

TRANSFORMATIONAL INNOVATION LEADER Accelerating Innovation to Zero Across the Global Ecosystem

RECOGNIZED FOR BEST PRACTICES IN THE GLOBAL SMART HOME-AS-A-SERVICE **INDUSTRY**

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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. Aprecomm Private Limited excels in many of the criteria in the smart home-as-a-service space.

AWARD CRITERIA			
Transformational Innovation Customer Impact			
Market Disruption	Price/Performance Value		
Competitive Differentiation	Customer Purchase Experience		
Market Gaps	Customer Ownership Experience		
Leadership Focus	Customer Service Experience		
Passionate Persistence	Brand Equity		

The Transformation of the Smart Home-as-a-Service Industry

The smart home-as-a-service market is experiencing accelerated growth since 2020, driven by increasing consumer demand for connected, convenient, and secure home experiences. Advancements in the Internet of Things-enabled smart devices, artificial intelligence (AI), and cloud delivery models make smart home solutions more accessible and affordable for the broader consumer base. Cloud-based AI-driven network intelligence, Wi-Fi analytics, adaptive Wi-Fi, cybersecurity, and advanced access controls are some technology-enabled services that aim to enhance the home experience for consumers.

Frost & Sullivan estimates the global smart homes market to reach a revenue of \$222.86 billion by the end of 2025, growing at a rate of 7.0%. The smart homes market includes smart home devices and software services across five key segments: home energy management, home automation, home entertainment, home safety and security, and health and wellness.

In another independent research, Frost & Sullivan estimates that the number of connected devices will reach 13.15 billion by 2027 at a compound annual growth rate of 13.4% between 2022 and 2027. Through their service providers, smart home experience platform providers will play a vital role in managing the

¹ Frost & Sullivan Report. Global Homes and Buildings Industry Outlook, 2025.

increasing number of devices, the growing neighbouring networks, and the rising threats from cyberattacks in residential and small business segments.²

With the rise of remote work due to the COVID-19 pandemic, reliable home internet access is more critical than ever, driving increased demand for high-speed broadband with minimal disruptions. However, most internet service providers (ISP) continue to assess their networks at a macro level, focusing primarily on Wi-Fi signal strength rather than the overall consumer experience. This narrow approach often overlooks key user pain points, preventing ISPs from fully understanding and addressing customer needs - ultimately leading to dissatisfaction.

Headquartered in Bengaluru, India and founded in 2016, Aprecomm takes a unique approach to supporting ISPs, helping them better understand and address consumer needs. The company's Alpowered network intelligence solution enables ISPs to analyze user experiences, identify pain points, and enhance satisfaction while maximizing revenue. By prioritizing end-user experience, Aprecomm delivers unparalleled value, allowing ISPs to offer add-on services and improve customer retention.

Transforming ISP Network Management

Aprecomm built its innovative platform from the ground-up, prioritizing end-user needs and designing its capabilities to enhance their experience. The company's cost-effective product portfolio enables holistic network management without compromising speeds, offering tools and solutions to automate network monitoring and optimize network health, thereby improving the end-user experience.

- Vyom Config Service (VCS) provides ISPs with a comprehensive toolset to configue and manage broadband devices—including routers and gatways—remotely. The TR-369 and TR-069 compliant, cloud-hosted solution is fully customizable, has automated configurations, and integrates intelligent analytics for simple, secure, and effective monitoring.
- Virtual Wireless Expert (VWE) is an intuitive platform that equips ISPs with real-time visibility and insights to diagnose and resolve issues automatically for a better end-user experience. The comprehensive solution adds Wi-Fi intelligence and deep customer insights to provide a holistic approach to wireless network management. VWE ensures fast speeds and exceptional reliability through one-click root cause analysis and self-evolving devices that resolve issues proactively in real-time. Additionally, its patented quality of experience algorithm measures and monitors Wi-Fi performance for each connected device continuously, to maintain a stable and reliable connection. As a result, VWE has reducesd truck rolls by 60% and cut support call times by 50% for Aprecomm's customers. ³

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² Frost Radar[™]: Smart Home-as-a-Service, 2023, Frost & Sullivan.

³ https://aprecomm.ai/vwe-enterprise/

Virtual Network Expert (VNE) offers ISPs unique network monitoring capabilities, from physical
network infrastructure (i.e., wires and routers) to Wi-Fi connectivity. Unlike traditional ISP
management solutions that simply detect issues, VNE pinpoints their exact source, enabling faster
and more efficient maintenance. Furthermore, VNE leverages advanced AI analytics to provide
actionable insights to diagnose potential network interruptions proactively.

"Aprecomm's strategic innovation roadmap is a cornerstone of its long-term growth plan. Aiming for a fully self-healing and self-managed network, the company is establishing a robust presence in data collection across various ISP network layers and infrastructure. This approach enhances its capabilities continuously, enabling increased automation and monitoring."

- Anirudh Bhaskaran Industry Principal

Aprecomm continues to advance its network intelligence offerings, providing ISPs with a holistic view of its networks and consumer base to enhance the user experience and maximize revenue. Its expertise in data analysis enable ISPs to gain actionable insights that improve performance, boost monetization and elevate end-user experiences. As a result, the company plans to release additional capabilities in 2025 to drive further monetization opportunities.

