FROST & SULLIVAN

Plume

2022
CUSTOMER
VALUE
LEADER

Global Smart Home-as-a-Service Industry

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Plume excels in many of the criteria in the smart home-as-a-service space.

AWARD CRITERIA

Business Impact	Customer Impact
Financial Performance	Price/Performance Value
Customer Acquisition	Customer Purchase Experience
Operational Efficiency	Customer Ownership Experience
Growth Potential	Customer Service Experience
Human Capital	Brand Equity

Galvanizing the Industry's Growth with Distinguished Technology

Founded in 2014 and headquartered in Silicon Valley, California, Plume is the creator and provider of the world's first software-as-a-service (SaaS) experience management platform for Communications Service Providers (CSPs) and their customers. With the company's trailblazing artificial intelligence (AI)-based technology and Smart Home Services, CSP customers are able to offer their subscribers efficient customization, security, management, and state-of-the-art Wi-Fi capabilities. Plume capitalizes on its Platform and comprehensive knowledge of CSP market trends to secure an unmatched competitive edge in the smart home-as-a-service market. The Platform accommodates both front-end consumer services (user interface) and back-end tools (database, application, and server that run backstage to leverage network and user insights to the CSP), galvanizing an outstanding smart home experience. Additionally, Plume's membership-based service set, HomePass, provides users with unprecedented customization and control of their home networks utilizing a flawless, intelligent application (app). The company's "back-end software suite for superior subscriber experience management,"[1] Haystack, prompts incomparable home network visibility for its CSP partners.

Plume powers aggressive market growth by persistently enhancing its operations and offerings. The company's corporate footprint expands to Slovenia, Taiwan, Poland, Japan, Canada, and Switzerland. It serves households in more than 20 countries across 40+ million locations and continues to increase

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[1] https://www.plume.com/serviceproviders/products/haystack/

these numbers. Plume's employee base "represents a diverse swathe of talent,"[2] highlighting its ambition to present innovative and pioneering smart home experiences to address different people's unique requirements.

In 2020, Frost & Sullivan recognized Plume for its ability to meet and exceed customers' expectations and its market disruptive approach and remains impressed with the company's continuing innovation and sustained leadership.

Roadmap to Success: Customer-centric, Continuous, Proactive

With its customer-centric corporate philosophy, Plume operates on the central tenet that its success depends on customer satisfaction. This philosophy permeates the company's daily practices. It invariably concentrates on CSPs' pain points to sustain longstanding relations, stimulating a solid sense of ownership. CSPs usually have substantial customer bases with access to high-speed fiber or Data Over Cable Service Interface Specification services. However, Service Providers face limitations in offering advanced services alongside high-speed internet because of the complex upgrade process introduced by legacy hardware vendors. In response to this challenge, Plume identifies the need for a user-centric, cloud-based services platform that is abstracted from hardware, thus ensuring that CSPs have complete control and flexibility over their consumer premises equipment (CPE) choices. Its SaaS experience management platform empowers the following functions for CSPs[3]:

- Optimizes Wi-Fi connection with wall-to-wall coverage to install other services.

- Improves and deploys new services from the same platform to augment top drawer internet service.

- Curtails the operating expenses (OPEX) to help customers with stringent connectivity frameworks.

- Transforms CSPs' service platforms to incorporate web-based application programming interfaces and big-data analytics for control and provisioning.

- Prompts self-installed services that do not require the technicians' support.

- Facilitates an efficient mobile app for CSPs' primary internet service offering.

- Drives the internal information technology resources' effective use.

- Offers a highly-scalable platform that leverages cloud, AI, and open-source technology to introduce services at high cadence.

