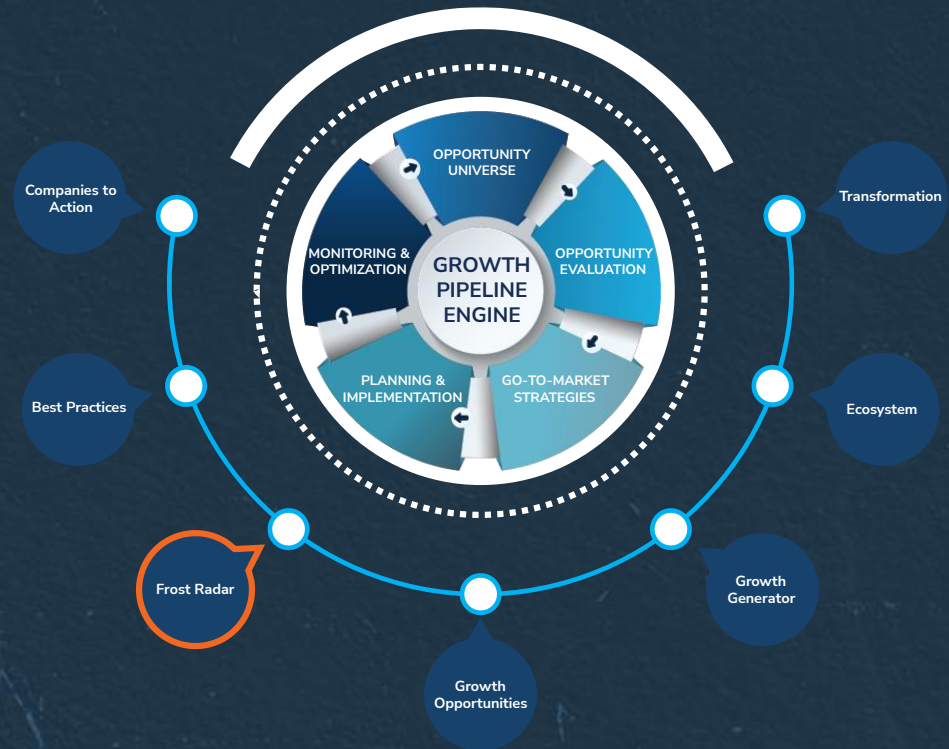


Frost Radar™: Enterprise Conversational AI in Healthcare, 2024

A Benchmarking System to Spark Companies to Action - Innovation That Fuels New Deal Flow and Growth Pipelines



KAF7-48

December 2024

Strategic Imperative and Growth Environment



Strategic Imperative

- The conversational AI space has a unique mix of players. The industry has established players that started using AI to improve their products/features, but it is also being flooded with native-AI companies that use the technology to address different challenges in the healthcare system.
- In this race to become the market leader, start-ups are continuously pressuring large incumbents by creating more automated and advanced conversational AI solutions.
- Generative AI (GenAI) is becoming a critical technology to enhance the capability of existing products. In the chatbot space, GenAI leads to the development of low-code/no-code platforms for creating the next generation of chatbots. Meanwhile, in the voice recognition/scribing space, new and expanding AI capabilities enable more sophisticated conversational AI solutions and services, which results in less human work to complete tasks, especially summarization, gap analysis, and downstream workflows.
- Few vendors are looking to integrate voice-recognition and chatbots. However, toward the end of 2028, these two segments will potentially merge, with most players offering integrated services.
- Platform play is becoming central to the idea of conversational AI, and platform vendors will have an advantage over vendors offering single-point solutions. Communication Platform-as-a-Service models will become the norm and an integral part of organizations' strategies by 2028. Ambient scribing will become an integral function of other solutions (electronic medical records [EMR], clinical documentation integrity [CDI], patient engagement) and lose its standalone segment.

Strategic Imperative (continued)

- Developers are looking to expand beyond their single stakeholder focus and looking to optimize the use of digital assistants or voice recognition for the broader audience to ease data analysis and insight generation.
- Organizations will move to a multi-chatbot experience. These different internal and external chatbots will become the first line of customer service.
- Data privacy and integration remain the key concerns. End users are selecting products that provide maximum fluidity, even if it means slowing the adoption timeline.

