2016 Voice Biometrics Product and Market Report
DMG Consulting’s inaugural Voice Biometrics Product and Market Report initiates our coverage of this highly beneficial IT sector. In our increasingly security-conscious world, voice biometrics is a product whose time has come. These solutions are starting to catch on in contact centers and for other applications, due to their ability to identify and verify callers. While contact-center-related uses of voice biometrics are the primary emphasis of this Report, other uses and verticals are covered where these solutions provide significant benefits and there is overlap with contact center functions.

Please contact Deborah Navarra at deborah.navarra@dmgconsult.com or 516-628-1098 with any questions. To order your copy of the report, visit www.dmgconsult.com.
Voice biometrics is not a new technology; it has been around for close to 20 years and has been used in a variety of industries. However, recent technical innovations, improvements in the speed and cost of the implementation process, and availability of these applications in the cloud are making voice biometrics more accessible for companies and their customers. Voice biometrics is a technology that uses the distinct characteristics of each speaker’s voice to identify them. Since each voiceprint is unique to every individual and non-replicable, biometrics can be a highly effective and secure method of identification, authentication, or even proof of life. For contact centers, voice biometrics has emerged as an important tool for effectively and securely handling customer identification, authentication and fraud mitigation. As the old and proven ways of verifying callers are being challenged as too unreliable and risky due to social engineering, voice biometrics is emerging as the most viable and cost-effective approach for providing security, which is an essential element of the servicing experience.

When it comes to contact centers, voice biometrics’ primary applications remain authentication and fraud mitigation, two uses that could save companies millions of dollars and improve the customer experience. The need for strong, multi-factor authentication is increasing, as the number of fraud attacks on enterprises, government agencies and personal systems continues to grow. Voice biometrics is an ideal method for validating callers and preventing fraudulent activity in contact centers. The voiceprints that are the foundation of a voice biometrics program cannot be decoded, reconstructed or used by another system, even if the voice biometrics application is hacked.

The voice biometrics market is confusing because each vendor has their own unique approach and no two solutions are alike. Prospects cannot easily compare the functionality, effectiveness and accuracy of the offerings, and it is difficult to verify vendor claims. This Report is designed to demystify the market and its products, and synthesize the information in a cohesive manner to give IT and business managers the information they need to better understand this emerging IT sector.

The 2016 Voice Biometrics Product and Market Report is the only in-depth analysis of these emerging solutions, covering vendors, products, functional capabilities, prices, and more. This Report presents information about how these solutions are being used, their benefits, as well as insights into emerging best practices. It also analyzes market trends and challenges, product innovation, reviews the competitive landscape, and presents market activity data and 5-year projections. The Report covers seven vendors who provide voice biometrics solutions to contact centers, although most of these solutions are designed for broader use across many verticals. The 6 vendors covered in detail in this Report are Auraya, NICE, Nuance, SESTEK, TradeHarbor and Verint Systems. A seventh vendor, ValidSoft, is covered at a high level.
Key Elements of This Report

- Definition of voice biometrics: what it is, how it works, and an examination of the functional components that comprise these solutions
- Insights into the current uses and applications of voice biometrics and their benefits for customers, contact centers and agents
- A look at non-contact-center applications for voice biometrics, including e-Signature
- Discussion of the regulatory issues that can potentially impact the voice biometrics market
- A review of the market trends and challenges that are driving investments and vendor innovation
- The role of voice biometrics in the customer journey
- Review and assessment of the voice biometrics competitive landscape
- Voice biometrics market activity analysis and 5-year market growth projections
- Overview of the 7 leading and contending voice biometrics vendors, including company snapshots and product offerings
- Implementation analysis, including vendor methodology, best practices, training and professional services, and maintenance and support
- Discussion of voice biometrics market innovation, including new features and enhancements that are planned for delivery in the next 12 – 18 months
- Vendor pricing models for on-premise, cloud-based and managed service voice biometrics solutions
- Detailed company reports for the 7 leading and contending voice biometrics vendors, analyzing their products, functionality and future product development plans
- Comprehensive Voice Biometrics Vendor Directory
- Voice Biometrics Glossary of Terms
Voice biometrics is replacing outdated and fraud-prone authentication processes: Contact centers are adopting voice biometrics to protect their customers and cut losses while improving the service experience.

The voice biometrics market is seeing increases in global presence and momentum: Voice biometrics solutions are starting to be used around the world, due to their effectiveness and proven value. While early adopters primarily used the technology in their contact centers, many companies in a variety of verticals have begun to find new uses for these solutions throughout the enterprise.

Companies and consumers alike benefit from voice biometrics: Voice biometrics technology helps both contact centers and their customers by addressing customer security and privacy concerns, smoothing the way for improved rapport between customers and agents, and reducing contact handling time and operating costs.

Voice biometrics is an important element of omni-channel support: To address the growing number of communications channels, voice biometrics solutions are beginning to support interactive voice response (IVR), mobile apps, web applications, and audio and video conference calls.
# Voice Biometrics Technology Building Blocks

![Sample Figure]

**Integrations**
- IVR
- ACD
- CTI
- CRM
- Agent desktop
- Speech analytics
- Desktop analytics
- Fraud database

**Channels**
- Voice
- Email
- Chat/IM
- IVR
- Visual IVR
- Web
- WebRTC
- Mobile Apps
- Social Media
- ATM

**Enrollment and Authentication**
- Text-independent
- Text-dependent
- Text-prompted
- Agent-assisted
- Self-service
- Consent management
- Whitelisting management

**Fraud Detection and Mitigation**
- Blacklist management
- Liveness/playback detection
- Gender ID
- Duplicate enrollment
- Geo-location tracking
- Multi-factor authentication
- Risk management strategies

**Optimization**
- Scoring
- Tuning
- Adaptation

**Core Modules**
- Real-time audio streaming
- Speech Recognition
- Recording
- Agent/real-time guidance

**Optional Modules**
- Speech analytics
- Fraud case management
- e-Signature
- Password reset
- Verticalized applications

**Underlying Technology**
- Voice biometrics engine
- Algorithms
- Integration tools
- Voiceprint database
- Workflow engine
- Rules engine

Source: DMG Consulting LLC, July 2016
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