interoute

from the ground to the cloud

2013 European Infrastructure-as-a-Service New Product Innovation Award

2013

FROST & SULLIVAN

50

50 Years of Growth, Innovation & Leadership

New Product Innovation Leadership Award
Infrastructure-as-a-Service
Europe, 2013

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 2013 European New Product Innovation Leadership Award in the Infrastructure-as-a-Service Market to Interoute.

Significance of the New Product Innovation Leadership Award

Key Industry Challenges Addressed

Infrastructure-as-a-service (IaaS) is a type of cloud offering that refers to the provision of raw data center facilities for compute and storage purposes on a pay-per-use or subscription basis.

One of the biggest obstacles for cloud adoption is potential loss of privacy and security. Since IaaS involves using data center resources owned by a third-party in a multi-tenant environment (in the case of a public cloud), it causes concerns among users about invasion or theft of data. Even in the case of a private cloud where resources are dedicated and accessed via a virtual private network (VPN), customers are often concerned about the trustworthiness of the network and resources provided by the IaaS provider. Therefore, a successful IaaS offering has to assure customers of the privacy and security provided. This is especially important in Europe, where organisations have stringent data policies regarding location and control of their data.

In Europe, there is also the added complication that regional data laws may necessitate the location of data centers in close proximity to the enterprise customer. Many service providers have a regional concentration in the location of data centers which can discourage Europe-wide adoption of their offering. Therefore, service offerings that can provide enterprises with proximity to their data may be preferred under certain circumstances.

Another concern among customers is the extent of flexibility provided by an IaaS offering. Customers may fear that renting data center facilities can restrict their level of control and management. Moreover, they might be concerned about the ease with which the IaaS solution integrates with the existing enterprise systems. Therefore, there is a necessity to develop solutions that can adapt to the requirements of the customer.

The IaaS market is highly competitive, involving numerous service providers offering similar IaaS services. Therefore, developing services are is different and offer value-added benefits is challenging.

A successful IaaS offering should therefore adapt to customer demands, secure the trust of European customers, and be able to provide effective service in all European regions.

Impact of New Product Innovation Leadership Award on Key Stakeholders

The New Product Innovation Leadership Award is a prestigious recognition of Interoute's accomplishments in the Infrastructure-as-a-Service Market. An unbiased, third-party recognition can provide a profound impact in enhancing the brand value and accelerating Interoute's growth. As captured in Chart 1 below, by researching, ranking, and recognizing those who deliver excellence and best practices in their respective endeavors, Frost & Sullivan hopes to inspire, influence, and impact three specific constituencies:

- **Investors**
  Investors and shareholders always welcome unbiased and impartial third-party recognition. Similarly, prospective investors and shareholders are drawn to companies with a well-established reputation for excellence. Unbiased validation is the best and most credible way to showcase an organization worthy of investment.

- **Customers**
  Third-party industry recognition has been proven to be the most effective way to assure customers that they are partnering with an organization that is leading in its field.

- **Employees**
  This Award represents the creativity and dedication of Interoute's executive team and employees. Such public recognition can boost morale and inspire your team to continue its best-in-class pursuit for Interoute.

Chart 1: Best Practices Leverage for Growth Acceleration
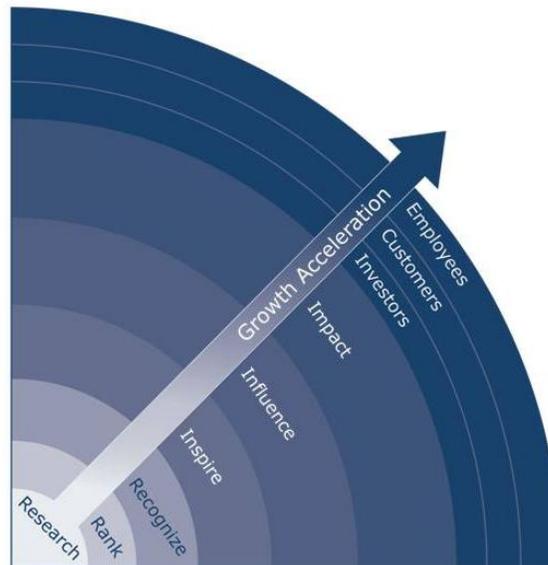
## Key Benchmarking Criteria for New Product Innovation Award

For the New Product Innovation Award, the following criteria were used to benchmark Interoute's performance against key competitors:

- Innovative Element of the Product

- Leverage of Leading-Edge Technologies in Product

- Value Added Features/Benefits

- Increased Customer ROI

- Customer Acquisition/Penetration Potential

Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies' performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company's performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 2.

