



2014 Global Pay TV Middleware Customer Value Leadership Award



FROST &



50 Years of Growth

Customer Value Leadership Award Pay TV Middleware Global, 2014

Frost & Sullivan's Global Research Platform

Frost & Sullivan is in its 50th year in business with a global research organization of 1,800 analysts and consultants who monitor more than 300 industries and 250,000 companies. The company's research philosophy originates with the CEO's 360-Degree Perspective™, which serves as the foundation of its TEAM Research™ methodology. This unique approach enables us to determine how best-in-class companies worldwide manage growth, innovation and leadership. Based on the findings of this Best Practices research, Frost & Sullivan is proud to present the 2014 Global Customer Value Leadership Award in Pay TV Middleware to Wyplay.

Significance of the Customer Value Leadership Award

Key Industry Challenges Addressed by Superior Customer Value

The world of Pay TV is changing, from a service provider driven ecosystem to a consumer driven industry. Demand for content is rising, even as bandwidth remains limited and expensive. The Internet poses both opportunities and challenges. It is a relatively cheap alternative to get interesting content to subscribers with limited upfront investments and controlled ongoing costs. On the other hand, the Internet is an unmanaged transmission medium, and leveraging it requires a fundamental architectural reworking for traditional service providers, like digital terrestrial transmission (DTT) broadcasters, cable MSOs, and satellite DTH service providers. This is also a more agile medium, with compression and streaming formats evolving far more rapidly than the more stable managed architectures of the past. Most importantly, this levels the playing field for all types of service providers, including those who are based only online, or who specialize in specific niche content. Frost & Sullivan feels that Pay TV service providers need to find more innovative ways to leverage the power of Internet Protocol (IP), while effectively warding off the new competitive challenges it brings.

The rapid rise of BYOD has also driven an app-centric culture, where subscribers expect to receive personalized, fresh services and applications to find and consume their content. Traditional middleware was built into managed set top boxes with a fixed set of services and shipped to consumers. Apps were refreshed when boxes were changed. Frost & Sullivan notes that this model is no longer competitive for Pay TV services. It is also not cost effective in terms of ongoing maintenance costs, upgrade costs, and latency in rolling out upgrades or new services to subscribers. Open source middleware is finding growing favor as a concept to battle the Pay TV service providers' dependency on middleware partners for ensuring their services remain fresh and compelling, as it puts control of upgrades and app rollouts in the hands of the service provider. It also provides for a richer ecosystem of app developers, which increases competition and decreases costs. At the same time, expertise

and investment is needed to implement and maintain open-source based middleware platforms.

Finally, average revenue per user (ARPU) comes under competitive pressure, and the majority of growth prospects shift from relatively affluent major markets to cost-conscious growth markets whose typical ARPUs are in the low to middle single digits. As such, low cost middleware that enables compelling experiences for subscribers and lays the foundation for Pay TV service providers to deliver value-added services that can raise total revenue is critical to differentiating Pay TV services. Frost & Sullivan feels that the Frog offering from Wyplay is an agile, adaptable platform that enables service providers of all sizes and in all markets to take a leap into the OTT-enabled world to grow customer satisfaction and revenues - at a very compelling price point.

Best Practice Award Analysis for Frog by Wyplay

The Frost & Sullivan Customer Value Leadership Award is presented each year to the company that has demonstrated excellence in implementing strategies that proactively create value for its customers with a focus on improving the return on the investment that customers make in its services or products. This Award recognizes the company's inordinate focus on enhancing the value that its customers receive, beyond simply good customer service, leading to improved customer retention and ultimately customer base expansion.

Wyplay's Performance in The Pay TV Middleware Market

Established in 2006, Wyplay is among the newer middleware companies in the industry today. The company is profitable and growing organically, with nearly 10 million units deployed by the end of 2013. With the ability to serve next-generation service needs for DTT, DTH, cable and IPTV services at a very competitive price point, Wyplay is achieving a quickening pace of adoption and industry reach. Their solution has been adopted in green field IPTV deployments, but has recently begun to displace solutions from established vendors, including NDS with Canal+, OpenTV with R a Spanish cable operator as well as more home-grown middleware solutions, such as with Belgacom, who was using a solution built with Nokia Siemens Networks. Other current customers include SFR and Vodafone.

