Biometric authentication evolves beyond fingerprints

A new study from Juniper Research has found that biometric authentication is now ready to move beyond fingerprints alone and use a range of identifiers, from facial recognition to voiceprints. These methods will become part of many more consumers' lives, installed on an estimated 190 million mobile devices, including smartphones and wearables, in 2016, before exceeding 600 million devices by 2021.

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The new research, *Mobile Biometrics: Consumer Markets, Opportunities & Forecasts 2016-2021*, has found that demand from businesses for methods that rely less on hardware will raise the profile of newer biometrics over the next five years, in particular voiceprints and facial recognition.

These technologies are easier to deploy than fingerprinting, as they do not require dedicated hardware, bringing biometric security to a whole new audience in markets with lower-tier smartphones, with fingerprinting remaining common in more affluent regions.

With many different biometric technologies now emerging for consumer use, Juniper predicts that multiple biometrics will become part of consumers' mobile experience in the near future.

From identification to verification

The research found that use cases for biometrics will shift from identification to verification, thanks to the need for increased security of the biometric itself. In these cases the biometric is stored and approved on-device and an affirmation sent to a service, rather than the biometric being transmitted and compared to a remotely held record. This is because biometrics cannot be changed like passwords, and so if they are compromised, they are unusable for life.

"While biometrics offer an increased amount of security and convenience, they need higher levels of protection," remarked research author James Moar. "Establishing best practices for storage and transmission of newer biometrics will be key to ensuring both consumer control over and the security of these most personal data."