ScienceSoft

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**ENABLING
TECHNOLOGY
LEADER**
*Leveraging Vital Technology to Enhance
Products and Applications*

*RECOGNIZED FOR BEST PRACTICES IN THE
NORTH AMERICAN PATIENT ENGAGEMENT
AND TELEHEALTH INDUSTRY*

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Table of Contents

Best Practices Criteria for World-class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. ScienceSoft excels in many of the criteria in the patient engagement and telehealth space.

The Transformation of the Patient Engagement and Telehealth Industry

The North American patient engagement and telehealth market is undergoing a substantial transformation fueled by advances in artificial intelligence (AI), cloud computing, and evolving regulatory frameworks. Healthcare stakeholders, including public payers, private insurers, hospital networks, and digital-first providers, are prioritizing solutions that enhance patient access, reduce administrative burdens, and ensure seamless care continuity across virtual and in-person encounters. Expanded Centers for Medicare and Medicaid Services (CMS) reimbursement policies post-COVID-19 have accelerated telehealth adoption in primary care, mental health, chronic disease management, and specialty consultations, establishing these technologies as foundational components of modern healthcare delivery.

As healthcare technology evolves, many providers have turned to AI-driven virtual assistants, NLP, and real-time application programming interfaces (API) to automate tasks like appointment scheduling and patient guidance. Broad adoption remains uneven, particularly in rural and underserved areas where language diversity, mobile access, and integration challenges persist. These disparities highlight the need for solutions that not only offer advanced functionality but also prioritize accessibility, multilingual support, and seamless interoperability with existing clinical systems. In many cases, providers face barriers such as limited IT infrastructure, fragmented data environments, and inconsistent standards compliance,

which hinder the deployment of scalable AI tools. Addressing these challenges requires platforms that are both technically robust and adaptable to the unique needs of diverse healthcare settings.

Looking ahead, the market's expansion will be propelled by continued regulatory initiatives, including proposed mandates for interoperability (e.g., CMS-0057), demographic demands for personalized digital experiences, and increased provider investment in automation and AI. Vendors that successfully integrate advanced artificial intelligence technologies, adaptable system architectures, robust regulatory compliance, and seamless integration with legacy systems are most likely to seize emerging growth opportunities. As healthcare shifts from reactive digital adoption to proactive, virtual-first care models, competitive advantage will increasingly depend on delivering measurable benefits like reduced operational costs, improved patient retention, and enhanced clinical throughput.

Where AI Speaks, Efficiency Follows

ScienceSoft addresses a critical gap in healthcare AI: the lack of real-time conversational tools that deliver natural, patient-specific interactions. Many existing platforms fall short when it comes to clarity, adaptability, and supporting patients with speech difficulties or complex medical questions. Leveraging a proprietary agent framework powered by large language models, ScienceSoft enables seamless, real-time dialogue that educates and engages patients effectively. This capability positions the company as a leader in developing scalable, secure, and highly adaptive AI solutions that reshape healthcare workflows and extend into other industries. At the heart of ScienceSoft's innovation is its Health Insurance Portability and Accountability Act (HIPAA)-compliant voice scheduling platform, which combines

"ScienceSoft extends its technical advantage through purposeful creativity. Its core engine powers patient education, triage workflows, and intelligent interaction with EHR systems—functions that go far beyond scheduling."

-Ana Victoria Dominguez
Best Practices Research Analyst

cutting-edge large language model (LLM) technology with secure middleware and interoperability standards to meet immediate patient needs while supporting long-term institutional goals.[1]

Building on this foundation, ScienceSoft delivers its capabilities through a highly interoperable AI scheduling platform, designed from the ground up to integrate with electronic health records (EHRs) via HL7 and FHIR standards. Deployed in the cloud and written in Python, the system connects seamlessly with patient management systems, SIP trunking, and media servers to support inbound and outbound telephony. Its proprietary AI agent framework interacts with APIs, enriches dialogue with contextual data, and verifies identity securely through personally identifiable information or one-time password codes. This robust architecture scales to support over 100 concurrent voice conversations, offering enterprise-grade performance with minimal disruption to clinical workflows.

By deploying Amazon Web Services (AWS) Nova LLM alongside LiveKit Media Server, ScienceSoft achieves bidirectional speech-to-speech interaction. The AWS Nova LLM is a large language model specifically

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[1] https://www.scnsoft.com/press-room/pressreleases/71502_hipaa-compliant-ai-scheduler Accessed July 2025

trained for real-time conversations, representing a significant technological advancement from AWS.[2] It supports a range of voices (male, female, accented) and currently operates in English and Spanish, while the platform can integrate with OpenAI and Google Gemini models to broaden multilingual capabilities. LiveKit Media Server manages the media streaming pipeline, ensuring high-quality, low-latency audio transmission between patients and virtual agents, effectively eliminating the multi-step lag common in conventional AI voice interactions. Compared to OpenAI's models, which generally operate around 200 milliseconds latency, ScienceSoft's optimized architecture delivers consistently lower response times, enabling smoother, more natural dialogue flow that enhances patient engagement and satisfaction.

