SoundHound Recognized as the

2021

Company of the Year

North American Automotive
Connected Voice Assistance Industry
Excellence in Best Practices

FROST & SULLIVAN

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Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. SoundHound Inc. excels in many of the criteria in the automotive connected voice assistance space.

AWARD CRITERIA

Visionary Innovation & Performance	Customer Impact
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

Voice Artificial Intelligence for Daily Interactive Experience

Voice assistant technology in the automotive industry is advancing quickly from command-based voice queries to semi-conversational natural language adoption. Many automotive original equipment manufacturers (OEMs) incorporate voice technologies into their infotainment and connected services, with others investing heavily in the technology as part of their growth strategy. The automotive industry is one of the early adopters of connected voice assistants. In fact, Frost & Sullivan research finds that by 2027 voice assistants will be commonplace in 80-90% of automobile OEMs, with nearly 100% implementation by 2029.

As enterprises and OEMs grow towards adopting advanced voice assistants into their products, there is a need to determine whether to partner with leading innovators in the connected voice assistant industry to develop in-house integration solutions or rely on third-party voice assistants (like those found on smart devices). Alternatively, third-party voice assistants are a hurdle to OEMs since end-users are already familiar with them and offer an easy plug-and-play option. To overcome these challenges, OEMs need to establish strong partnerships with automotive-connected voice assistant providers who offer robust services, integrate seamlessly with their technology, and have innovative natural language processing capabilities.

SoundHound Inc., was founded in 2005 in Santa Clara, California, and has a global presence with nine offices spread across North America, Europe, and Asia and teams in 16 countries. The company started

to bring the world of voice artificial intelligence (AI) to everything around us, enabling interactive daily experiences. SoundHound first started with music recognition, aiming to turn sound into meaning with a mobile application (app) that is now a music discovery, identification, and voice-controlled player, with over 315 million downloads.[1] In 2015, SoundHound introduced its voice AI platform, Houndify, a project ten years in the making, featuring SoundHound's proprietary Speech-to-Meaning® and Deep Meaning Understanding® technologies. Houndify provides a remarkable voice interaction experience for a broad range of applications including automotive, Internet of Things products, music services, and apps. With its innovative voice AI platform, SoundHound continues its success as a leader in the automotive connected voice assistant industry.

Innovative Speech-to-Meaning® and Deep Meaning Understanding® Technology for a Superior Voice Assistant Experience

Since its inception 16 years ago, SoundHound continuously develops and improves the proprietary technology embedded in its platform. This commitment makes the Houndify platform one of the most advanced voice AI platforms, enabling it with speech processing and natural language understanding (NLU) capabilities. SoundHound's Speech-to-Meaning® technology processes speech in real time and deciphers speech intent, improving its accuracy and speed. Additionally, SoundHound's Deep Meaning Understanding® capabilities allow end-users to make compound and complex statements for continuous inter-linked queries. For example, a request for "restaurants within ten miles of me with outdoor seating" has multiple requests: a restaurant, a geographical location, and a specific amenity. SoundHound's innovative proprietary Speech-to-Meaning® and Deep Meaning Understanding® technology improve the conversational nature of its interactive voice experience. These technologies make the Houndify platform ideal for automotive OEMs that wish to provide a robust connected voice assistant infotainment system.

The Houndify platform utilizes advanced AI to power its automatic speech recognition (ASR) capabilities. The ASR technology actively listens for speech and processes complex language in real-time, and the integrated NLU components deliver greater precision for understanding complex speech than competitors. Furthermore, the ASR is available in over 20 languages and even treats accented languages (e.g., American English, British English, and Indian English) as different languages for better understanding.

