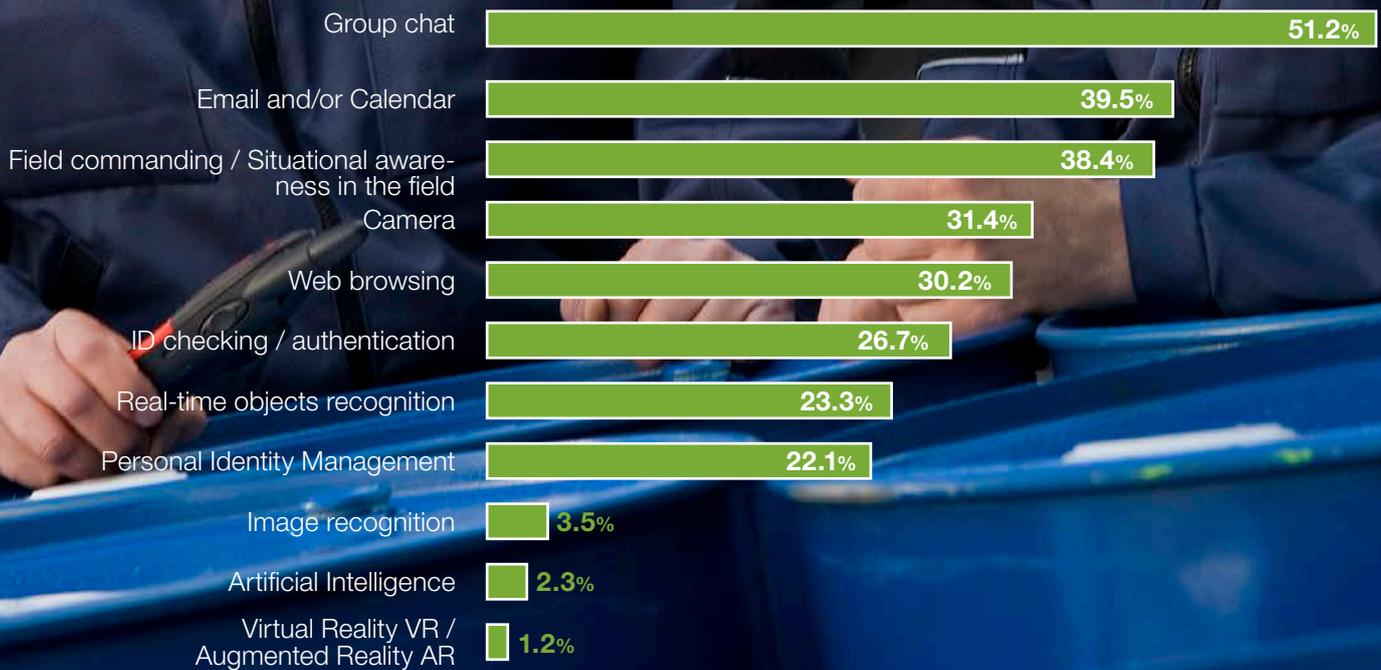
Apps with the greatest potential

The top apps are very much the same as those in the other app related questions.

Key findings

It is noteworthy how few believe in the viability of image recognition, artificial intelligence and VR/AR apps. This is a clear opportunity for app developers to imagine and deliver something that users have not yet considered.

What are the most potential use cases for mobile apps?



