# FROST & SULLIVAN

## FROST & SULLIVAN BEST PRACTICES AWARD

### REAL - TIME MEETING ASSISTANCE SERVICE
### NORTH AMERICA

## Entrepreneurial Company of the Year
## 2019

Otter.ai

# Contents

# Background and Company Performance

## Industry Challenges

In the 21<sup>st</sup> century, team collaboration has become key to drive success in a competitive landscape. An increasing number of businesses are using multimedia cloud software-based collaboration solutions to empower employees communicate and collaborate without boundaries. Globalization of business has resulted in a diverse and distributed workforce. The true impact in the future will come from teams comprising a mix of full-time and part-time employees, remote workers, freelancers, gig economy workers, and crowdsourcing. Cloud meeting and collaboration services have been increasingly allowing companies to foster this type of workplace transformation that allows dynamic teams to form and collaborate seamlessly. Active Host/Full deployment models have been opening conferencing services to more users than when these services were previously reserved for selected groups due to cost. As a consequence of the availability of better collaborative tools, more meetings are being held per company than ever before with more people attending each meeting from anywhere.

One of the main challenges brought by this ever-increasing flood of enterprise cloud meeting and collaboration has been the amount of data that is exchanged and shared. Thousands of hours of speech conversations are generated within companies of which many are difficult to capture, comprehend, analyze, and categorize. Today, enterprise collaborative meetings are not always productive, with participants experiencing problems in retention rates or too busy taking notes. Moreover, surrounding noises, such as loud typing, heavy breathing and dogs barking, along with multiple voices, multiple languages, and heavy accents make understanding and analysis even more painful. The misery doesn't end after the call wraps up when the action items lead to lengthy email follow ups or, worse yet, don't get addressed at all due to lack of proper speech insight.

In the contact center environment, speech analytics is becoming key to extract crucial information out of unstructured data from customer interactions, to identify potential issues and improve outcomes. In addition to voice transcription, capturing speech intent, action and emotion can provide considerable context and relevancy across multiple channels, allowing businesses to gain valuable insights to be shared across the enterprise.

A new breed of artificial intelligence (AI) powered voice transcription meeting assistant services are emerging with the mission of solving speech chaos within enterprise meetings by making voice transcription easily searchable, sharable, accessible and actionable.

A company that demonstrates entrepreneurial leadership is well positioned to compete. Entrepreneurial leadership attests to a company's innovative features and functionality, reliable service delivery, and greater attention to customer needs. An entrepreneurial company boosts growth rates through constant innovation and reduces churn through unwavering attention to evolving customer needs.

## Entrepreneurial Innovation and Customer Impact

Created by California-based tech startup Otter.ai in 2018, Otter Voice Meeting Notes is an in innovative AI-powered voice-to-text transcription service that uses proprietary speech recognition technology to automatically transcribe a conversation in near real time (with

only seconds of delay), adding keywords that reflect the meeting content and making all parts of the conversation instantly stored, searchable and sharable. The application can also learn to identify speakers automatically, according to their voiceprint; let users snap photos during a recording and insert them inline within the transcript; allow for integration with third party services for storage, calendars and contacts; and offer users various customization options, including custom vocabulary. Since its introduction, Otter.ai has been widely adopted  with users having recorded, transcribed, organized, and edited more than 10 million meetings, lectures and other conversations for a total of over 300 million minutes. Taking the impact of Otter.ai in the real-time meeting assistance service market, Frost & Sullivan recognizes the company with the 2019 Entrepreneurial Company of the Year award for its innovative AI-powered speech recognition service.

**Market Disruption**

Otter.ai is allowing users and businesses to document its conversations and dialogs in a way which has never been successfully done before.