The company is expected to continue its growth trajectory, with the potential to add upwards of 6M subscribers in 2014 based on existing and expected customer wins. Frost & Sullivan points out that this growth is particularly noteworthy, as Wyplay offers an open source middleware solution. Such solutions are very attractive from a flexibility and cost perspective, but to date have seen limited success. Comcast RDK, as one example, has seen high licensing interest for the North American cable segment. However, it does not have the global and cross-application reach that Wyplay enjoys. Even within the U.S., volume deployments and growth momentum have been quite limited. Similarly, Google TV (recently rebranded as Android for TV) is essentially open source middleware as well, but has seen

some false starts and is still struggling to find its sweet spot in a challenging market.

Key Performance Drivers for Wyplay

Frost & Sullivan independent analysis confirms that Wyplay differentiates in two separate dimensions. First: in contrast with more established vendors whose core competency is linear live bouquet delivery over a single type of network (typically QAM or satellite), Frog provides service providers with the ability to seamlessly blend content sourced from hybrid sources including OTT, OTA (DTT) and conventional managed channels. Second: in contrast with other multi-network middleware solutions, typically provided by newer middleware startups (some of whom have since been acquired) or by major software companies, Wyplay is designed as a transparent middleware solution. As a result, it enables a unified and consistently branded browsing and playback experience, regardless of the source a given linear channel or given VOD title is being sourced from. For example, whether a channel is delivered over the air via DTT, via satellite, via traditional cable, or over the Internet, it appears consistently as a service-provider branded offering to the subscriber – it is displayed in the same guide, and selected and rendered in the same manner. Put together, Frost & Sullivan firmly believes that these factors result in compelling value for both service providers and customers alike.

Wyplay company leverages direct sales for reaching Tier I customers, but is expanding to a partner-driven ecosystem distribution strategy to reach lower tier customers and also to expand into regions, such as Latin America, India and South East Asia. Wyplay's ecosystem spans the complete value-chain from Silicon to Set-Top Box to system integrators to 3rd-party software companies.

FROG is pre-ported on major silicon vendors such as STMicroelectronics, Broadcom, Entropic, MStar, Sigma Designs, Vixs to integrate Frog with STB chipsets for added scalability, lower time to market, and lowered cost.

System integrator partners announced include integrators such as Eurogiel, Larsen & Toubro, MathEmbedded, NEST, S3 Group, TataElxsi...

The company is also partnered with set top box vendors, including AirTies, Altech SetOne, Amino, Arcadyan, Changhong, Cisco, Coship, Easy Digital, Huawei Device, Homecast, Jiuzhou, Kaon Media, OpenTech, Samsung, Skyworth, Technicolor...

Frog by Wyplay provides as well a Marketplace where 3rd party software companies enrich the Frog offering. The first Marketplace partners to have joined Frog are: Quadrille (Push VOD system), WizTiVi (Second screen EPG application), WildMoka (real time EPG enrichment), Movea (gyroscopic RCU for a better User Experience) and Airties (plug and play WIFI add-on).

Frog is seeing significant traction in the embattled Pay TV industry, not only on account of its enticing value proposition of effectively overhauling traditional services for the new age, but also because of its lightweight deployment process, very competitive cost structure, and liberal licensing policy.

These factors are discussed in detail below.

Factor 1: Enable Greater Channel Reach without Infrastructure Overhaul

Broadcasters deliver content today via DTT broadcast channels and/or using satellite-based distribution. The challenge is that spectrum is much in demand - but scarce. Thus, obtaining licenses for spectrum in these models is difficult and expensive. In order to compete with other service providers (notably IPTV and OTT), broadcasters need to provide a greater variety of content, in better resolution. However, in order to maintain business bottom line, they are seeking more cost-effective alternatives to traditional transmission. OTT offers a more economical model for this auxiliary content. As streaming and compression technologies mature, it is technically feasible and economically quite attractive to implement these hybrid architectures. The challenge is, however, that deployed set top boxes and the middleware and application layer that power them are not equipped to effectively handle such multi-source multi-network architectures. Any solution that interferes with quality of browsing, channel selection, latency or playback quality is badly received by subscribers, and therefore becomes a competitive issue. Wyplay's Frog solves this problem by allowing content from multiple sources to be seamlessly channeled through a single, streamlined interface. As such, service providers can choose any convenient medium for transmitting content, while consumers are unaware of the underlying complexity and simply enjoy a better content selection and rendering experience.