Using apps to share data

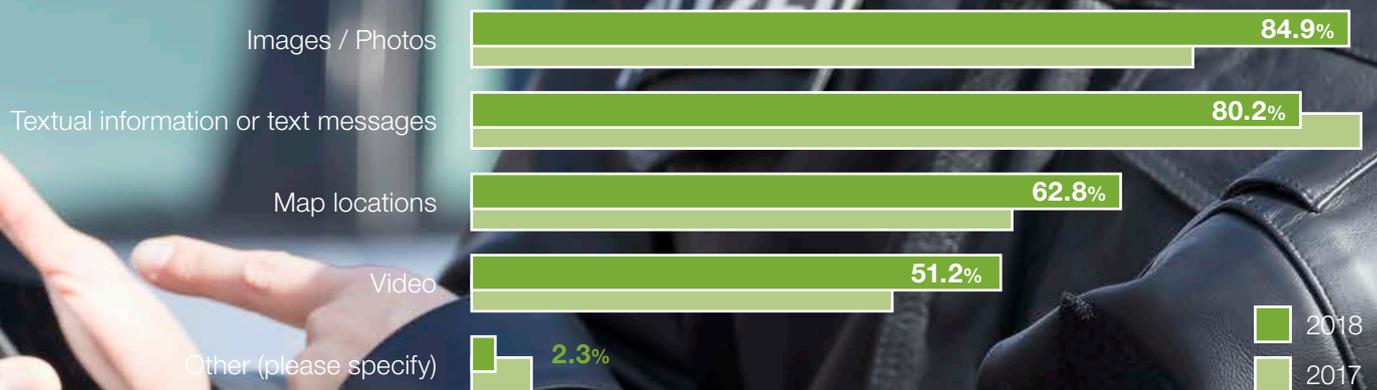
The overwhelming majority of respondents (85%) reported they share images and 80% share textual information. Video is the third most popular data type to share, chosen by around 51% of respondents, while almost 63% share map locations.

Key findings

Users want and need to share images (and video). The ideal device will therefore have a camera and a sharing app.

Sharing images or video as part of professional operations is a significant need. Users may not be early adopters, but the trend shows that sharing of images and video is spreading from the consumers' record-breaking activity to the professional arena.

Which types of data are you sharing by using apps?



Professional demands of apps

The survey found three stand-out characteristics of mobile apps that professional users value most:

60.5% Security and ownership of data - control in own hands

58.1% High reliability and availability of the service

59.3% Easy to use

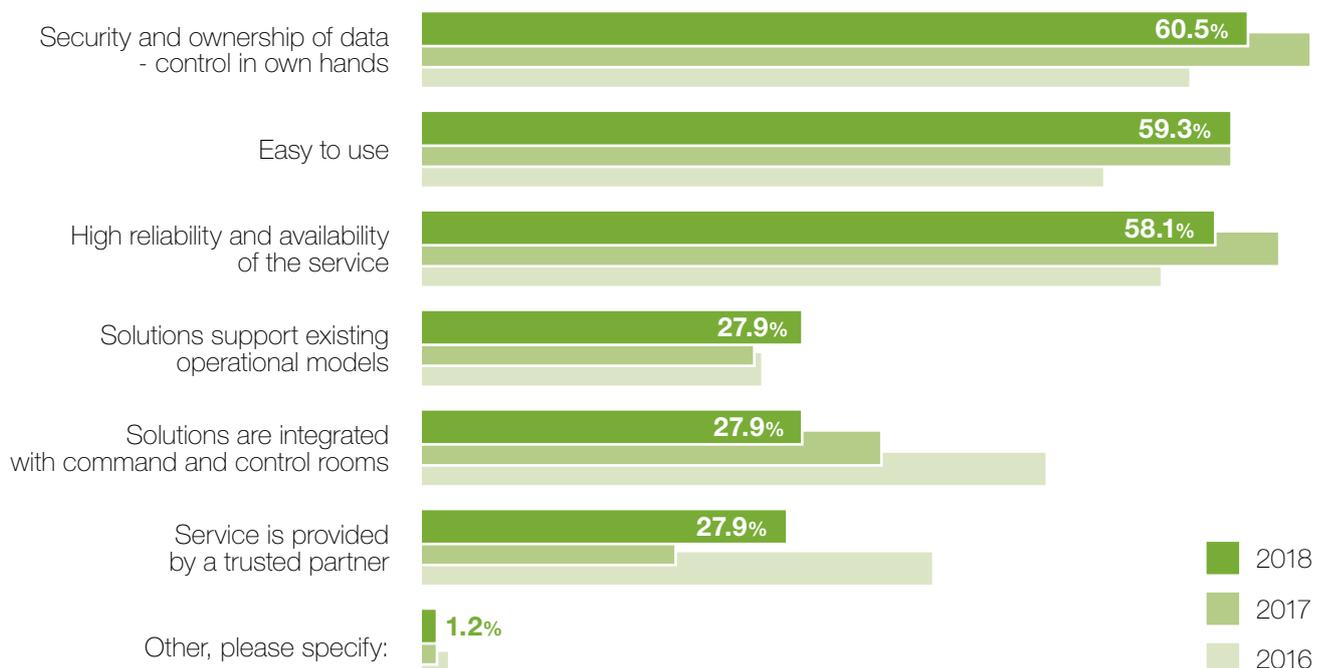
Support for current operative models, service from a trusted provider, or integration with control rooms is not nearly as high on the list of important app characteristics, but almost one quarter of the respondents ticked these boxes.