Growth Environment

- The enterprise conversational AI in the healthcare market will reach \$2.34 billion by the end of 2027 at a CAGR of 17.2%. The ambient voice recognition market will continue to represent most of the market share, while the market for chatbots will increase at a fast pace.
- Integrating data from patient marketing and acquisition into patients' financial, marketing, and health records is an emerging opportunity to gain additional insights for use in improving care delivery, outcomes, patient satisfaction, and retention.
- Organizations should put more effort into deploying ambient real-time transcription with natural language processing (NLP) because it offers the most productivity gains, cost reduction, and potential to transform healthcare into a more patient-focused experience. These solutions benefit from GenAI capabilities to produce summaries, enhance coding practice, suggest real-time gap analysis, and generate downstream documents, such as referrals and automated order entry.
- Providers are eagerly pursuing clinical and administrative efficiencies as well as patient engagement improvements in clinical and non-clinical areas, such as marketing and acquisition, all of which will drive the adoption of conversational AI solutions.
- Healthcare providers still face the challenge of identifying solutions that best meet their needs and integrating them into their platforms, which entails high implementation costs.
- With the rapid influx of many solutions into the market, it is challenging for start-ups to be noticed and gain traction because healthcare organizations are overwhelmed with business development outreach. Organizations prefer solutions from familiar providers to ease the deployment and change management processes.

Growth Environment (continued)

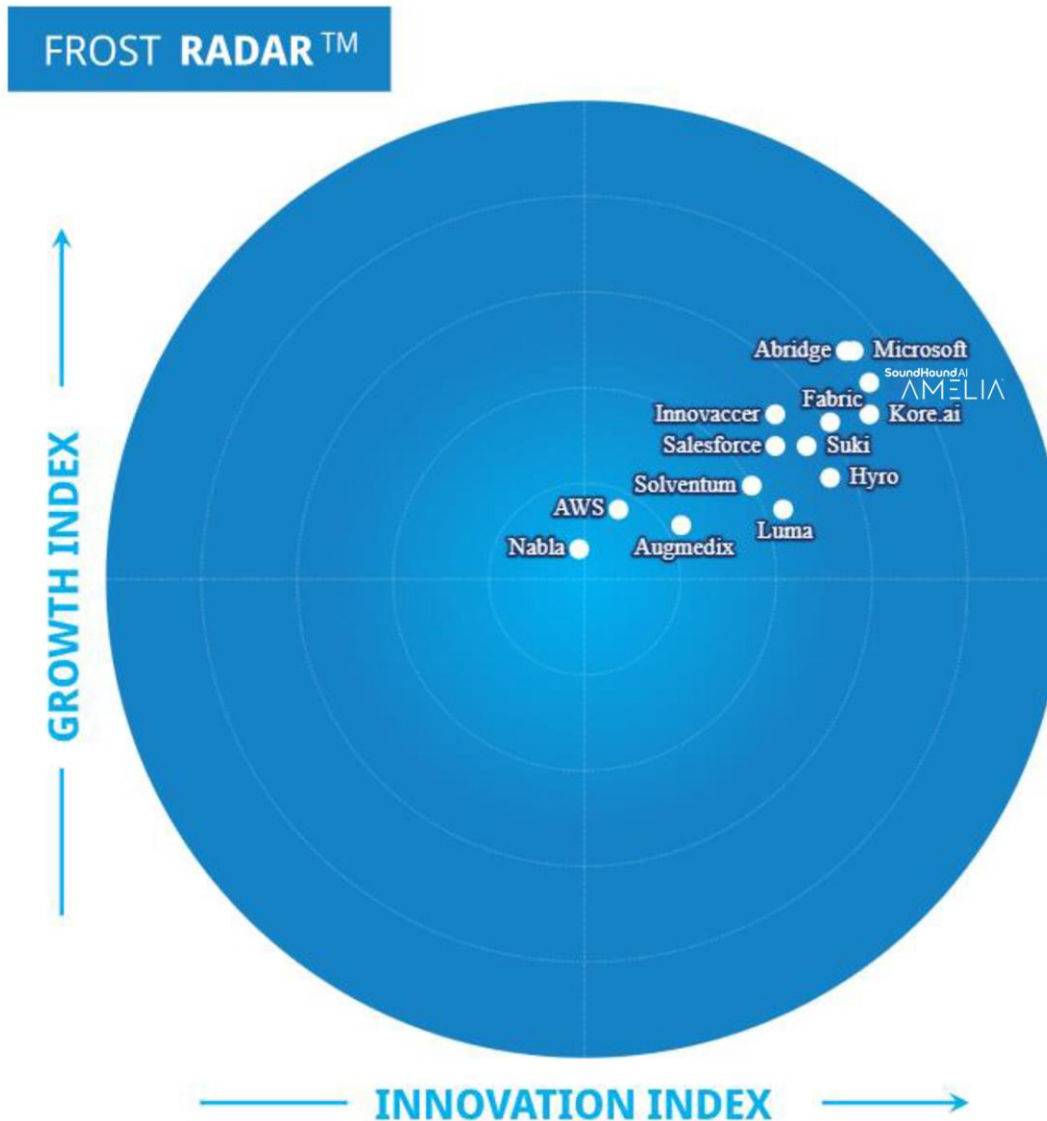
- The industry will see a rapid surge of M&A activity, with bolt-on scribing solutions being acquired by other digital health vendors that will either enhance the solution's capability or integrate the solution into upstream or downstream applications.