Chart 2: Performance-Based Ratings for Decision Support Matrix
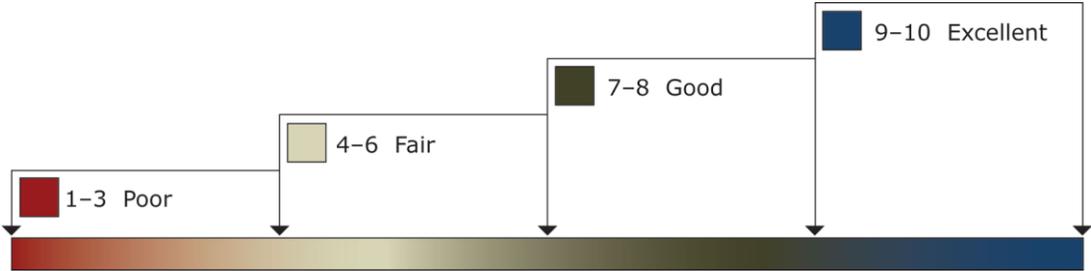
This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

Chart 3: Frost & Sullivan's 10-Step Process for Identifying Award Recipients

Best Practice Award Analysis for Interoute

The Decision Support Matrix, shown in Chart 4, illustrates the relative importance of each criterion for the New Product Innovation Award and the ratings for each company under evaluation. To remain unbiased while also protecting the interests of the other organizations reviewed, we have chosen to refer to the other key players as Competitor 1 and Competitor 2.

**Chart 4: Decision Support Matrix for
New Product Innovation Award**

Measurement of 1–10 (1 = lowest; 10 = highest)	Award Criteria					
	Innovative Element of the Product	Leverage of Leading-Edge Technologies in Product	Value Added Features/Benefits	Increased Customer ROI (small change)	Customer Acquisition/Penetration Potential	Weighted Rating
Relative Weight (%)	**20%**	**20%**	**20%**	**20%**	**20%**	**100%**
Interoute	9	8.5	9	9.5	9.5	9.1
Competitor 1	8.5	8	8.5	8	8	8.2
Competitor 2	8	7.5	8	7.5	8.5	7.9

Criterion 1: Innovative Element of the Product

Interoute's IaaS offering is an automated, on-demand service called the Virtual Data Center (VDC). The VDC provides both public and private cloud on the same platform. This combination is possible because the VDC has been built within Interoute's existing MPLS (Multiprotocol Label Switching) fibre optic network. This unique feature offers end-users the choice of accessing their cloud by using either the public Internet or their private corporate VPN. Therefore, end-users have the flexibility of using private and public cloud simultaneously, or switching between both in real-time when required.

Another important feature of the VDC is that it combines virtualization of both computing resources and the network. Virtualisation of the network refers to the incorporation of the concept of software-defined networking (SDN) across its MPLS network. Network virtualisation is beneficial as it simplifies network management and offers improved scalability.

Frost & Sullivan research reveals that these innovative elements make Interoute's VDC more flexible and secure than both Competitor 1 and Competitor 2.

Criterion 2: Leverage of Leading-Edge Technologies in Product

The VDC offered by Interoute leverages on leading technologies to provide a secure, scalable and easy-to-manage network. The underlying network for the VDC is Interoute's MPLS network. MPLS has been recognized as a standard in the industry for efficient transfer of data.

Interoute focuses on the importance of providing a high quality network to ensure good service in its cloud offering. It has therefore virtualized its network, in addition to providing virtualized computing and storage. Software automation of the network can help create a system whereby Interoute can easily create VDC for individual customers within their already existing private corporate MPLS VPN (Virtual Private Network). This not only ensures privacy in the cloud, but also facilitates better management of data traffic.

Interoute has a well-developed pan-European MPLS network that it uses as a foundation for its virtual data centers. Its focus on creating a secure and reliable network; combining leading edge technologies such as MPLS and SDN differentiates its IaaS offering from its competitors.

Criterion 3: Value Added Features/Benefits

The VDC is an on-demand service offering compute and storage as a service across certified (ISO 27001, ISAE 3402, PCI-DSS) data centers located in Geneva, Amsterdam, Berlin, Paris and London. Customers can control the location of their data and can benefit from redundancy due to the presence of 5 virtual data centers across the continent.

The VDC also has a fully automated backup and disaster recovery system where customers can have both a local (primary VDC) and remote back up (secondary VDC).

VDC customers can also benefit from an additional feature called the Enterprise CloudStore. This is a shared platform where customers can look for popular third-party enterprise applications. Enterprises can also upload their own appliances onto the CloudStore, creating a private and internal applications store.

Criterion 4: Increased Customer ROI

The return on investment for customers from Interoute's VDC accrues mainly from the network underlying its cloud platform.

The VDC helps provide security and flexibility to its customers by enabling the creation of VLAN segregated: multi-tiered networks within firewall-enabled virtual machines. Since Interoute has its own network, there are several other advantages. First, by avoiding network partners - which are a requirement for other competitors - it is able to ensure lower latencies and increased flexibility. Second, it is able to provide customers with the benefit of free movement of data between VDCs.

Interoute's customers also have the opportunity to customize the VDC offering by adapting the service according to their requirements. This service is especially useful for organisations looking to build complex hybrid cloud platforms. Interoute's hosting services for UEFA's (Union of European Football Associations) IT platform, FAME (Football Administration and Management Environment), is an example of Interoute's customisation service.

