Voice Biometric Update: New Demand Drives Caller Authentication

Regulatory mandates for financial services and healthcare providers drive new interest in voice biometrics as part of multi-factor user authentication for online- and phone-based commerce. Opus Research expects rapid growth for voice-based caller authentication, anticipating large-scale, customer-facing implementations among financial institutions, insurance companies, government agencies and customer care.

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Key Findings

Voice biometric technology providers are in position to vie for a share of the market created by the need to provide user authentication for online- and phone-based commerce:

- **Banks and financial institutions have found that online- and phone-based transactions are less susceptible to fraud than paper-based counterparts** – This finding is confirmed by statistics compiled in the U.S. by the Federal Trade Commission, Council of Better Business Bureaus and Javelin Strategy & Research. As transactions migrate online, financial institutions are making headway in reducing the number of “incidents” of identity theft through non-paper transactions.

- **Despite a decline in incidents of fraud, losses from identity theft continue to grow** – Though the number of fraud incidents are on the decline, losses from identity theft continue to grow roughly 5% per year in the United States, from $52.3 billion in 2003 to a projected $56.6 billion in 2006.

- **Voice biometric specialists now position their technologies into authentication solutions** – Over the past ten years, core technologies have evolved from SDKs (software development kits) and stand-alone appliances into integrated and distributed solutions designed for contact centers and Web sites.

- **Deadline looms for two-factor authentication** – In the U.S., the Federal Financial Institutions Examination Council (FFIEC), which is affiliated with the Federal Deposit Insurance Corporation, mandates use of two-factor authentication – instead of relying solely on a PIN or password – by the end of 2006.

- **On a cost/efficacy basis, voice biometrics holds an advantage over alternatives** – While physical tokens and challenge statements are relatively inexpensive to employ, these techniques have proven to be flawed. Voice biometrics requires no special hardware and is demonstrably more accurate than more popular biometric counterparts, including fingerprints, iris scans and facial scans, in terms of its “equal error rate” (EER).

- **Innovations in voice verification will have a ripple effect across industries and application areas** – Large-scale, customer-facing deployments of caller authentication will not be restricted to financial services. The technology will find new applications among government agencies, healthcare providers, insurance companies, online travel specialists and any e-commerce specialist operating both Web sites and contact centers.
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