F R O S T  S U L L I V A N

Frost Radar™: Enterprise Conversational AI in Healthcare, 2024



Frost Radar™: Enterprise Conversational AI in Healthcare



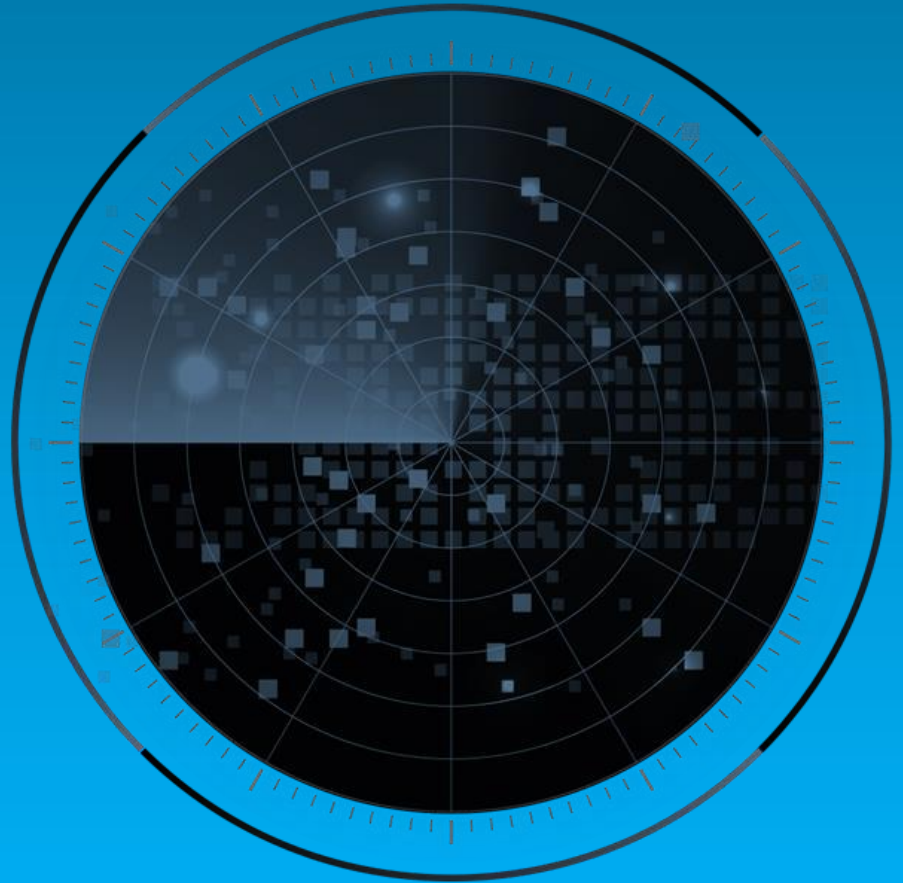
Frost Radar™ Competitive Environment

- Frost & Sullivan screened and analyzed more than 100 enterprise conversational AI solution vendors across voice and chatbot segments and short-listed 14 companies based on a detailed analysis of their corporate growth potential and ability to drive visionary innovation in this space. These companies represent the best mix of AI-native companies and companies adopting AI to enhance their solution.
- The Frost Radar™ features Abridge, AWS, Augmedix, Fabric, Hyro, Innovaccer, Kore.ai, Luma Health, Microsoft, Nabla Technologies, Salesforce, Solventum, SoundHound AI (Amelia Conversational AI Platform), and Suki AI. While many other companies are engaging in developing voice AI and chatbot solutions for the healthcare industry, Frost & Sullivan has identified these 14 organizations as market leaders.
- The Frost Radar™ measures the growth rate in addition to absolute revenues and combines them with several other factors to measure companies' performance along the Growth Axis. This is important to mention because for companies such as Microsoft, Salesforce, Solventum, AWS, SoundHound AI, Innovaccer, and Kore.ai only their conversational AI revenue for the healthcare sector is considered.
- The AI-native companies have built their technology stack to make AI an assistive technology that reduces the administrative burden on end users. Meanwhile, the traditional companies that were solving these challenges with other technologies have adopted AI to enhance the value of their solution.
- Abridge and Microsoft lead the voice AI segment; while Microsoft has a large client base and greater net recurring revenue, Abridge has shown a high growth rate in the last three years and is more agile in innovating and bringing advanced solutions to the market. Meanwhile, in the chatbot segment, SoundHound AI and Kore.ai have stiff competition. While SoundHound AI is looking to integrate voice AI with Amelia's conversational AI platform, Kore.ai seeks to enhance the user experience and improve enterprise administration.

Frost Radar™ Competitive Environment (continued)