While voice to text transcription has existed for some time, aspects such as high levels of accuracy, noise filtering, voice differentiation and context-awareness were always missing links in previous offerings. In the field of artificial intelligence applied to speech recognition, on the other hand, most of the technological advancements within the past decade have been centered on the market of intelligent voice assistants for human-to-machine interactions (i.e., Apple Siri, Amazon Alexa and Google Assistant). Finally, while IT giants such as Amazon, Baidu, Google, and IBM Watson have been researching and developing services based on AI-powered voice transcription, each one of them still offers its own set of limitations.

Startup Otter.ai has certainly become a market disruptor in the field of AI-powered real time transcription service market. The tool does not only differentiate itself in the meeting assistance realm by focusing on human-to-human interactions instead of human-to-machine interactions, but it also offers one of the most advanced and comprehensive AI-powered voice to text transcription services in the market today, either equaling or beating the capabilities offered by major IT giants who had spent substantial amounts of time and resources to create their existing offerings.

**Competitive Differentiation**

The Otter.ai web and mobile application uses Ambient Voice Intelligence™, a proprietary technology that gives individuals the power to capture, store, scan, search, and share important parts of voice conversations from lectures, presentations, meetings and interviews. The program has been trained on millions of hours of audio input collected from various public sources including audio books, TV and radio programming, parliamentary proceedings, and podcasts, among others. Different noises were also introduced in the training system to increase the difficulty so that the model can learn how to handle noise. For words with similar pronunciation, the system intelligently identifies the context behind it, the words before it, words after it and even words that were said 10 minutes ago. The application's AI engine, Machine Learning (ML) algorithms and Natural Language Processing (NLP) software get smarter with more usage across time.

Otter.ai features and characteristics include:

- Automatic speech recognition: Otter's proprietary AI-powered speech recognition technology is optimized for conversations with multiple participants and challenging acoustic environments.

- Audio Recording: Generates an audio record of the conversation along with the generated text, providing an additional level of functionality.

- Speaker separation and identification: The app uses a technology called diarization to separate each individual speaker and generates a voice print for each person's voice. This allows the service to know when different speakers are active to identify individual voices in a conversation in the same way that AI recognizes faces in photos on social media.

- Deep content search: Users can search by keyword to recall snippets of all of their conversations that are stored in Otter.

- Groups: Content can be quickly shared within the Otter app with individuals or team members in real time.

- Playback: Text and audio are synchronized on playback and users can quickly jump to any point in the audio recording by clicking the transcribed text.

- Inline Photos: Allows users snap a photo of a whiteboard, a presenter or other relevant content and add it inline to the note in the Otter app providing new visual context.

- Custom Vocabulary: Empowers users to teach Otter.ai uncommon or new jargon, acronyms and names of people, products and companies by adding these words to their accounts, improving the overall accuracy with unique terminology identification.

- Security: Otter.ai syncs data over an encrypted connection and stores recordings and data in a secure cloud.

Otter.ai offers all the above features and capabilities at no cost with the default Otter Free Plan that includes up to 600 minutes of transcription every month with no expiration. Users can upgrade at any moment to Otter Premium, which includes 6,000 minutes of transcription per month for a price competitive fee of $9.99 monthly or $99.99 annually, a saving above the 90% compared to paying $0.02 to $0.33 per minute with competitors. Otter.ai also offers 50% off discount to students and educational institutions under its Otter for Education offering.

In March 2019, Otter.ai announced Otter for Teams, extending the features and capabilities of Otter to businesses and enterprises around the world. Otter for Teams maintains the core features of the consumer version and pairs these with rich business-grade functionality, including account management and provisioning, reporting and support for single sign-on. The new release reduced the speech recognition error rate by more than 25% and reduced the speaker-recognition error rate by more than 25%. Additionally, a partnership between Otter and Zoom enables conversations recorded by Zoom users to be automatically uploaded to Otter, although Otter users also may also upload recordings from their favorite call recording application or online meeting service. Finally, Otter.ai also recently partnered with Dropbox to automatically sync media files in

the cloud storage application and save the resulting transcripts back to the same folder in minutes.