The ongoing platform development with additional capabilities monitors multiple dimensions and parameters, enabling precise subscriber segmentation

and giving ISPs deeper insights into customer needs. Its fully configurable interface allows users to access and analyze data tailored to their specific roles. Beyond enhancing subscriber understanding, the extended monetization solution recommends add-on services based on past successes within each cohort, further driving revenue growth. This expanded capability strengthens customer retention by delivering a superior user experience, fostering loyalty, and reducing churn. Frost & Sullivan highly commends Aprecomm's extensive product portfolio, recognizing its pivotal role in enabling ISPs to gain deep insights into their subscriber base. This, in turn, empowers ISPs to expand their footprint significantly while fostering strong customer loyalty.

"We are thrilled to see the transformative impact of ACT SmartWi-Fi® on our customers' digital lives. Our initial launch data validates our commitment to delivering on our promise—ensuring a significantly superior online experience for our customers. Whether streaming on a Smart TV, working on a laptop, or browsing on a mobile device, ACT is redefining what high-performing internet looks like in Indian homes."

- Ravi Karthik Chief Marketing and Customer Experience Officer of ACT Fibernet

Case Study: ACT Fibernet

ACT Fibernet has recently deployed Aprecomm's customer experience optimization platform, including self-optimizing Wi-Fi. During the initial launch stages across 250,000 homes over 15 days, ACT SmartWi-Fi users experienced an average of three times higher speeds delivered to all devices than in homes without the new smart Wi-Fi service. Specific devices showcased even more impressive gains—Smart TVs saw speeds improve by two times, laptops by three times, and smartphones by four times. Additionally, thanks to AI-powered intelligent optimization, over 80% of Smart TVs, over 70% of laptops, and over 60% of mobile devices were successfully steered to optimal

Wi-Fi channels, ensuring a more reliable and higher-performing internet experience and resolving issues such as interference and congestion before they could impact the end user.

"Aprecomm's solution has helped us to transform our approach to customer support, giving us visibility into customers' Wi-Fi networks so that we can understand the issues they face[...] We have much more control over the quality of experience we provide, and the time we take to resolve customer queries has been reduced massively."

- Vivek Raina, CEO of Excitel⁵

Case Study: Excitel Broadband

Aprecomm's Al-driven VWE transformed Excitel's customer experience by enabling real-time network monitoring. By providing access to extensive data and analytics, including quality of experience measurement, Excitel's support team are able to clearly understand customers' connectivity issues and fix them quickily and proactively. Amid the surge in broadband demand during the pandemic, the company deployed VWE seamlessly across Excitel's complete subscriber base, empowering support teams with a single dashboard for remote

diagnostics and intelligent automation. This resulted in a 35% improvement in first-call resolutions, a 30% reduction in support call duration, a 62% drop in truck rolls, and a 15% decrease in support staff requirements. By enhancing network reliability, minimizing disruptions, and ensuring seamless connectivity, Aprecomm helped Excitel solidify its reputation for exceptional service, fueling its growth beyond one million subscribers. ⁴

Pioneering Al-driven, Self-healing Networks

Aprecomm's strategic innovation roadmap is a cornerstone of its long-term growth plan. Aiming for a fully self-healing and self-managed network, the company is establishing a robust presence in data collection across various ISP network layers and infrastructure. This approach enhances its capabilities continuously, enabling increased automation and monitoring.

Recognizing the critical role of AI in network performance management, Aprecomm invests significantly in its AI infrastructure. This ensures the company remains at the forefront of automation, streamlining monitoring and network maintenance.

The company's AI engine, Evolv, is designed to evolve continuously through the data it captures. This allows Evolv to measure real end-user experiences and optimize the network automatically to ensure widespread satisfaction. The system adapts continuously to new data, including additional devices and applications used by end users, ensuring it aligns with consumer needs and enhances the quality of experience tailored to specific uses. Aprecomm's solution goes deep to understand, monitor, and optimize customer experience right down to the application-level, ensuring that consumers are served an optimal experience tuned to the differing service use-cases; this is particularly relevant to intensive applications such as 4K video streaming and live gaming. To this end Aprecomm has forged a strong relationship with Qualcomm to strengthen its solution and priortize application data flows fort best performance.⁵

 $^{^{4}\,}https://aprecomm.ai/case-studies-and-white-papers/how-aprecomm-used-ai-to-help-excitel-transform-its-approach-to-customer-experience/$

 $^{^{5}\} https://www.prnewswire.com/news-releases/aprecomm-teams-up-with-qualcomm-to-boost-network-application-intelligence-302269207.html$

Global Expansion and Growth Empowered through Strategic Partnerships

"Aprecomm is deeply committed to delivering exceptional value to its customers by fostering long-term relationships with ISP clients. From the outset, the company works closely with ISPs to fully understand end-user needs, ensuring that its solutions maximize service offerings, enhance capabilities, and drive revenue growth."