- It is in the mid-segment that the most intense competition is taking place. Fabric, Suki, Hyro, Solventum, Innovaccer, and Luma Health compete to continuously innovate and improve their market performance. While Fabric has a strong focus on inorganic growth, Solventum's platform relies on AWS's solution, and the company has successfully integrated it with its CDI platform. The other four companies are looking to improve their solutions through increased investment in R&D, which includes bringing new solutions to the market in 2025.
- The challengers in the market, AWS, Nabla, and Augmedix have a strong focus on growth and capturing the market share. While AWS is a B2B vendor and does not cater directly to providers, Augmedix will see a change in momentum with the recent acquisition by Commure and the enhanced segment interplay. Nabla has seen quick success but trails behind other companies in terms of building trust and gaining market share.

Frost Radar™: Companies to Action



SoundHound AI (Amelia Conversational AI Platform)

INNOVATION

- SoundHound AI with its Amelia Conversational AI Platform has focused its energy on improving the administrative and operational process of a payer or provider organization. It has intelligently stayed out of the clinical workflow market, which is quickly becoming saturated. The company is addressing three of the five quintuple-aim objectives—employee health, cost, and patient experience.
- The Amelia Conversational AI platform has significantly advanced its conversational AI capabilities, incorporating natural language processing (NLP) and natural language understanding (NLU) to facilitate dynamic, contextually rich interactions. R&D efforts emphasize the development of sophisticated algorithms and fine-tuned large language models (LLMs) that enable the platform to recognize complex user intents, allowing for personalized and multi-faceted customer interactions.
- The platform offers a multimodal and omnichannel experience for the end users. The platform is multilingual (107 languages) and understands nuances in human communication, such as context switching, complex sentences, and sentiment analysis.
- The company has been using fine-tuned LLMs since 2020; however, the introduction of ChatGPT in 2022 has accelerated the use case development given that it enables the platform to become more agile and flexible. The GenAI-powered low-code/no-code platform enables easy user onboarding and gives the end users the ability to develop and deploy custom solutions rapidly.
- Amelia was acquired by SoundHound AI in August 2024 and has been leveraging megatrends to continue its transformation journey—adding voice-enablement solutions, consolidating its focus on specific industry verticals, and M&A activity to support sustained growth.