Interestingly, integration with control rooms has been trending towards a lower priority: from 46% in 2016 to 34% in 2017 to 28% this year.

Key findings

The top three characteristics have remained constant throughout the survey history – and two of them are very different from the behaviors of consumers, who as a rule do not think much about their ownership of data. It is clear that consumer apps do not meet these three needs as a rule, so common everyday consumer apps are therefore not suitable for adoption into professional use as they are.

The most important characteristics of mobile apps



Selecting the right vendor

People were asked to select up to three most important criteria when choosing a vendor of mobile broadband solutions. The survey results show that proven experience and the ability to deliver solutions on the latest smart device platforms are considered the most important in selecting a vendor. (Proven experience in critical communications solutions (51%) and apps that can be used on the latest smart devices/platforms (44%) are the top priorities.)

Key findings

Mobile broadband vendors must demonstrate their experience in critical communications solutions – and increasingly their experience in mobile apps as well. What's more, their solutions need to be up to date, working on the latest smart device platforms.

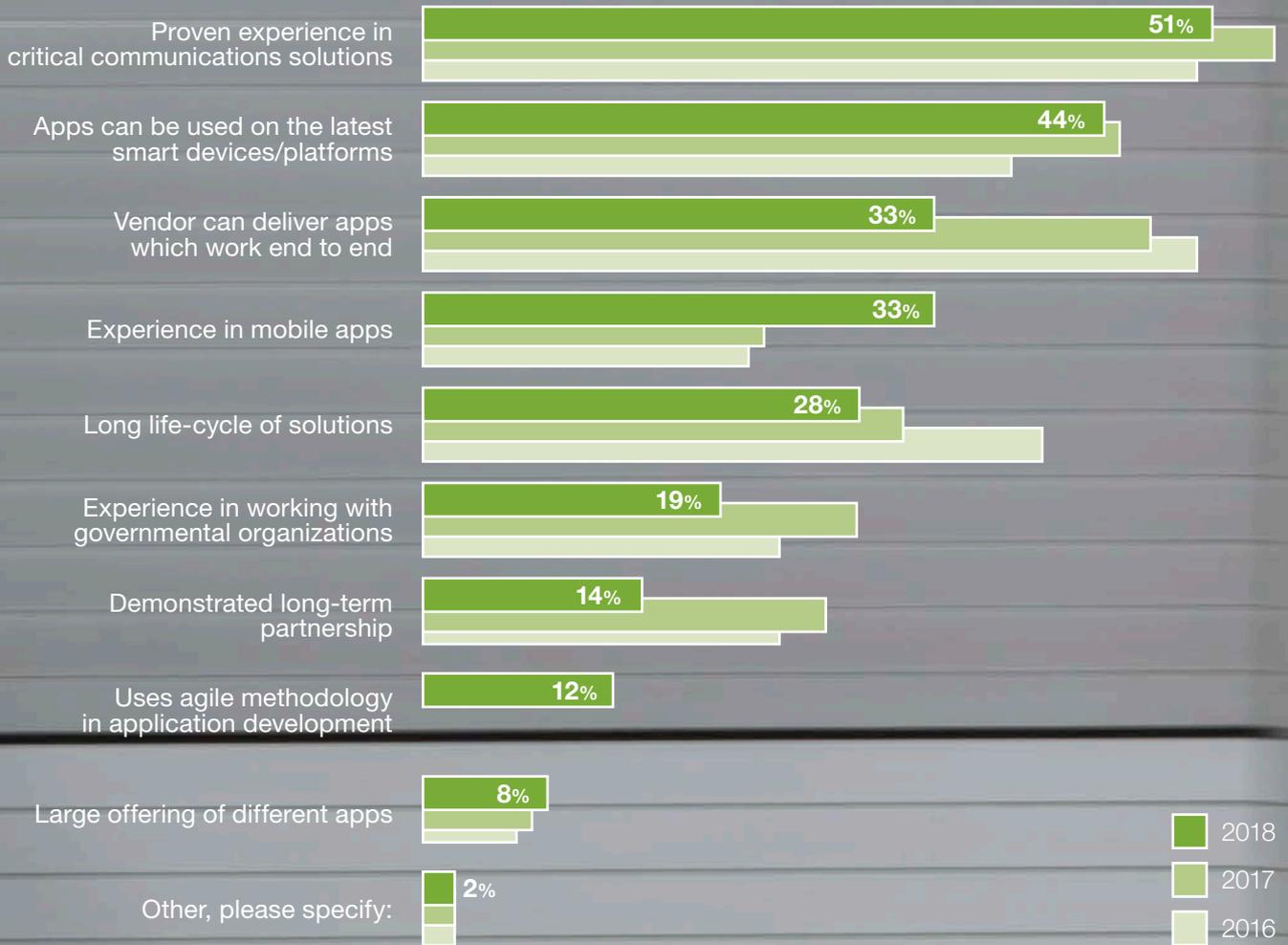
Latest platforms took number two position from the requirement for an ability to deliver apps that work end-to-end. The end-to-end requirement, as well as a long life-cycle of solutions, show a downward trend over the history of this survey.