Today, Otter.ai is piloting Otter for Teams with a number of enterprises, including creative agencies, large financial institutions, independent brokerages, government bodies, and design consulting companies. In addition the product is being provisioned to students at educational institutions including UCLA, Tulane, Warwick University, and many others.

**Market Gaps**

Sam Liang, the founder behind Otter.ai is a former Google architect who clearly understood the technology gaps existing in the past speech recognition industry. He placed together a team of experts from Google, Facebook, Nuance, Yahoo, as well as Standford, Duke, MIT and Cambridge to create Otter.ai in 2016 with the mission of developing an AI-based intelligent voice recorder that offers automatic transcription. It was planned to be visibly different from existing voice assistance technologies that focused on human-to-machine interactions rather than human meetings. In human-to-machine interactions, the speech recognition task is easier since sentences are shorter in the form of questions and commands. With human-to-human interactions, instead, speech recognition is more challenging since more people are involved speaking longer sentences with different accents and at different paces. In this sense, Otter.ai has a completely differentiated offering.

In the speech transcription market, on the other hand, there have always been several market gaps that made these services far from perfect. Aspects such as degree of accuracy, high price points, lack of "real-time" transcription, the reality of some level of manual transcribing involvement, and the missing AI processing intelligence element made existing offerings appealing to only specific target markets.

Otter.ai saw a clear opportunity here to take advantage of accelerated advancements in the voice, AI and deep learning fields to develop its home-grown intuitive AI-driven real-time speech translation service, delivering accurate results in a matter of seconds. Since its initial debut into the market, at Mobile World Congress, Otter.ai software service has received enormous positive accolades from journalists, reported, analysts, and consumers alike with many praising the solution's clear understanding of users' desired outcomes and fulfilling the existing gaps in the traditional speech technology market.

**Price/Performance Value**

Otter.ai price/performance value is very competitive in the market. First, its free plan is very generous in terms of minutes, yet offering more speech accuracy than many automatic services. On the other hand, Otter.ai Premium is much more cost effective than other available solutions in the market that charge either per minute, have a higher cost per month or do not offer the level of value that Otter.ai has. Human-based services are priced even higher. Most charge on a per-minute basis within the $1 to $3 range. Finally, and unlike other companies, Otter.ai does not rely on technology sourced from the likes of Google, IBM or Microsoft. The system has been built from the ground up. Today, very few vendors offer the price/functionality value that Otter.ai delivers into the market.

**Customer Purchase Experience**

The Otter.ai blog site displays different cases of user satisfaction with the service. Journalists, for example, praise Otter.ai for having a significant impact in their daily reporting productivity, speeding their workflows in terms of note taking, note categorization and ability to search for transcribed data. In the education realm, on the other hand, Otter.ai is a perfect companion for class note taking, lecture playback, searching for important words, conducting research interviews, sharing notes with peers, and gaining work experience. Finally, and in the business realm, Otter for Teams is helping users to efficiently collect information from meetings, providing an edge for users who are following up with potential partners or customers, summarizing conference calls for busy executives, and generating real-time easy to read transcripts for keynotes. It is Otter.ai's rich experience that resulted in cloud video conferencing company Zoom Video to license the company's technology into its own offering, enabling conversations recorded by Zoom users to automatically upload to Otter.

Today, no one doubts about Otter.ai value added capabilities in the real-time transcription and meeting assistance realm. The success of the service has been reflected in a host of recognitions such as receiving thousands of five star ratings, being named AppStore App of the Day numerous times, and by Fast Company and Mashable as one of the best apps of the year.

**Brand Equity**

Otter.ai branding comes from the animal, which is thought to be one of the smartest creatures in the world, with a high IQ. Otters, for example, learn to use rocks and tools to open clams. They are also said to have a very good memory, which also compelled the company to settle on the Otter.ai name.

While still a nascent brand, the company has already made visible presence not only in important technology industry events such as Enterprise Connect, TechCrunch Disrupt, and Web Summit, but also across the internet with major tech sites praising the tool's innovative value add as one of the most recommended AI-driven speech-to-text transcription services in the market today.