SoundHound understands the ability to customize a voice AI platform is an important aspect for many OEMs that wish to provide a unique interactive experience to their voice assistants. SoundHound's suite of tools that enable customization includes private domains for proprietary operations and enhanced product functionality, application programming interfaces to support custom wake phrases, custom commands, and a digital voice specific to a company's brand for a personalized experience. OEMs also have the option for the level of embedded voice assistant, including a command and control embedded voice user interface, an expanded version with light NLU for conversational interfaces, and options for advanced, fully-conversational NLU for more complex solutions. Additionally, with the Houndify platform, OEMs have access to collaborative capabilities, software development kits, diagnostics, and analytics. With a growing library of over 100 content domain libraries (including music, sports, podcasts,

fitness, and more), the Houndify platform provides end-users with a robust infotainment solution. SoundHound has domain partnerships with high-profile domain leaders, including Yelp, iHeartMedia, TiVo, AccuWeather, Sportradar, Parkopedia, HERE Technologies, and Audiobooks.com, and actively seeks partnerships with domain content providers as part of its strategy to bring the power of voice AI to every possible in-car service application.

A key differentiator for OEMs in a partnership with SoundHound is the collection, analysis, storage, and ownership of user analytics. Additionally, partnerships that deliver in-house integrations give OEMs access to end-user data, a benefit not found with most third-party providers who do not offer this data. Ownership of user analytics is a unique platform feature that provides critical insights into customer interactions and experiences. Data ownership enables OEMs and developers to provide custom and personalized experiences, optimizing voice assistant solutions, strengthening customer relationships, and retaining brand independence.

The company has partnerships with many large and premium automotive OEMs, including Mercedes-Benz, Honda, PSA and Hyundai, whose vision for voice assistant infotainment systems goes beyond traditional use cases like navigation and music. Mercedes-Benz leverages SoundHound's Speech-to-Meaning®, Deep Meaning Understanding®, customization options, and user analytic data to provide a truly branded infotainment experience with the Mercedes-Benz User Experience. Additionally, the long-term partnership between Hyundai and SoundHound powers Hyundai's Dynamic voice recognition system with Houndify's voice AI platform, providing drivers with access to cloud-based information from SoundHound's multiple knowledge domains. Houndify-powered infotainment systems capitalize on natural and easy voice interactions, with advanced functionalities that are easily discoverable, all with an OEM-branded personality to give end-users a remarkably easy and convenient driving experience.

"Partnering with SoundHound Inc. and integrating such a natural, conversational voice interface in our vehicles, allows the driving experience to become even more intuitive."

- Sajjad Khan, Executive Vice President, Mercedes-Benz

"Hyundai's Dynamic Voice Recognition system continues to gain momentum across our fleet of vehicles… Our multi-year partnership with SoundHound has helped fuel Hyundai's position as an innovator in the global automotive market, providing an exceptional in-car experience to our customers."

- Andy Freels, President, Hyundai America Technical Center (HATCI)

SoundHound's Hyundai Experience

Source: SoundHound

Another customization feature is SoundHound's connectivity solutions that optimize OEMs voice-enabled solutions. OEMs choose from fully embedding, hybrid, or exclusive cloud connectivity options based on their requirements for NLU processing power, privacy needs, and voice user interface when devices are on or off. Edge connectivity solutions include:

Houndify Edge: A fully embedded solution without internet connectivity and privacy concerns. The Edge solution provides full accessibility to custom commands and instant updates to development command codes for efficient voice-enablement of infotainment solutions.

Houndify Edge Hybrid: Provides cloud connectivity and reliable embedded technology. The Hybrid solution ensures devices are always-on to respond to commands and pushes product updates to deliver a cloud-connected voice experience. Additionally, Edge Hybrid utilizes Active Arbitration technology, seamlessly selecting from embedded voice functions or information retrieval from the cloud.

Houndify Cloud: Offers efficient and unlimited access to relevant data and information and robust voice assistant user experience for smart devices and products. The Cloud solution also gives OEMs ownership of end-user data, enabling strong customer relationships.

The Future of Houndify and Voice Assistants

SoundHound's vision for the future of Houndify is to improve its capabilities, enhance the user's voice interactions greatly, and provide a solid return on investment for OEMs. The company has developed a Collective AI(R) architecture that enables unique domains to connect for multi-domain queries. The result is an integrative network of information and possibilities with exponential growth that delivers a robust user experience. For example, a query asking for the cost of a rideshare to the nearest restaurant with the highest ratings requires access to three domains (rideshare costs, location mapping, and restaurant ratings). With Collective AI, Houndify and domains will continually grow, improving the platform's capabilities and knowledge.