Experience with mobile apps has a slight upward trend.

A large offering of different apps does not seem to be as important for the respondents. This has been the least appreciated requirement throughout the survey history, with only 6-8% of respondents choosing it.



The most important criteria to choose the vendor



Planning to adopt apps – and apps adoption

The survey asked respondents about their organization’s plans to introduce apps in the future. The survey also included two new questions – how people got the apps into the device, and how people identified apps that they use.

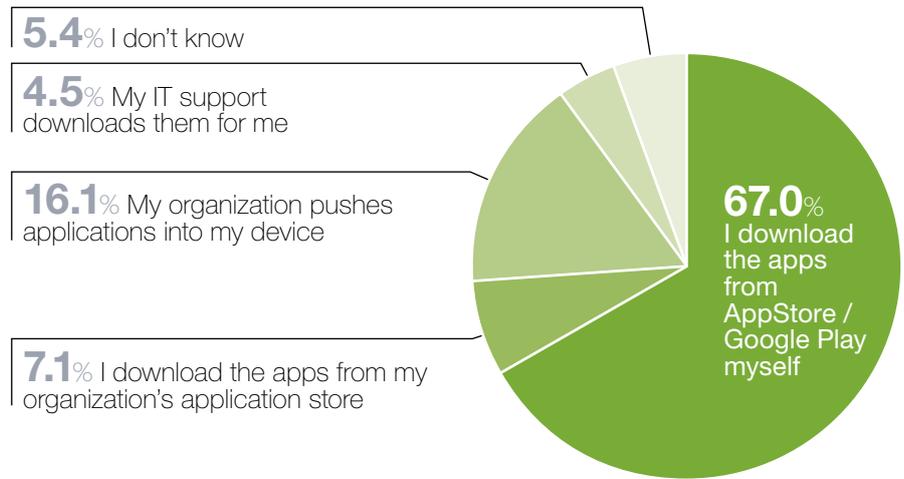
Four in ten report that they either have no plans to adopt new apps, or they do not know about any plans.

However, nearly a third of this year’s respondents (29%) have decided to introduce new apps in 12-24 months or to start a trial. There has been a slight increase in the number of these decisions when looking at the percentages over the years.

Most of the respondents (67%) downloaded apps into the device themselves. Only 7% of respondents used an organization-specific application store.

Searching for apps in the commercial application store, reading reviews and learning about new apps at conferences or events were the most popular ways to identify potential applications for use. Recommendations by friends were only a little more popular than the response “My IT department decides”.

How do you get the applications into your device?