The architecture goes further by embedding advanced security features, like AWS Bedrock Guardrails and AWS Macie, to prevent data leakage and conversational misuse. These tools actively monitor interactions to detect toxic dialogue, block attempts to extract sensitive information, and mitigate potential threats— offering a level of embedded security most other solutions lack. At the same time, the system uses retrieval-augmented generation and graph-based knowledge indexing to ensure every interaction is contextual, relevant, and compliant. Tight real-time integration with EHRs, customer relationship management systems, and telehealth platforms grounds every conversation in live data, forming the technological foundation for the company's broader success across creativity, market adoption, and multi-industry deployment.

ScienceSoft extends its technical advantage through purposeful creativity. Its core engine powers patient education, triage workflows, and intelligent interaction with EHR systems—functions that go far beyond scheduling. The agent supports true real-time API function-calling, enabling it to verify patient identity, check provider availability, and update appointment data dynamically during conversations. This real-time responsiveness reduces booking time by 40%.[3] For elective surgery clinics, AI consultants streamline pre-visit counseling and eliminate repetitive information delivery. The system also increases patient intake call handling capacity by over 70%, delivering both efficiency and scalability. Internally, ScienceSoft deploys autonomous AI agents to support cloud infrastructure self-healing and tooling automation— continually improving system performance and expanding operational scope across use cases.

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> *-Priyanka Jain*
> *Senior Industry Analyst*

Furthermore, the company approaches deployment as a strategic partnership, prioritizing clinical alignment and operational readiness from the outset. The company maintains a steady deployment pipeline. Most implementations reach completion within six weeks, driven by a streamlined integration process tailored to each client's infrastructure. A dedicated team of MD consultants and health IT experts ensures that the solution fits seamlessly into diverse clinical environments, following established HIMSS integration protocols. Rather than offering a generic interface, ScienceSoft handles customization directly

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[2] https://www.scnsoft.com/case-studies/hipaa-compliant-healthcare-ai-voice-scheduler-powered-by-amazon-nova-sonic?utm_source=chatgpt.com Accessed July 2025
[3] https://www.businesswire.com/news/home/20250702115247/en/ScienceSoft-Raises-the-Bar-for-AI-Voice-Scheduling-in-Healthcare Accessed July 2025

through its engineering team, enabling fast, cost-efficient adjustments once the core system is in place. This model allows the platform to adapt across a wide range of use cases—from appointment scheduling to triage and patient education—without requiring full model retraining. Instead, clients benefit from targeted knowledge injection, which accelerates personalization and maintains contextual accuracy across deployments.

ScienceSoft Accelerates Application Diversity with AI Agent Platform

ScienceSoft's conversational AI platform extends far beyond healthcare scheduling. Underpinned by its modular, agent-based framework, the solution supports diverse use cases across multiple industries without requiring full retraining, just targeted knowledge injection.

Healthcare: The HIPAA-compliant AI scheduler integrates seamlessly with EHR, customer relations management, and practice management systems to automate scheduling, billing, patient intake, surgical scheduling, and clinical decision support. Its bidirectional, real-time dialogue reduces booking time by up to 40%, slashes call abandonment by 30%, and cuts operational costs by at least 50% [4]

Human Resources: The same agent architecture powers automated interviews and onboarding workflows, delivering efficient and consistent candidate interactions.

Government & Regulatory Advisory: ScienceSoft deploys conversant agents to guide compliance workflows and advisory services, ensuring clarity and regulatory alignment.

IT Infrastructure: In incident detection and support scenarios, the agent framework delivers real-time response and context-enriched troubleshooting at scale.

Finance & E-Commerce: Conversational agents manage customer service automation, from inbound queries to transactional support, improving response times and user satisfaction.

With accolades like semifinalist status in the Amazon Nova Demo Competition (competing alongside IBM, Accenture, and Deloitte) and Microsoft Solution Partner certification for Data & AI, ScienceSoft validates its diverse AI capabilities across both healthcare and enterprise domains.

Built for Trust, Backed by Experts

ScienceSoft delivers high price-to-performance value by eliminating the typical cost barriers tied to AI adoption in healthcare. Operating as a software integrator rather than a product vendor, the company tailors its pricing to each deployment. Implementation and engineering fees reflect the scope of customization, while ongoing operational costs are based on actual usage—factoring in compute power, LLM calls, telephony infrastructure, and data throughput. This modular, pay-as-you-scale model enables even smaller clinics to access real-time AI tools for scheduling and triage without requiring heavy upfront investment. A key component of the offering is the AI firewall, a high-value layer that strengthens data protection and ensures compliance—especially critical in clinical settings. By avoiding rigid licensing structures and leveraging open-source frameworks, ScienceSoft keeps long-term maintenance costs low and allows clients to expand functionality without disruptive system changes.