Taking into account the continuous growth of the company, Frost & Sullivan is confident that Otter.ai will continue to efficiently expand its overall branding as it educates the market about its innovative service offering.

## Conclusion

Frost & Sullivan applauds Otter.ai for winning the 2019 Entrepreneurial Company of the Year Award in the real-time meeting assistance industry for its live AI-powered transcription service.

With its strong overall performance, Otter.ai has earned Frost & Sullivan's 2019 Entrepreneurial Company of the Year Award.

## Significance of Entrepreneurial Leadership

Ultimately, growth in any organization depends on customers purchasing from a company and then making the decision to return time and again. In a sense, then, everything is truly about the customer. Making customers happy is the cornerstone of any successful long-term innovation or growth strategy. To achieve the dual goals of customer engagement and growth, an organization must be best in class in 3 key areas: understanding demand, nurturing the brand, and differentiating from competition.

- Acquire competitors' customers
- Generate awareness and interest
- Increase market share
- Grow the total size of the market
- Win more customers than you lose

- Increase brand equity
- Foster a strong corporate identity
- Improve brand recall
- Inspire customers
- Adhere to a clear value proposition

DEMAND

BRAND

Entrepreneurial Company of the Year

COMPETITIVE POSITIONING

- Identify unique selling points
- Offer superior value to customers
- Deliver on the promised value proposition
- Carve out a market niche
- Balance price and value

## Understanding Entrepreneurial Leadership

Demand forecasting, branding, and differentiation underpin an entrepreneurial company's journey toward forming deep relationships with customers and permanently altering the market with their actions. Entrepreneurial Innovation and Customer Impact are the cornerstones of this award, as discussed further in the next section.

## Key Benchmarking Criteria

For the Entrepreneurial Company of the Year Award, Frost & Sullivan analysts independently evaluated Entrepreneurial Innovation and Customer Impact according to the criteria identified below.

**Entrepreneurial Innovation**

Criterion 1: Market Disruption
Criterion 2: Competitive Differentiation
Criterion 3: Market Gaps
Criterion 4: Blue Ocean Strategy
Criterion 5: Passionate Persistence

**Customer Impact**

Criterion 1: Price/Performance Value
Criterion 2: Customer Purchase Experience
Criterion 3: Customer Ownership Experience
Criterion 4: Customer Service Experience
Criterion 5: Brand Equity

# Best Practices Award Analysis for Otter.ai

## Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows research and consulting teams to objectively analyze performance according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES
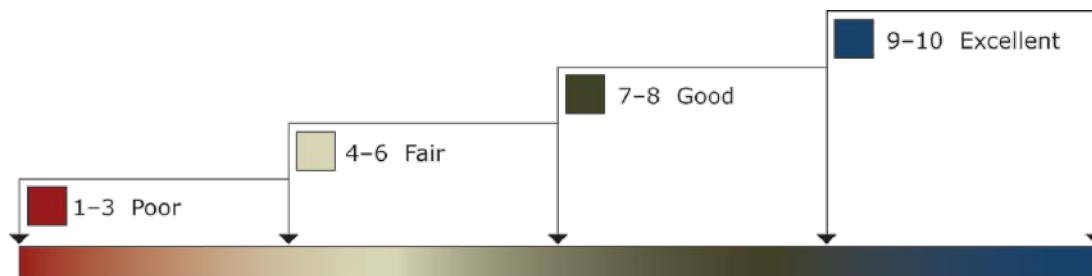


The Decision Support Scorecard considers Entrepreneurial Innovation and Customer Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, Frost & Sullivan has chosen to refer to the other key participants as Competitor 1 and Competitor 2.

| Measurement of 1–10 (1 = poor; 10 = excellent) | | | |
|---|---|---|---|
| **Entrepreneurial Company of the Year** | Entrepreneurial Innovation | Customer Impact | **Average Rating** |
| | | | |
| **Otter.ai** | **10.0** | **9.0** | **9.5** |
| Competitor 1 | 7.0 | 7.5 | 7.25 |
| Competitor 2 | 8.0 | 7.0 | 7.5 |

## Entrepreneurial Innovation

### Criterion 1: Market Disruption
Requirement: Innovative solutions that have genuine potential to disrupt the market, making current solutions obsolete and shaking up competition.