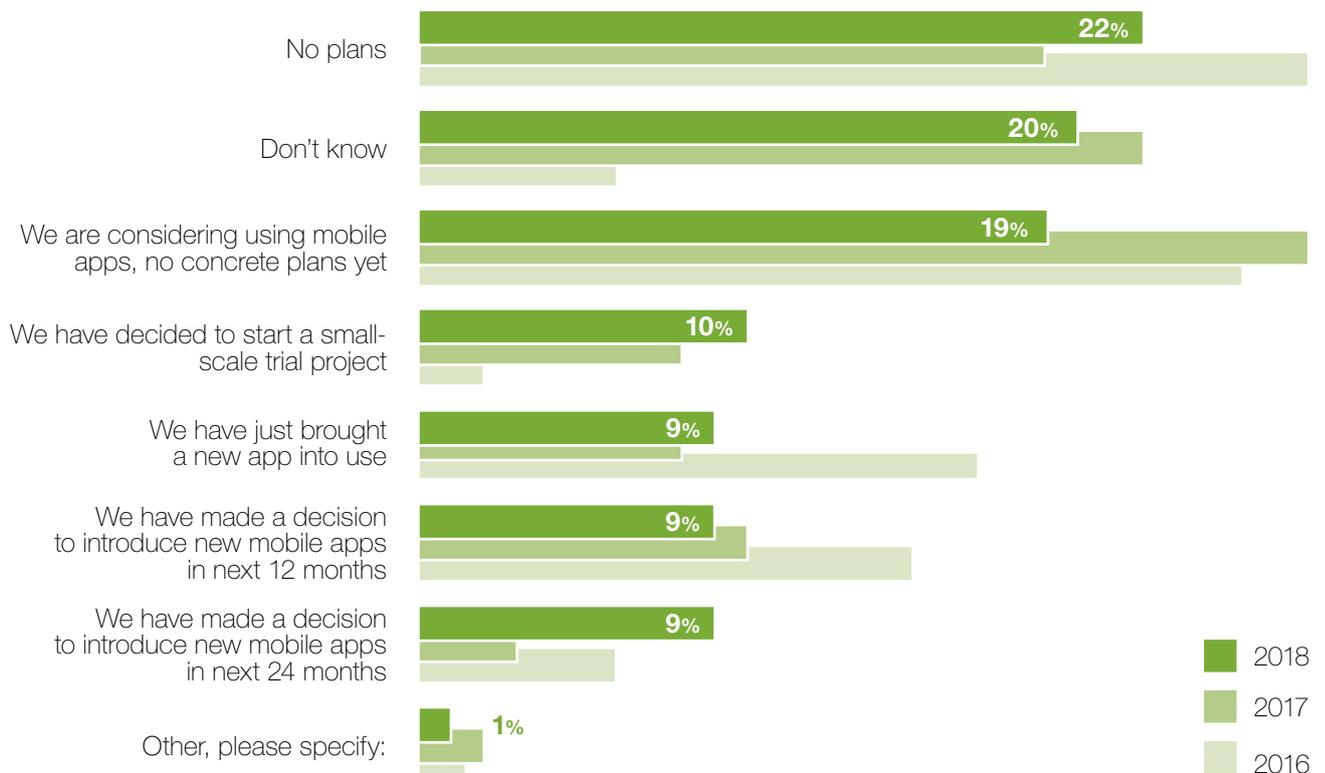


How do you identify potential applications?



tion in general

Does your organization have plans to introduce new mobile apps?



Key findings

Organizations may be on the brink of realizing that the adoption of apps needs to be controlled and organized. According to this year's numbers, most users download their apps from generic app stores. In other words, app adoption does not look like it is being professionally managed.

Professional organizations do have room for improvement in terms of device security - only 7% of the respondents reported using an enterprise app store.

There are small indications in the survey that instead of allowing people to download generic apps into their device and use them in the

organization's network, there are increasing numbers of organizational plans.

Application developers should make sure that their apps are reviewed. Their presence at conferences and events attended by their target users should also form part of their marketing plans.

Survey methodology

Airbus conducted this third annual survey on mobile apps over a two-and-a-half-month period from November 2017 to February 2018. 112 people responded to the survey from across the world with the biggest representation being public safety and other professional organizations with 43% of respondents.

The survey was made available online. Respondents were able to pre-subscribe to this report as an incentive to complete the survey. No other incentives were offered. The survey was promoted through Airbus's Secure Comms blog and through Facebook, Twitter, LinkedIn, Google+ and email.

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- 3** The three surveys indicate an upward trend in the use of almost every kind of app

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