Interoute's expertise in developing and provisioning network services make VDC more robust compared to Competitor 1 and Competitor 2.

Criterion 5: Customer Acquisition/Penetration Potential

Interoute already has a strong presence in Europe as a telecommunications provider, operating in 29 countries with a vast backbone network and Metropolitan Area Network (MAN) covering more than 60,000 kilometers.

Since the VDC is integrated into this network, it has strong customer acquisition potential from existing customers of the Interoute network. Customers of Interoute's MPLS network can choose to add a data center, which can be done easily due to virtualization across the network. Apart from its expertise in network services, another feature that can attract external customers is the ability to choose from 5 data centers located across Europe.

Interoute's reputation in Europe, its unique approach combining virtualisation in computing and the network make VDC an attractive offering in the European IaaS market.

Conclusion

Interoute's Virtual Data Center (VDC) offering is a flexible and secure infrastructure-as-a-service solution that is integrated with its pan-European MPLS network. This unified approach to computing and network offers customers the potential to access both public and private cloud on the same platform. Interoute has also virtualized both its computing and network, which simplifies the creation of secure, private clouds for customers. Interoute's focus on building resilient networks, ability to provide network services and data centers across different regions in Europe, and initiatives to provide value-added benefits such as CloudStore makes it a worthy recipient of the New Product Innovation Leadership award in the European IaaS market.

The CEO 360-Degree Perspective™ - Visionary Platform for Growth Strategies

The CEO 360-Degree Perspective™ model provides a clear illustration of the complex business universe in which CEOs and their management teams live today. It represents the foundation of Frost & Sullivan's global research organization and provides the basis on which companies can gain a visionary and strategic understanding of the market. The CEO 360-Degree Perspective™ is also a "must-have" requirement for the identification and analysis of best-practice performance by industry leaders.

The CEO 360-Degree Perspective™ model enables our clients to gain a comprehensive, action-oriented understanding of market evolution and its implications for their companies' growth strategies. As illustrated in Chart 5 below, the following six-step process outlines how our researchers and consultants embed the CEO 360-Degree Perspective™ into their analyses and recommendations.

Chart 5: The CEO's 360-Degree Perspective™ Model Research

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 6: Benchmarking Performance with TEAM Research
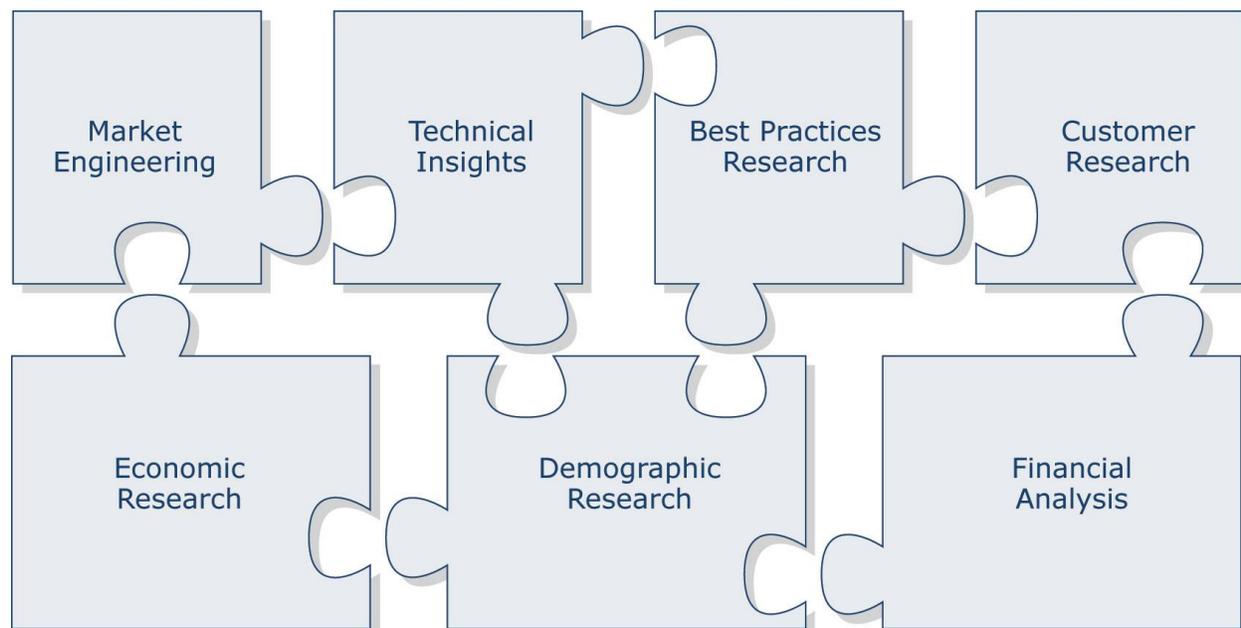
About Frost & Sullivan

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.