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[4] https://www.businesswire.com/news/home/20250702115247/en/ScienceSoft-Raises-the-Bar-for-AI-Voice-Scheduling-in-Healthcare
Accessed July 2025

Because each solution is tailored to fit clinical workflows, customers experience a strong sense of ownership from the initial rollout onward. ScienceSoft begins every implementation with in-depth workflow mapping, often performing this process on-site, to pinpoint the exact moments where AI should engage. The result is a system that feels purpose-built rather than externally imposed. Clients, whether they operate independently or without in-house IT departments, co-develop solutions that reflect their operational realities. In some cases, ScienceSoft serves as the surrogate IT team, guiding decisions on architecture, integration points, and customization strategies. This collaborative development model delivers functional accuracy and fosters pride in a platform that clients help shape from the ground up.

Customer service quality reinforces that experience through responsiveness and continuity. ScienceSoft provides proactive support that spans beyond simple troubleshooting, offering long-term maintenance through monthly service agreements that include ongoing system updates, patching, and infrastructure monitoring. Engineers handle incident response in real time, whether the issue stems from cloud performance, system-level dependencies, or compliance risk. The company also assists with client-side governance and certification preparation, offering expertise in HIPAA audits and security checklists through AWS Security Hub and National Institute of Standards and Technology frameworks.

By offering value-added services, ScienceSoft transforms the support experience into a strategic asset, which is particularly important in a healthcare environment where system downtime and security lapses carry clinical consequences.

Over time, these attributes have strengthened ScienceSoft's brand equity and created a customer base marked by trust and repeat engagement. While under non-disclosure due to client privacy and healthcare compliance. Clients return for additional services, including AI-driven consultation agents, billing support tools, and voice-interactive clinical decision support systems. This consistent demand speaks to a broader perception of ScienceSoft as a long-term innovation partner. Internally, the company reinforces this perception by certifying team members through the Health Information and Management Systems Society and embedding MD consultants directly into product teams, signaling a brand that is not only technically adept but also deeply embedded in the realities of healthcare delivery.

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Conclusion

ScienceSoft exemplifies the disciplined application of artificial intelligence (AI) in healthcare, combining strong engineering with practical deployment at scale. Its voice AI solution integrates seamlessly with electronic health records, scheduling systems, and telehealth platforms, while adhering to Health Insurance Portability and Accountability Act standards and ensuring latency remains under 200 milliseconds. This technical performance is underpinned by a modular, vendor-agnostic architecture and transparent pricing that allows healthcare providers to adopt the solution without the burden of lock-in or complex onboarding.

What sets ScienceSoft apart is how it operationalizes AI across both client-facing and internal domains. On the front end, its voice agents manage far more than appointment booking—they enable real-time function calling for identity verification, availability checks, and triage workflows. On the back end, ScienceSoft deploys autonomous AI agents to support infrastructure self-healing and tooling automation, reducing the need for manual DevOps interventions and improving system resilience.

These capabilities translate into measurable outcomes: healthcare clients can expect a 40% reduction in booking time, a 30% drop in call abandonment, and up to 70% more calls per hour than a patient service representative by shifting call handling from human staff to AI. Some clients have also seen call-handling capacity increase by over 70%.

ScienceSoft's track record is reinforced by recognitions such as Microsoft Solution Partner status for Data & AI and semifinalist placement in the Amazon Nova Demo Competition, where it stood alongside industry leaders like IBM and Accenture. This balance of technical depth, operational maturity, and real-world results positions ScienceSoft as a reliable enabler of next-generation patient engagement.

ScienceSoft earns Frost & Sullivan's 2025 North American Enabling Technology Leadership Recognition for its strong overall performance in the patient engagement and telehealth industry.

What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and applies its technology in new ways to improve existing products and services to elevate customer experience.

Best Practices Recognition Analysis

For the Enabling Technology Leadership Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Customer Impact

Price/Performance Value: Products or services offer the best ROI and superior value compared to similar market offerings

Customer Purchase Experience: Purchase experience with minimal friction and high transparency assures customers that they are buying the optimal solution to address both their needs and constraints

Customer Ownership Excellence: Products and solutions evolve continuously in sync with the customers' own growth journeys, engendering pride of ownership and enhanced customer experience

Customer Service Experience: Customer service is readily accessible and stress-free, and delivered with high quality, high availability, and fast response time

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty, which is regularly measured and confirmed through a high Net Promoter Score®

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Best Practices Recognition Analytics Methodology

Inspire the World to Support True Leaders

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company's long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

VALUE IMPACT

STEP		WHAT	WHY
1	Opportunity Universe	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	Transformational Model	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	Ecosystem	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	Growth Generator	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	Growth Opportunities	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	Frost Radar	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	Best Practices	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	Companies to Action	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

*Board of Directors, Investors, Customers, Employees, Partners

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 Generator™

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:

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