More importantly, Frog which is based on HTML5 can be deployed to existing set top boxes - without the need for an expensive overhaul. As applications age and service providers look to upgrade offerings, they deploy new set top boxes which can cost upwards of USD 200 (total deployment cost) in major markets and are typically higher than USD 30 even in the lowest priced regions. In contrast, Frog can be delivered to existing set top boxes as long as they have an IP connection, and thus delivers considerable savings right from day one. By extending the useful lifetime of expensive set top boxes through this software solution, Wyplay is enjoying a lowered barrier to entry. This is a significant driving factor of the company's current growth trajectory.

Factor 2: Restore Attractiveness of Pay TV Service Experience

Call analytics firm Marchex recently performed an exhaustive study detailing which companies' customers are most likely to curse them out over the telephone and has found that satellite TV and cable TV providers rank first and third among all industries, respectively. Specifically, the survey found that satellite TV companies get cursed out in more than 1% of calls (one out of every 81), while cable companies get cursed out in

0.81% (one out of 123). Much of this frustration is a result of content licensing issues, bundles, oppressive pricing and inadequate customer support in resolving technical glitches. However, it points to a broader issue of diminishing value perception and growing annoyance with services that are perceived as dated and out of touch with the times.

At the same time, Pay TV operators are struggling with legacy infrastructure and inflexible systems. Operators state they are often slowed down when deploying new services by their dependence on the development cycles of third-party proprietary set-top box software platforms.

Frog enables Pay TV service providers to ramp their offerings up to match current expectations. When operators have access to source code, they gain greater development flexibility and, as a result, can more quickly deploy newer, more compelling services. While there are several open source middleware solutions on the market, Wyplay has excelled on its multi-network capabilities and core functionality. Evidence of this superiority comes from the growing number of customer wins where Wyplay has replaced major incumbents – operators evidently see an improvement that is significant enough to justify the investment and disruption of replacing their existing middleware.

Factor 3: Disruptive Price Point

Frost & Sullivan estimates that the average cost of middleware is 15 USD per unit deployed. Additionally, companies typically charge up-front deployment fees, backend server fees, and ongoing service and maintenance fees. In contrast, Frog is licensed on a sliding scale that begins at €2 per subscriber and decreases with cumulative (not annual) volume. There is no cost in the development phase, and there are no annual maintenance fees following deployment. This lack of ongoing royalties – a subscriber is only paid for when initially deployed – is another significant differentiator. During development, while Wyplay offers its own integration services, customers are also free to work with a system integrator or development partner of their choice. Open source solutions always entail some additional measure of research, development and maintenance from the customer side, but even with this consideration, it is quite evident that Wyplay provides an extremely compelling price-performance value proposition.

This factor certainly plays a significant role in Wyplay's rapidly growing adoption. There are other ramifications as well. For example, this lower price point enables service providers to innovate more aggressively with experimental models, such as Social TV, where monetization is not yet significant, and therefore revenues are quite low. It also gives Wyplay a very strong foothold in rapidly growing, yet cost sensitive markets, such as India, which is adding over 60 million digital cable households - even as DTH and IPTV household numbers continue to climb upwards; China, which is poised to become the largest country by subscriber households for the Pay TV market; and broadly Latin America, which is the fastest growing regional market for Pay TV and DTT.

This pricing, coupled with functional excellence, is allowing Wyplay to win over a wide range of businesses, from Canal+, who serves over 13M subscribers today, to Vodafone TV, with 150,000 subscribers.

Factor 4: Freedom and Independence for Service Provider

Frog provides a server side component which encompasses all modes of content delivery, including DTH (with its many custom descriptors), cable (DVB), and OTT (including support for hybrid broadband-broadcast standards such as TNT in France). Second screen applications are also provided. Modules for the set top box user interface and middleware include electronic program guide, channel changing (zapper), digital video recorder (DVR), whole home media connectivity, multi-room playback, and social TV. The source code can be freely downloaded and is backed by validation tools, integration tools, sample applications, documentation, and community resources, including a portal and support. The reference UI is based on HTML5. Operators are free to select, configure, and deploy their offering based on this rich set of pre-configured modular solutions. Ongoing partnerships with silicon vendors are providing a growing range of SoC platforms as well.

