FROST & SULLIVAN
BEST PRACTICES
AWARDS

FROST & SULLIVAN

2020 BEST PRACTICES AWARD
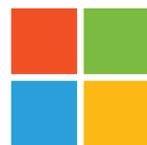
Microsoft

2020 GLOBAL AI FOR HEALTHCARE IT GROWTH, INNOVATION & LEADERSHIP FROST RADAR AWARD

F R O S T ❦ S U L L I V A N

The Frost Radar^{TM}
Global AI for Healthcare IT Market
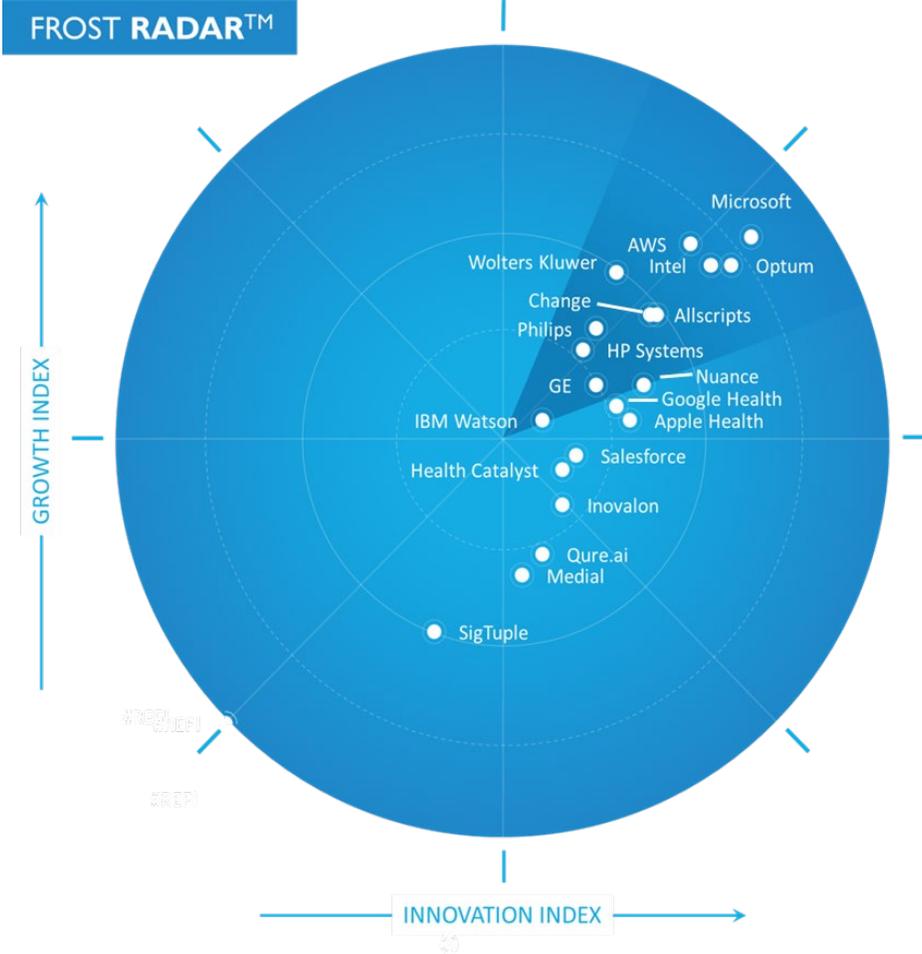
FROST **RADAR**™

Source: Frost & Sullivan

In a field of 200 global industry participants, Frost & Sullivan has independently ranked the top 20 companies in the above Frost Radar™ analysis. The key parameters independently analyzed include:

- Innovation Scalability
- R&D
- Product Portfolio
- Mega Trends Leverage
- Customer Alignment
- Growth Pipeline
- Vision and Strategy
- Sales and Marketing
- Revenue Growth
- Market Share Growth

Frost & Sullivan studies related to this independent analysis:

- K26D : Artificial Intelligence Market—Key Application Areas for Growth in Healthcare IT, Forecast to 2022
- K3CE : Role of AI in the Pharmaceutical Industry, 2018-2022
- MD1C **:** Growth Opportunities in the Global Medical Imaging Artificial Intelligence Market, Forecast to 2022

The Growth Environment

The global artificial intelligence (AI) for the healthcare IT (HCIT) market is on a rapid growth trajectory. Sales of AI-enabled HCIT products are expected to generate more than $34.83 billion globally by 2025. Almost 50.7% of the revenue will be contributed by government agencies (including public payers), followed by hospitals (36.3%) and physician practices (13%).

Clinical AI solutions will drive 40% of the market revenue and financial AI solutions will contribute the same. The rest of the revenue will be derived from sales of operational AI solutions.