Furthermore, with Plume's Platform, clients maximize several benefits: an escalated average revenue per unit up to $15 per month, elevated lifetime value per customer up to $2,000, increased customer lifetime up to 2.9 years, and lowered churn up to 30%. This Platform enables CSPs to integrate new services that upturn stickiness and supplement new monthly revenue, expanding customer lifetime by 30% and lifetime value per customer by 70%. In addition, Plume's Platform curtails costs for marketing, truck roll support, and call support, magnifying the budget for additional services. CSPs can leverage

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[2] https://www.plume.com/homepass/about/
[3] *Total Cost of Ownership Study: PLUME CUSTOMER EXPERIENCE MANAGEMENT PLATFORM* (Plume, 2020)

over 36.7% savings from direct OPEX and marketing, 51% lower call-in rates, and 67% condensed truck roll rates. Additionally, they incur 97% less service installation costs, with a more than 95% self-installation success rate and 67% faster feature development and deployment timelines. Plume recognizes that CSPs who have implemented its Platform and added services have had remarkably less customer dissatisfaction[4].

To ensure a technology-integrated, immaculate, and dynamic customer experience, the company has equipped its Platform with a full suite of products: HomePass (for residential subscribers), WorkPass (for small businesses), Haystack, and Harvest (both for Service Providers).

HomePass is an all-inclusive suite of Smart Home Services with Sense (for home awareness and motion detection), Guard (AI-powered cyber-security), Adapt (self-optimizing, adaptive Wi-Fi), and Control (for screen time application monitoring, state-of-the-art parental controls, and ingenious guest access.

Introduced in March 2021, WorkPass is the first-of-its-kind intelligent services and management tools suite tailored to meet the needs of small business owners. This business services platform empowers valuable insights and expedites effortless network installation while maintaining optimum business network security. WorkPass enables users to monitor customer activity and manage employee productivity remotely, helping small businesses set up their networks easily through its holistic, small business network solution that matures over time[5].

Haystack accommodates engineering, operations, and support teams. It includes Frontline and Panorama that provide insights for Tier-1, -2, and -3 engineering and support staff to oversee the operational condition of the network. Haystack also incorporates Signal, an "AI-powered proactive monitoring and autonomous resolution tool"[6] that identifies unsatisfied customers. It predictively initiates outbound customer care contact to minimize calls and dynamize user satisfaction.

> *"It integrates innovative approaches to its framework to complement the industry's requirements and trends, exceeding clients' expectations and staying one step ahead of its competition. The company aggressively invests in new ventures and partnerships to expand its products' and solutions' reach, excellence, and value."*
>
> *- Iqra Azam,*
> *Best Practices Research Analyst*

Harvest captures customer application patterns, usage behavior, and device trends to design and filter cohorts of clients' customer bases. Integrated with network analytics, Harvest accelerates product-, promotional-, and marketing-based attractiveness, capitalizing on network trends and customer buying decisions.

Plume meets with clients to assess their specific needs and develop tailored solutions with roadmaps for seamless execution. This foundational approach establishes ongoing trust with customers for long-lasting relationships. Frost & Sullivan applauds Plume's highly-advanced approach to product development and implementation, highlighting its strong focus on constantly delivering innovative offerings and satisfying their expectations.

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[4] https://www.plume.com/serviceproviders/resources/tco-infographic/
[5] https://www.plume.com/workpass
[6] https://www.plume.com/serviceproviders/products/haystack/

Superior Customer Experience: Growth Strategy Central Pillar

With its customer-focused strategy, Plume consistently brings to market best-in-class services. It sustains and aggressively grows its CSP customer base by transforming users' operations. Its smart home-as-a-service-based business framework allows clients to upgrade their in-home experiences with numerous perks: connectivity, transparency, safety, and personalization. The company's Adapt service unceasingly distributes speed and Wi-Fi coverage in all rooms. Service Providers leverage complete smart home control and comprehendible network topology for their support teams. Plume maintains customers' peace of mind with boosted security and privacy strategies that monitor, evaluate, and restrain threats. Moreover, customers maximize the entire network checking ability with the HomePass app through custom profiles, content filters, and guest access levels[7].