SoundHound AI (Amelia Conversational AI Platform)(continued)

INNOVATION

- Through the Amelia Conversational AI Platform, SoundHound AI offers solutions in two segments.
 - Digital Assistant for Patient Engagement allows connection with patients on multiple channels, including voice to offload work from call centers and scheduling employees.
 - Digital Assistant for Employees is for common service and helpdesk requests, including IT support and human resources
- In March 2024, the company launched Amelia Answers, an advanced capability within its conversational AI platform that integrates generative and deterministic AI to enhance digital experiences in enterprise environments where security and guardrails are critical. This innovation enables organizations to deploy virtual agents that efficiently respond to customer and employee inquiries by combining predetermined FAQ responses with GenAI for nuanced questions.
- SoundHound AI has also been testing its agentic or multi-agent system (MAS) since early 2024. This system allows customers to combine the traditional deterministic approach with the dynamic GenAI-based problem-solving approach for different use cases. Although agentic systems are in their infancy, they offer a glimpse into the future of how intelligent autonomous systems will deliver significant scale and efficiencies.
- In 2024, the Amelia Platform's Patient Engagement solution was also made available in the Epic Showroom. Capabilities over voice, chat, and SMS include scheduling and managing appointments, intake, pre-registration, and check-in; patient payments; medication refills; finding locations, doctors, and services; and 300 frequently asked questions.

SoundHound AI (Amelia Conversational AI Platform)(continued)

GROWTH

- SoundHound AI, a leading provider of voice AI technology, acquired Amelia in 2024, making the combined entity one of the largest publicly traded conversational AI companies. SoundHound AI's Voice AI with real-time listening and understanding capabilities combined with Amelia's enterprise platform will enable the new entity to develop more complex use cases in the healthcare sector.
- The company is focused on addressing its core markets. Organizations requiring backend integrations and numerous customers are Amelia's primary users. The company works closely with the client team to define the return on investment, road map, and initial use cases for the platform.
- With the recent acquisition, the company is now firmly progressing toward its vision of voice-enabling the world with conversational intelligence.
- In August 2024, SoundHound AI, by acquiring Amelia, partnered with MUSC Health to implement an AI agent named Emily to improve patient access. Integrated with Epic, Emily uses conversational AI to streamline tasks such as appointment scheduling and answering non-clinical questions, offering patients 24/7 self-service. This solution enhances efficiency and reduces wait times by automating patient engagement and administrative processes, improving the patient experience.
- In March 2024, Commure and Amelia partnered to automate intelligent patient journeys across the care continuum by integrating evidence-based care coordination with Amelia's Conversational AI platform. This collaboration enables healthcare organizations to provide personalized, 24/7 patient support, streamline appointment management, and enhance care plan adherence, improving patient outcomes while reducing costs.

SoundHound AI (Amelia Conversational AI Platform)(continued)

FROST PERSPECTIVE

- As a company focusing on the operational segment, SoundHound AI has a tremendous opportunity to help hospitals improve their administrative operations. It is already on its way to easing the contact center operations; however, to further improve its position on the Radar, it needs to be one of the early vendors to tap into emerging or need-based segments, such as automating payer-provider interaction.
- Taking ownership of the entire revenue cycle management process would significantly reduce the load on workers and lead to significant financial gains for organizations. To achieve this, SoundHound AI should partner with a documentation manager GenAI player to assist representatives on both ends to resolve points of conflict during the prior authorization or claims management process.
- In terms of clinical setting, with the voice technology of SoundHound, Amelia has a strong case for emergency department scribing or surgery notes, where clinicians talk over one another and there is a need to capture the different voices and share role-based notes with them for review.

Best Practices & Growth Opportunities



Best Practices

1

To achieve continuous success and constant return on investment, platform-based products must form the backbone of conversational AI solutions. Investing in a data lake and AI stack would reap significantly more benefits than providing a digital assistant alone.

2

As omnichannel engagement becomes an important part of the healthcare value chain, conversational AI solutions will seek to enhance the experience of patients, providers, and staff by easing communication with data, platforms, or technology. Solutions will expand to serve all stakeholders in the value chain and not be limited to patients or providers.

3

User experience will change drastically in the next three to five years. As the existing user interface of EHRs becomes obsolete for newer solutions, platform vendors will seek to adopt new front ends to improve the user experience and transition them to future ways of working.

Growth Opportunities

1

As GenAI capabilities become engrained into conversational AI solutions, it will become easier to develop a gateway solution that eases the prior authorization process and improves system-to-system communication between payers and providers, reducing the burden on administrative staff across both organizations.