Next-generation AI solutions that are important to improving the overall efficiency of the healthcare ecosystem include:

- **Conversational AI**: Clinical risk stratification and provider referral through chatbots

- **Pharmaceutical AI:** Clinical trial eligibility assessment via IT

- **Bioinformatics AI:** Targeted immunotherapy for infectious diseases via IT

- **Infrastructure AI:** Supercomputing on cloud to incorporate clinical research outcomes on front line clinical decision support systems

- **Remote AI:** Contactless health hygiene via Internet of Things (IoT) and contactless pain management via face recognition IoT

- **Hardware Integrated AI:** Rapid molecular diagnostic testing through wearables

- **Deep Tech AI:** National data center for infectious diseases

- **Genomics AI:** Precision medicine (IT) for infectious or rare diseases (DNA sequencing through AI to assess the vulnerability of chronic population to infectious or rare disease)

- **Operations AI:** Supply chain analytics of medical products specific to infectious or rare diseases

- **Research AI:** Real-world evidence (RWE) IT market for complex diseases

- **Social AI:** National contact tracing application for transmissible diseases

Frost Radar™ Growth, Innovation & Leadership Award
Microsoft

Frost Radar™ Location

- Microsoft is pioneering the robust and comprehensive application of AI across a broad range of infrastructure and enabling a partner ecosystem to extend the value of the Azure and Microsoft 365 platforms with custom-built solutions for healthcare.

- Microsoft's AI technology is used globally to drive precision medicine workflows, aid population health analytics, propel evidence-based clinical research on cloud, and expedite drug or treatment discovery.
- Microsoft is the undisputed leader on the Radar.
- Frost & Sullivan acknowledges that Microsoft is the world's top healthcare AI firm.

Growth

- Microsoft's healthcare AI business is growing at record speed among its competitors in the core ICT market and among leading healthcare IT vendors such as AWS since it offers a foundational and deep footprint across all types of healthcare enterprises—especially among payers, providers, BioPharma and MedTech companies.
- The company is positioned for additional growth and is expected to remain best in its class because Microsoft's AI business is thriving globally, including in the United States which contributes significantly to the firm's total healthcare AI business.

Innovation

- Microsoft's healthcare AI business unit is diversified and forward thinking.
- It caters to healthcare providers, leveraging the Microsoft Cloud for Healthcare platform along with Azure, Microsoft 365, Dynamics 365 and the Power Platform (which are available via Microsoft tools and applications, and partners' tools and applications to drive interdisciplinary clinical decision support through a central command center; pharma companies applying clinical research evidence on drug discovery pipeline to identify treatment breakthroughs; government agencies pursuing population health tracking at scale; leading diagnostic labs applying AI to deliver 360-degree clinical interpretation; retail health solutions with Kroger, Walmart and Walgreens Boots Alliance; and global clinical academic and research organizations and philanthropic health initiatives driving medical discovery.

Next Steps

- Frost & Sullivan congratulates Microsoft for its leading position on the Frost Radar^{TM} and predicts its continued growth for the next 3 to 5 years.

- Microsoft has committed to target innovation for developing AI solutions in conversational AI, machine learning, data sciences, precision medicine, IoT, clinical research and philanthropic projects globally that achieves incremental growth for the company in the long run. .

- With its global presence, industry-leading brand visibility, and favorable C-suite mindset, Microsoft's healthcare AI business is likely to be a benchmark in the industry for years to come.

What is the Frost Radar™?
Companies to Action – Benchmarking Future Growth Potential

What is it?

A robust analytical tool that benchmarks companies' innovation focus and growth performance in a given market.

How is it built?

Through in-depth analysis built on Frost & Sullivan's 360-degree research methodology (primary and secondary research) and objective rating of companies in a given market.

Why do you need it?

To understand how companies benchmark against each other in their ability to innovate and grow against a backdrop of industry transformation.

What will it accomplish?

Companies can gain an objective, independent perspective of their innovation and growth strategies, including their robustness, effectiveness, relative competitive strength, and implications for their long-term success.

How to use it?

The Frost Radar™ is a dynamic tracking tool that offers frequent rating and positioning of companies that are leading the industry in growth, innovation, or both. Because of changes in the operating environment and internal organizational changes, their positioning in the Frost Radar™ will change over time. It is important to leverage the Frost Radar™ to ensure that companies are aware of changes to their ecosystem and their relative positions to it.

What does it mean to be on the Frost Radar™?

Companies have been chosen to be in the Frost Radar™ because they have proven themselves to be worthy by demonstrating excellence in growth, innovation, or both, and are able to translate that into proven solutions that benefit their clients. At times, companies with high market share may not place on the Radar. Companies are chosen because they are already doing great things or are poised to do great things.

> All companies on the Frost Radar™ could be Companies to Action. Best Practice recipients are the companies that Frost & Sullivan considers the **Companies to Act On Now**.

Growth Excellence Award

The Growth Excellence best practice award is bestowed upon companies that are achieving high growth in an intensely competitive industry. This includes emerging companies making great strides in market penetration and seasoned incumbents holding on to their perch at the pinnacle of the industry.

Innovation Excellence Award

The Innovation Excellence best practice award is bestowed upon companies that are industry leaders outperforming their competitors in this area, or new market entrants contending for leadership through heavy investment in R&D and innovation.

Growth, Innovation & Leadership Award

The Growth Innovation Leadership (GIL) best practice award is bestowed on companies that are market leaders at the forefront of innovation. These companies consolidate or grow their leadership position by continuously innovating and creating new products and solutions that serve the evolving needs of the customer base. These companies are also best positioned to expand the market by strategically broadening their product portfolio.

Frost Radar™ – Benchmarking Future Growth Potential
2 Major Indices, 10 Analytical Ingredients, 1 Platform

Vertical Axis – The Growth Index

Growth index 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. The elements of this index include:

- **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 the 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.

Horizontal Axis – The Innovation Index

Innovation index is a measure of a company's ability to innovate 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. The elements of this index include:

- **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.
- **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.