

Summary

Executive summary

Modern people monitoring solutions rely on GPS and wireless communications technologies to determine the location of a person and transmit the data to a third party. Technological advancements have enabled substantial improvements in GPS receiver performance and cost. Dedicated people locator devices are available in a wide range of form factors including boxes, pendants, bracelets, watches and handsets designed for different use cases. The growing installed base of GPS-enabled smartphones have opened up the market for location based mobile apps, which are used in a number of people monitoring segments.

Consumer-oriented people locator solutions range from family locator services that provide peace of mind for parents of children and teenagers, to solutions that assist caregivers of seniors and people suffering from various medical conditions. The market for handset-based family locator services is dominated by freemium apps. Location sharing functionally is also offered by numerous widely-used apps such as Google Maps, Facebook Messenger, Snapchat and Apple's Find My Friends. A number of companies market GPS-enabled devices for children that are too young to use mobile phones. The market is still in its infancy, but is expected to grow in the coming years, especially in North America. Vendors including Bestie, hereO and LG Electronics have designed locator devices for kids in the form of wristwatches. Many companies are also offering general GPS tracking devices that can be used for several different application areas. BrickHouse Security, WTS Positioning Solutions and Yepzon have launched locators that can be used to track luggage, pets, kids and more.

The total addressable market for pet tracking devices is huge. There are over 300 million dogs and cats in households in Europe and North America. GPS based pet locator devices address two major concerns for pet owners – preventing the pet from getting lost and helping the pet stay healthy. People are often passionate about their pets and willing to spend considerable amounts of money on pet related products and services. The installed base of active pet locator devices in Europe and North America exceeded 500,000 in 2017. Tractive has grown rapidly to become the clear market leader in Europe as well as globally. Whistle

Labs is the largest player on the North American market and one of the leading companies worldwide. Both companies offer pet locator devices, which in addition to location tracking also measure the pet's activity to help the pet stay healthy.

Telecare service providers are showing increasing interest in mobile telecare solutions, known as mobile Personal Emergency Response Systems (mPERS) in North America. Incumbents such as Philips Lifeline, Tunstall and Doro have launched new products in this category recently. There are also a number of companies offering solutions in various people monitoring segments, including mobile telecare. Navigil and Laipac Technology offer smartwatches to be used for lone workers as well as people with Alzheimer's disease, elderly people and people suffering from various medical conditions. Over time, mobile telecare devices are likely to replace conventional telecare systems among seniors as they are better suited for a mobile lifestyle. The number of active mobile telecare systems in Europe and North America is estimated to have reached close to 900,000 at the end of 2017.

People locator solutions addressing the needs of businesses are available from companies in industries such as fleet and asset tracking, as well as IT and specialist vendors. Mobile workforce management applications enable workers to report time, collect data in the field, access back-office information and communicate with managers. Berg Insight estimates that the market for mobile workforce management software in Europe and North America amounted to € 1.0 billion (US\$ 1.1 billion) in 2017. The market for lone worker devices and services is growing as more employers become aware of the solutions available to protect their workforce. New and stricter regulations that specifically address the safety of lone workers also foster market growth. There were an estimated 630,000 and 260,000 monitored lone workers in Europe and North America respectively at the end of 2017.

Electronic monitoring (EM) of offenders is still relatively rare in the European and North American corrections systems. Monitoring systems based on radio frequency (RF) or GPS/cellular technology are used to provide alternative ways of sentencing offenders at various stages of the criminal justice system, including at pre-trial, at sentencing and following a period of incarceration. The average daily caseload of monitored individuals in Europe and North America amounted to about 36,000 and 155,000 respectively during 2017. In North America, 75 percent of the systems used are based on GPS/cellular technology.