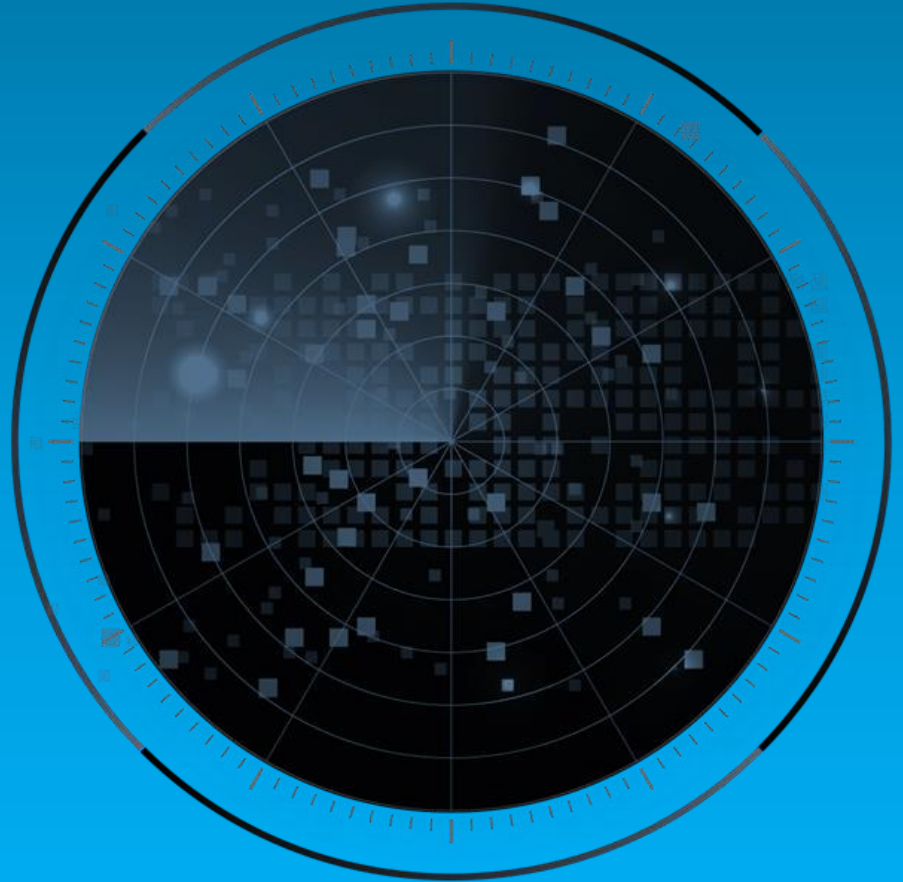
2

Multi-bot orchestration platforms will become popular as organizations seek to build and deploy custom bots for various departments and services. These bots will be trained in specific verticals, allow end users to obtain information through text or natural language, and connect with organizational bots to ensure a common user interface and quicker adoption.

3

The demand for emotional intelligence and empathy is growing. Vendors seek to fine-tune their bots/agents to recognize human emotions and respond accordingly. This is intended to improve patient engagement by directly impacting user satisfaction. These bots will quickly recognize the need to escalate the issue without irking the consumer.

Frost Radar™ Analytics



Frost Radar™: Benchmarking Future Growth Potential

2 Major Indices, 10 Analytical Ingredients, 1 Platform

Growth Index

Growth Index (GI) is a measure of a company's growth performance and track record, along with its ability to develop and execute a fully aligned growth strategy and vision; a robust growth pipeline system; and effective market, competitor, and end-user focused sales and marketing strategies.

GI1**MARKET SHARE (PREVIOUS 3 YEARS)**

This is a comparison of a company's market share relative to its competitors in a given market space for the previous 3 years.

GI2**REVENUE GROWTH (PREVIOUS 3 YEARS)**

This is a look at a company's revenue growth rate for the previous 3 years in the market/industry/category that forms the context for the given Frost Radar™.

GI3**GROWTH PIPELINE**

This is an evaluation of the strength and leverage of a company's growth pipeline system to continuously capture, analyze, and prioritize its universe of growth opportunities.

GI4**VISION AND STRATEGY**

This is an assessment of how well a company's growth strategy is aligned with its vision. Are the investments that a company is making in new products and markets consistent with the stated vision?