### Criterion 2: Competitive Differentiation
Requirement: Deep understanding of both current and emerging competition to create and communicate strong competitive differentiators in the market.

### Criterion 3: Market Gaps
Requirement: A clear understanding of customers' desired outcomes, the products that currently help them achieve those outcomes, and where gaps exist.

### Criterion 4: Blue Ocean Strategy
Requirement: Strategic focus on creating a leadership position in a potentially uncontested market space, manifested by stiff barriers to entry for competitors.

### Criterion 5: Passionate Persistence
Requirement: A deep belief in the rightness of an idea and a commitment to pursuing it despite seemingly insurmountable obstacles.

## Customer Impact

### Criterion 1: Price/Performance Value
Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

### Criterion 2: Customer Purchase Experience
Requirement: Customers feel they are buying the optimal solution that addresses both their unique needs and their unique constraints.

### Criterion 3: Customer Ownership Experience
Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

### Criterion 4: Customer Service Experience

Requirement: Customer service is accessible, fast, stress-free, and of high quality.

**Criterion 5: Brand Equity**

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

## *Decision Support Matrix*

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.
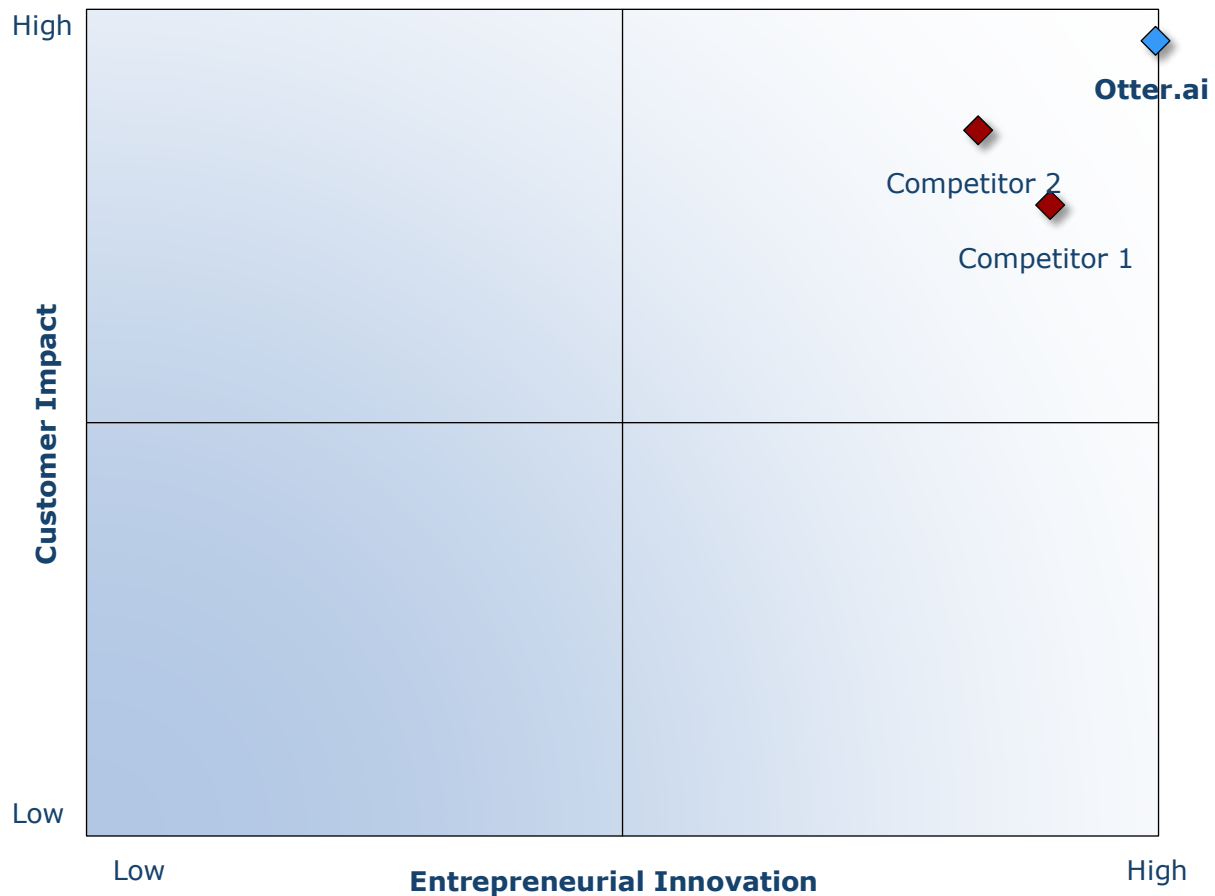
## Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate award candidates and assess their fit with select best practice criteria. The reputation and integrity of the awards are based on close adherence to this process.