Importantly, although Frog by Wyplay is open source, its governance model does not include mandatory community contribution requirements that are often part of open source licenses such as RDK from Comcast. Specifically, Wyplay does not require that operators contribute their proprietary modifications to the source code back to the open source pool. Wyplay also does not have any vested interests in parallel business models, so it does not require inclusion of a proprietary app store or third party VOD library, which is a requirement with some open source solutions on the market today such as Android for TV. This gives operators the freedom to innovate and differentiate, while also preserving their R&D investments and ongoing revenue streams. Put together, this aids greatly in their receptivity to Frog. From a forward-looking perspective, there is no lock-in; operators are free to upgrade their version of the middleware and its apps and distribute them freely. In other words, operators are free to innovate at their own pace, with or without continued reliance on Frog. This reduces perceived risk from a business perspective, while also providing a significant momentum boost from an engineering perspective.

Conclusion

Middleware forms the heart of the Pay TV experience. Video delivery methods are evolving, and consumer expectations are rapidly reshaping, challenging service providers to find ways to innovate and remain relevant. This gives rise to a pressing need for a middleware solution that operators can augment and upgrade at an agile pace to respond to new business opportunities and changing competitive landscape. At the same time, controlling costs is critical – particularly in markets where ARPUs are in the single to low double digits.

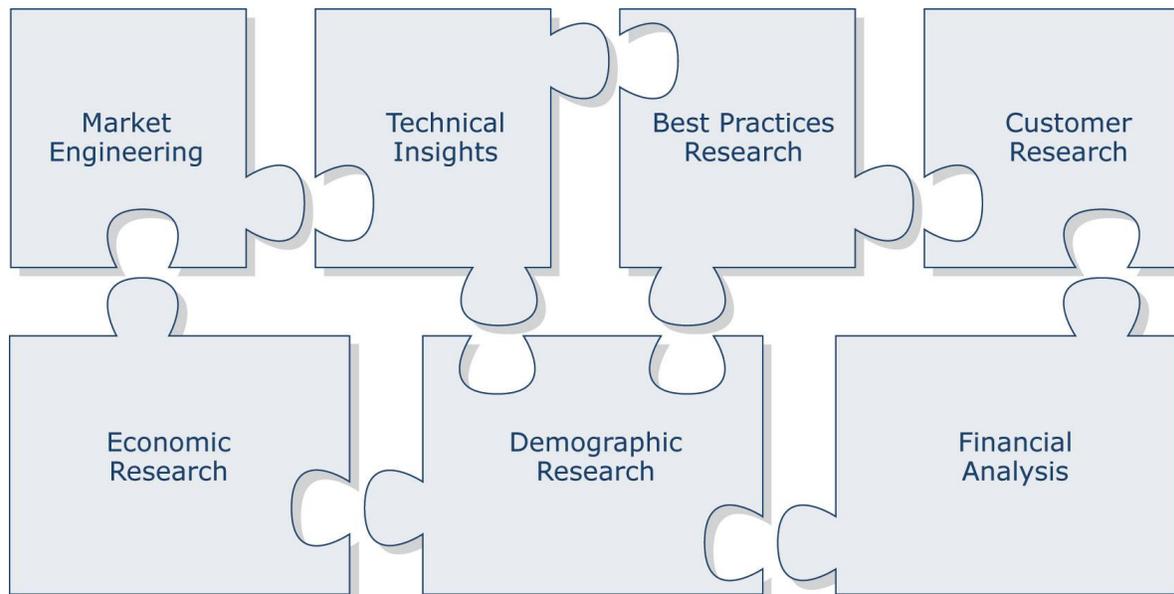
Frog by Wyplay provides a compelling value proposition in this challenging situation,

combining the flexibility and low cost of an open source offering with a level of functionality associated with more traditional solutions. From an operational perspective, it enables the seamless convergence of multiple modes of content transmission – satellite, DTT, cable, IPTV, and OTT – into a single, uniformly branded experience. The solution can be deployed in lightweight fashion to existing set top boxes, thus providing additional savings from extended box life. For the outstanding value that Frog delivers to Pay TV operators, as well as their end subscribers, Frost & Sullivan is proud to present the 2014 Global Customer Value Leadership Award to Wyplay.

Critical Importance of TEAM Research

Frost & Sullivan's TEAM Research methodology represents the analytical rigor of our research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all seven of Frost & Sullivan's research methodologies. Our experience has shown over the years that companies too often make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Frost & Sullivan contends that successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. In that vein, the letters T, E, A and M reflect our core technical, economic, applied (financial and best practices) and market analyses. The integration of these research disciplines into the TEAM Research methodology provides an evaluation platform for benchmarking industry players and for creating high-potential growth strategies for our clients.

Chart 1: Benchmarking Performance with TEAM Research



About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best-practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 40 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.