Another innovation on the horizon for SoundHound is integrated voice commerce on Houndify. With this feature, users will be able to carry out monetary transactions as part of the voice interaction experience. For example, voice commerce can enable end-users to tell their voice assistant to pay for

gasoline or an oil change and have the platform carry out the purchase without heavy interaction between the user and the platform. Voice commerce queries such as these create a seamless transaction for end-users and serve as a means for shared revenue. SoundHound's partnership with Mastercard aims to support these types of transactions. The AI-Powered Drive through solution enables users to order and pay for their purchase for quicker service and touchless interactions. As in-car electronic commerce (e-commerce) gains popularity, OEMs are starting to partner with payment providers. SoundHound utilizes this opportunity in a distinct partnership with Mastercard to provide end-users with the additional benefit of convenient voice-assisted e-commerce. Additionally, as more consumers increase their use of touchless technologies, voice assistants will be at the forefront of contactless solutions, thus lucratively profiting automakers. Voice commerce can also be a venue for voice advertising with curated recommendations for end-users, another source of revenue for OEMs.

As one use case demonstrates, the partnership between SoundHound and Parkopedia, a leading parking services provider, further speaks to the potential of such multi-domain queries. With this partnership, drivers can ask their Houndify-powered voice assistant infotainment system to find parking in a specified location, the Parkopedia service searches and finds a spot. Then other content domains provide further support via directions and payment features. As SoundHound partners with others in the connected car ecosystem, payment capabilities such as this will grow to include electric vehicle charging, fuel, food ordering, and toll payments.

Strengthening Brand Loyalty and Customer Success

The company aims to provide a uniquely branded experience for OEMs to implement a robust infotainment experience. Unique experiences are a distinct value proposition for OEMs who wish to deliver superior custom voice assistant products and services that help to drive strong brand loyalty. OEMs that deliver innovative in-house voice assistant infotainment experiences in addition to third-party integrations will establish their leadership position in the industry. With its Speech-to-Meaning,® Deep Meaning Understanding,® and customization options, the Houndify platform provides a supreme branded experience for OEMs and a dynamic voice assistant for end users. The OEMs' success in developing brand loyalty and recognition translate to success for SoundHound and reinforce its partnerships.

The company's partnership with notable vendors across several industries, including Deutsche Telekom, Snapchat, Pandora, VIZIO, and Mastercard, speaks to the strength of its voice assistance technology. Additionally, despite the economic uncertainty brought on by the COVID-19 global pandemic, SoundHound's growth has not been impacted. It has improved because of its hands-free solutions available throughout the pandemic. The uncertainty has driven many industries to invest in their more immediate roadmap, including voice assistant solutions. The need to limit touch interactions (that can lead to infections) also added a further need and acceleration for industries to utilize voice interaction technologies. As more OEMs and industries adopt voice AI technology, SoundHound's success will continue to grow as a defaulter.

Conclusion

Automotive original equipment manufacturers (OEM) are at the forefront of incorporating voice assistant technology as a default into their products and services. OEMs will need to determine whether to build technology in-house with OEM-specific voice assistant suppliers or partner with third-party providers from the consumer electronics segment of the connected voice assistant industry. SoundHound's Voice Artificial Intelligence Platform, Houndify, an automotive-connected voice assistant, provides robust services, integrates seamlessly with OEM's technology, and has innovative Speech-to-Meaning® and Deep Meaning Understanding® capabilities. The Houndify platform is available in over 20 languages, processes speech in real-time, deciphers speech intent quickly and with high accuracy, and allows end-users to make compound and complex queries. Strong partnerships with leading vendors across several industries enables SoundHound to provide over 100 content domains translating to exceptional value for OEMs and end-users.

For its strong overall performance, SoundHound Inc. is recognized with Frost & Sullivan's 2021 North American Company of the Year Award in the automotive connected voice assistant industry.

[1] https://www.soundhound.com/about

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends: Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first-to-market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.
Learn more.

Key Impacts:

- **Growth Pipeline:** *Continuous Flow of Growth Opportunities*
- **Growth Strategies:** *Proven Best Practices*
- **Innovation Culture:** *Optimized Customer Experience*
- **ROI & Margin:** *Implementation Excellence*
- **Transformational Growth:** *Industry Leadership*

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)