GI5**SALES AND MARKETING**

This is a measure of the effectiveness of a company's sales and marketing efforts in helping it drive demand and achieve its growth objectives.

Frost Radar™: Benchmarking Future Growth Potential

2 Major Indices, 10 Analytical Ingredients, 1 Platform (continued)

Innovation Index

Innovation Index (II) is a measure of a company's ability to develop products/ services/ solutions (with a clear understanding of disruptive Mega Trends) that are globally applicable, are able to evolve and expand to serve multiple markets and are aligned to customers' changing needs.

II1**INNOVATION SCALABILITY**

This determines whether an organization's innovations are globally scalable and applicable in both developing and mature markets, and also in adjacent and non-adjacent industry verticals.

II2**RESEARCH AND DEVELOPMENT**

This is a measure of the efficacy of a company's R&D strategy, as determined by the size of its R&D investment and how it feeds the innovation pipeline.

II3**PRODUCT PORTFOLIO**

This is a measure of a company's product portfolio, focusing on the relative contribution of new products to its annual revenue.

II4**MEGA TRENDS LEVERAGE**

This is an assessment of a company's proactive leverage of evolving, long-term opportunities and new business models, as the foundation of its innovation pipeline. An explanation of Mega Trends can be found [here](#).

II5**CUSTOMER ALIGNMENT**

This evaluates the applicability of a company's products/services/solutions to current and potential customers, as well as how its innovation strategy is influenced by evolving customer needs.

Next Steps: Leveraging the Frost Radar™ to Empower Key Stakeholders



Significance of Being on the Frost Radar™

Companies plotted on the Frost Radar™ are the leaders in the industry for growth, innovation, or both. They are instrumental in advancing the industry into the future.

GROWTH POTENTIAL

Your organization has significant future growth potential, which makes it a Company to Action.

BEST PRACTICES

Your organization is well positioned to shape Growth Pipeline™ best practices in your industry.

COMPETITIVE INTENSITY

Your organization is one of the key drivers of competitive intensity in the growth environment.

CUSTOMER VALUE

Your organization has demonstrated the ability to significantly enhance its customer value proposition.

PARTNER POTENTIAL

Your organization is top of mind for customers, investors, value chain partners, and future talent as a significant value provider.

Frost Radar™

,

STRATEGIC IMPERATIVE

- Growth is increasingly difficult to achieve.
- Competitive intensity is high.
- More collaboration, teamwork, and focus are needed.
- The growth environment is complex.

LEVERAGING THE FROST RADAR™

- The Growth Team has the tools needed to foster a collaborative environment among the entire management team to drive best practices.
- The Growth Team has a measurement platform to assess future growth potential.
- The Growth Team has the ability to support the CEO with a powerful Growth Pipeline™.

NEXT STEPS

- **Growth Pipeline Audit™**
- **Growth Pipeline as a Service™**
- **Growth Pipeline™ Dialogue with Team Frost**

Frost Radar™ Empowers Investors

STRATEGIC IMPERATIVE

- Deal flow is low and competition is high.
- Due diligence is hampered by industry complexity.
- Portfolio management is not effective.

LEVERAGING THE FROST RADAR™

- Investors can focus on future growth potential by creating a powerful pipeline of Companies to Action for high-potential investments.
- Investors can perform due diligence that improves accuracy and accelerates the deal process.
- Investors can realize the maximum internal rate of return and ensure long-term success for shareholders.
- Investors can continually benchmark performance with best practices for optimal portfolio management.

NEXT STEPS

- **Growth Pipeline™ Dialogue**
- **Opportunity Universe Workshop**
- **Growth Pipeline Audit™ as Mandated Due Diligence**

Frost Radar™ Empowers Customers

STRATEGIC IMPERATIVE

- Solutions are increasingly complex and have long-term implications.
- Vendor solutions can be confusing.
- Vendor volatility adds to the uncertainty.

LEVERAGING THE FROST RADAR™

- Customers have an analytical framework to benchmark potential vendors and identify partners that will provide powerful, long-term solutions.
- Customers can evaluate the most innovative solutions and understand how different solutions would meet their needs.
- Customers gain a long-term perspective on vendor partnerships.