Additionally, the company helps magnify service models with a particular focus on visibility, satisfaction, evolution, and insight. CSP customers have direct access to in-home networks through Haystack, which provides intuitive, in-home visibility to significantly abridge truck rolls. It assures a comprehensive analysis of subscribers' issues in real time. Plume empowers Service Providers to satisfy their users with new services, uninterruptedly provided through the Plume Cloud and fueled by OpenSync. Its AI and machine learning integrated cloud-deployed Platform advances as a client's base enlarges. Furthermore, Plume activates clients' existing data with analytics tools that support intuitive decisions to push business expansion.

Its user-friendly, and cutting-edge website serves as a robust customer acquisition portal. Plume impressively maps its services', solutions', and products' structure through its website, giving current and potential clients a streamlined, digestible, and in-depth idea of its capabilities. Frost & Sullivan acknowledges that this is an intelligent technique to acquire new clients and promote loyalty among the existing ones.

At the same time, Plume incorporates client feedback into its strategic decisions and implementation plans to maximize short-term growth opportunities while providing a path to future revenues. It has more than 250 CSP global partners. The company's outstanding partner ecosystem is testimony to the excellence of its offering. A few noteworthy organizations in this global ecosystem are Amazon Web Services, Samsung, Vodafone, Comcast, Hitron, Broadcom Inc., and NXP. In July 2021, Plume exceeded an important milestone, having managed one billion+ unique client devices worldwide through cloud controllers, though the company has now managed over 1.6 billion devices (May 2022), evidence of just how fast it is scaling to meet the growth of the smart home market.

"Plume impressively maps its services', solutions', and products' structure through its website, giving current and potential clients a streamlined, digestible, and in-depth idea of its capabilities. Frost & Sullivan acknowledges that this is an intelligent technique to acquire new users and promote reliability among the existing ones."

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By the end of 2020, the company's technology-powered over 20 million active households, and today that figure has grown to over 40 million active

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[7] https://www.plume.com/serviceproviders/why-choose-plume/

locations (households and small businesses). With its solid emphasis on continuous and rapid development, Plume performed approximately one million new home activations each month in 2020, and scaled this significantly through 2021, adding over 1.5 million locations on average per month. Plume accomplished these high numbers when industry commentators anticipated a sharp escalation in the smart home services sector's expansion, energized by the work-from-home culture and "consumers' insatiable appetite for hyperconnectivity and personalization[8]."

Plume goes to great lengths to ensure a seamless solution integration. The company's support team meets with customers first to assess their unique needs. At this stage, after planning out the implementation outline, it carries out a simple deployment process with a turnkey solution entirely managed by Plume, providing sustenance throughout all defined stages. Furthermore, the solution has an ultra-reliable infrastructure with strict service-level agreements. Post-deployment, Plume provides immediate follow-up support: 24/7 availability, a 60-day trial period, proper staff training and education, and marketing toolkits[9]. The impact of its operations and their progressive results are reflected in customers' glowing testimonials:

"In the end, Plume was absolutely heads and shoulders above what anybody else could do."

-Michael L. Giobbi, Chief Technology Officer, Armstrong

A Foot in the Present and an Eye on the Future

Since its inception, Plume's sterling reputation and customer-centric framework led to its coveted preferred partner status. Over the years, it has added a range of new partners to its established base. For example, in June 2021, EPS Global, "a leading value-added distributor of a broad portfolio of traditional and open networking and whole-home broadband offerings,"[10] announced its collaboration with Plume. This new partnership enables Service Providers to monetize small businesses and smart homes by facilitating access to new service propositions that capitalize on broadband to deliver numerous benefits, including excellent, self-optimizing Wi-Fi connectivity and incomparable customer experiences. "Under this new agreement, EPS Global [acts] as a key Plume distributor globally."[11] Moreover, in December 2021, Israel-based Heights-Telecom signed a new partnership with the company to harness next-generation cloud-driven services across its whole customer premise(s) equipment range. This partnership allows Heights-Telecom to immensely augment its service provider offerings by incorporating OpenSync – the fastest-growing open-source framework for smart homes and small businesses worldwide – and Plume's award-winning services suites to its passive optical network and digital subscriber line gateways alongside Wi-Fi extender products[12]. In September 2021, the company partnered with the Communications Supply Service Association (CSSA). This collaboration concentrates on increasing the availability of Plume's SaaS experience platform and digital services suites for smarthomes and small businesses for utility providers across North America[13].