-Anirudh Bhaskaran Industry Principal Aprecomm is deeply committed to delivering exceptional value to its customers by fostering long-term relationships with ISP clients. From the outset, the company works closely with ISPs to fully understand end-user needs, ensuring that its solutions maximize service offerings, enhance capabilities, and drive revenue growth. Aprecomm's value proposition revolves around providing impactful solutions that improve network performance and strengthen the ISP's brand reputation, boost client loyalty, and increase retention. By continuously monitoring ISP networks for anomalies or pattern shifts, the company enables ISPs to take proactive measures to address potential connectivity issues before they affect

customers.

Focusing initially on the highly competitive and cost-sensitive Indian market, Aprecomm refined its offerings and pricing models in a challenging environment, optimising customer return on investment (ROI). As ISP markets mature and the demand for advanced management capabilities grows, the company is expanding its reach globally, scaling its solutions to deliver value to international clients. Aprecomm's expansion strategy is supported by its easy onboarding process, which reduces the sales cycle of Alpowered solutions from three to six months to just a few weeks. This efficient integration process allows the company to onboard millions of units quickly, further streamlining implementation and maximising ROI for its customers.

With proven success in the Indian market, Aprecomm strategically positions itself for global expansion into mature markets, where its automated monitoring and AI-driven capabilities can be fully leveraged. This growth is bolstered further by the company's strong strategic partnerships, positioning it for long-term success and sustainable growth in the global ISP space.

Aprecomm is rapidly expanding its influence in the network intelligence and customer experience space through a series of high-profile partnerships which has led to successful business expansion oustide of India. The company's AI-powered solutions, which include self-healing and self-optimization algorithms, are becoming increasingly integral to ISPs globally. By collaborating with major players such as Qualcomm, Edgecore Networks, Nokia, Hitron Technologies Americas, OpenGlobe, and ThinkTechnology Aprecomm has positioned itself at the forefront of the global broadband revolution, delivering superior customer experiences and optimizing network performance on the global stage.

These strategic partnerships allow Aprecomm to enhance its product offerings, expanding its reach across continents. For instance, the partnership between Hitron and Aprecomm offers ISPs immediate access to Al-powered, pre-integrated customer premise equipment (CPE) devices that optimize the customer experience and network performance. With the company's advanced cloud-based platform embedded into Hitron's Wi-Fi 7 routers, gateways, and extenders, ISPs can deploy solutions rapidly, reducing setup time and accelerating time to market. This integration delivers significant operational benefits, such as

enhanced operational efficiency through Agentic Al-driven self-healing capabilities, reduced customer service costs, and improved first-call resolution rates. This collaboration supports the growing trend of ISPs focusing on delivering a superior customer experience over traditional metrics like speed and price. This growing network of partnerships is a testament to Aprecomm's technological expertise and its ability to innovate and meet the ever-evolving demands of the broadband and enterprise sectors.⁶

Frost & Sullivan applauds Aprecomm for its transformative innovation in the network intelligence space, particularly for its AI-powered solutions that are revolutionizing the smart home experience. By enabling broadband service providers to deploy self-optimizing and self-healing networks, the company is setting new standards in customer experience and operational efficiency. Its ability to seamlessly integrate with over 190 CPE devices from over 50 original equipment manufacturers supporting over 45 service provider customers and managing seven million locations globally underscores its leadership in delivering unmatched quality experience to end users.

Conclusion

With the growing importance of home internet connectivity due to the increased remote nature of the job market in a post-COVID-19 world, internet service providers (ISP) need deeper insights into their subscriber base to tailor services to maximize their experience and foster brand loyalty. By taking a subscriber-first approach, Aprecomm equips ISPs with a deeper understanding of their customer base. The company's product portfolio aligns with this focus, providing ISPs with tools to analyze subscriber behavior and manage networks efficiently without compromising speed. In addition to its extensive solution span, Aprecomm's innovative artificial intelligence capabilities provide extensive automation capabilities, empowering self-monitoring and self-healing networks to fix arising issues proactively and minimize network downtimes. With its differentiated strategic approach and extensive value proposition, Frost & Sullivan expects Aprecomm to achieve high and long-term growth as it fosters close relationships with ISPs globally.

Aprecomm Private Limited earns Frost & Sullivan's 2025 Global Transformational Innovation Leadership Recognition for its strong overall performance in the smart home-as-a-service industry.

 $^{^{6}\} https://aprecomm.ai/news/hitron-partners-with-aprecomm-to-deliver-pre-integrated-ai-powered-solutions-for-broadband-service-providers/$

What You Need to Know about the Transformational Innovation Leadership Recognition

Frost & Sullivan's Transformational Innovation Leadership Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Recognition Analysis

For the Transformational Innovation Leadership Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Transformational Innovation

Market Disruption: Innovative new solutions have a genuine potential to disrupt the market, render current solutions obsolete, and shake up competition

Competitive Differentiation: Solutions or products articulate and display unique competitive advantages

Market Gaps: Solution satisfies the needs and opportunities that exist between customers' desired outcomes and their current market solutions

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

Passionate Persistence: Tenacity enables the pursuit and achievement of seemingly insurmountable industry obstacles

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®

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)