NEXT STEPS

- **Growth Pipeline™ Dialogue**
- **Growth Pipeline™ Diagnostic**
- **Frost Radar Benchmarking System**

Frost Radar™ Empowers the Board of Directors

STRATEGIC IMPERATIVE

- Growth is increasingly difficult; CEOs require guidance.
- The Growth Environment requires complex navigational skills.
- The customer value chain is changing.

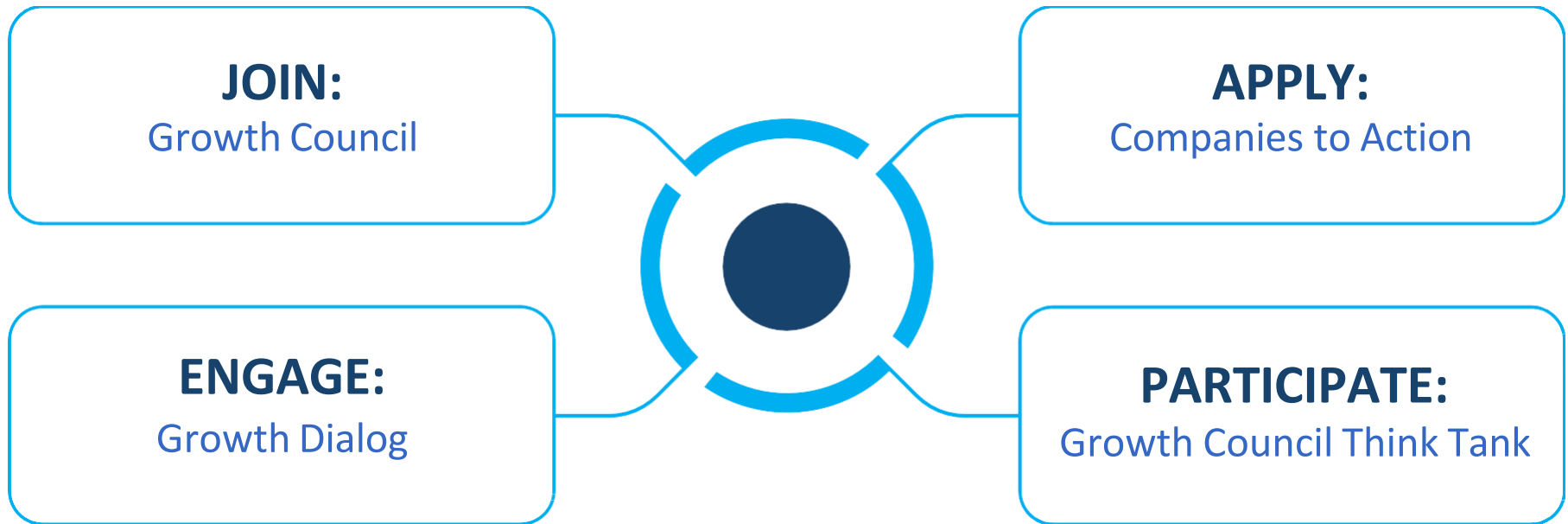
LEVERAGING THE FROST RADAR™

- The Board of Directors has a unique measurement system to ensure oversight of the company's long-term success.
- The Board of Directors has a discussion platform that centers on the driving issues, benchmarks, and best practices that will protect shareholder investment.
- The Board of Directors can ensure skillful mentoring, support, and governance of the CEO to maximize future growth potential.

NEXT STEPS

- **Growth Pipeline Audit™**
- **Growth Pipeline as a Service™**

Next Steps



Does your current system support rapid adaptation to emerging opportunities?

Legal Disclaimer

Frost & Sullivan is not responsible for any incorrect information supplied by companies or users. Quantitative market information is based primarily on interviews and therefore is subject to fluctuation. Frost & Sullivan research services are limited publications containing valuable market information provided to a select group of customers. Customers acknowledge, when ordering or downloading, that Frost & Sullivan research services are for internal use and not for general publication or disclosure to third parties. No part of this research service may be given, lent, resold, or disclosed to noncustomers without written permission. Furthermore, no part may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of the publisher.

For information regarding permission, write to: permission@frost.com

© 2024 Frost & Sullivan. All rights reserved. This document contains highly confidential information and is the sole property of Frost & Sullivan. No part of it may be circulated, quoted, copied, or otherwise reproduced without the written approval of Frost & Sullivan.