[8] https://www.plume.com/serviceproviders/news/plume-reaches-20-million-active-households-2
[9] https://www.plume.com/serviceproviders/working-together/
[10] https://www.epsglobal.com/about-eps-global/latest-news-3/june-2021/eps-global-partners-with-plume
[11] Ibid
[12] https://syndicated.wifinowglobal.com/resource/heights-telecom-partners-with-plume-to-leverage-next-generation-cloud-driven-services-across-its-complete-cpe-range/
[13] https://www.cssa.net/news/cssa-partners-with-plume-to-transform-the-broadband-experience/

"By our Association joining together with Plume, we are now able to bring their best-in-class whole-home Wi-Fi software to our Members and customers. Broadband service providers have been looking for seamless, reliable, user-optimized, and intelligent tools that their customers expect in 2021 and beyond. Plume delivers these tools in spades, improving the Wi-Fi experience and saving service providers significant expenses such as reducing truck rolls."

- John Brown, President & Chief Executive Officer, CSSA

Plume demonstrates high-growth potential. The company is well-positioned in the market, with an industry-leading product that provides tremendous value in high-demand sectors. In February 2021, it raised an incredible $270 million from New York-based private equity firm "Insight Partners, valuing the company at $1.35 billion[14]." In October 2021, the company raised "$300 million led by SoftBank Vision Fund 2 at a valuation of $2.6 billion[15], with $697 million raised to date. Fahri Diner, Plume's founder and chief executive officer, stated that the company will utilize the money to continue engineering its software platform, "inking and servicing more deals with carriers and generally expanding its horizons[16]." Frost & Sullivan believes the company is well-positioned to drive the global smart home-as-a-service space into its next growth phase, capturing market share and sustaining its leadership in the coming years.

Conclusion

Customer-centric strategies help companies safeguard leading positions in markets, but only if the approach is authentic and the implementation is seamless. Plume incorporates customer-focused strategies and exemplifies best practice implementation. With its state-of-the-art, AI-integrated smart home and intelligent business services, Plume's clients accommodate their customers with advanced Wi-Fi capabilities, security, and control. Plume's comprehensive and versatile SaaS experience management platform facilitates front- and back-end services, resulting in an unparalleled quality of smart home experience. It consistently improves client satisfaction by identifying and addressing users' pain points, thereby maintaining loyal relationships. It integrates innovative approaches to its framework to complement the industry's requirements and trends, exceeding clients' expectations and staying one step ahead of its competition. The company aggressively invests in new ventures and partnerships to expand its products' and solutions' reach, excellence, and value. This overall customer-first approach offers immense value to existing and new customers and solidifies Plume's reputation in the market.

For its strong overall performance, Plume earns Frost & Sullivan's 2022 Global Customer Value Leadership of the Year Award in the smart-home-as-a-service industry.

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[14] https://www.reuters.com/article/us-plume-funding/smart-home-tech-firm-plume-raises-270-million-now-valued-at-1-35-billion-idUSKBN2AN1D3
[15] https://techcrunch.com/2021/10/12/plume-raises-300m-as-it-passes-1-2b-devices-in-35m-homes-using-its-smart-wifi-service/
[16] Ibid.

What You Need to Know about the Customer Value Leadership Recognition

Frost & Sullivan's Customer Value Leadership Award recognizes the company that offers products or services customers find superior for the overall price, performance, and quality.

Best Practices Award Analysis

For the Customer Value Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Business Impact

Financial Performance: Strong overall financial performance is achieved in terms of revenues, revenue growth, operating margin, and other key financial metrics

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

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The Growth Pipeline Engine™

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:

■ Mega Trend (MT)

■ Business Model (BM)

■ Technology (TE)

■ Industries (IN)

■ Customer (CU)

■ Geographies (GE)