| STEP | OBJECTIVE | KEY ACTIVITIES | OUTPUT |
|---|---|---|---|
| 1 **Monitor, target, and screen** | Identify award recipient candidates from around the world | • Conduct in-depth industry research<br>• Identify emerging industries<br>• Scan multiple regions | Pipeline of candidates that potentially meet all best practices criteria |
| 2 **Perform 360-degree research** | Perform comprehensive, 360-degree research on all candidates in the pipeline | • Interview thought leaders and industry practitioners<br>• Assess candidates' fit with best practices criteria<br>• Rank all candidates | Matrix positioning of all candidates' performance relative to one another |
| 3 **Invite thought leadership in best practices** | Perform in-depth examination of all candidates | • Confirm best practices criteria<br>• Examine eligibility of all candidates<br>• Identify any information gaps | Detailed profiles of all ranked candidates |
| 4 **Initiate research director review** | Conduct an unbiased evaluation of all candidate profiles | • Brainstorm ranking options<br>• Invite multiple perspectives on candidates' performance<br>• Update candidate profiles | Final prioritization of all eligible candidates and companion best practices positioning paper |
| 5 **Assemble panel of industry experts** | Present findings to an expert panel of industry thought leaders | • Share findings<br>• Strengthen cases for candidate eligibility<br>• Prioritize candidates | Refined list of prioritized award candidates |
| 6 **Conduct global industry review** | Build consensus on award candidates' eligibility | • Hold global team meeting to review all candidates<br>• Pressure-test fit with criteria<br>• Confirm inclusion of all eligible candidates | Final list of eligible award candidates, representing success stories worldwide |
| 7 **Perform quality check** | Develop official award consideration materials | • Perform final performance benchmarking activities<br>• Write nominations<br>• Perform quality review | High-quality, accurate, and creative presentation of nominees' successes |
| 8 **Reconnect with panel of industry experts** | Finalize the selection of the best practices award recipient | • Review analysis with panel<br>• Build consensus<br>• Select recipient | Decision on which company performs best against all best practices criteria |
| 9 **Communicate recognition** | Inform award recipient of recognition | • Present award to the CEO<br>• Inspire the organization for continued success<br>• Celebrate the recipient's performance | Announcement of award and plan for how recipient can use the award to enhance the brand |
| 10 **Take strategic action** | Upon licensing, company is able to share award news with stakeholders and customers | • Coordinate media outreach<br>• Design a marketing plan<br>• Assess award's role in strategic planning | Widespread awareness of recipient's award status among investors, media personnel, and employees |

# The Intersection between 360-Degree Research and Best Practices Awards

## Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



# About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's growth team with disciplined research and best practices models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit http://www.frost.com.