



**2014 Global Carrier Ethernet Testing
Customer Value Leadership Award**



F R O S T & S U L L I V A N



50 Years of Growth, Innovation & Leadership

Background and Company Performance

Industry Challenges

With the growing popularity of Carrier Ethernet, service providers across the world extensively use this networking technology to deliver their network services to end users. Carrier Ethernet has also emerged as the technology of choice for enterprises migrating to private cloud-based infrastructures. In such a scenario, it has become vital for service providers to ensure their network performance and reliability meet customer expectations. In addition to ensuring effective and fast deployment of Carrier Ethernet network services, service providers are also required to make sure that they successfully meet their service level agreements (SLAs) in order to deliver maximum customer value.

Although a number of companies provide test instruments that help in the effective deployment of Carrier Ethernet services, a majority of the test vendors fail to offer a comprehensive solution that can monitor and manage the Ethernet circuits without interfering with the customers' existing infrastructure. For instance, a few of the companies require the installation of additional hardware devices at customer sites to monitor the performance of the Ethernet services.

Hence, in order to address this issue, companies that are able to deliver comprehensive test solutions that can manage the Ethernet circuits without interfering with a customer's existing infrastructure succeed in creating a competitive edge for themselves in the global Carrier Ethernet testing market.

Customer Value and Implementation Excellence of Veryx Technologies

Ability to Deliver Total Customer Experience

Although a relatively small company, Veryx has established a distinct position for itself in the global test and measurement industry. The company offers an impressive portfolio of test solutions, which include from legacy testing solutions for Layer 2/3 protocols to the emerging Cloud, Software-defined Networking (SDN) and Network Function Virtualization (NFV) standards. In recent years, the company has been focusing more on developing conformance testing solutions for Metro Ethernet Forum (MEF) standards. Having played an active role during the development of testing methodologies for MEF standards, Veryx boasts an unmatched understanding of MEF CE 2.0 and the earlier MEF 9 and 14 standards. Using its domain expertise in MEF standards, the company is currently focusing on catering to service providers who are deploying Carrier Ethernet-based network services utilizing MEF-based technologies.

With a concentrated focus on catering to the Carrier Ethernet testing needs of service providers, Veryx introduced its flagship product, [SAMTEST](#), for service assurance. This comprehensive solution offers test and measurement based on MEF CE 2.0, ITU-T Y.1564 and ITU-T Y.1731 standards, enabling carriers and service providers to ensure network reliability before the actual roll-out and reduce 'Mean-time-to-Repair' after roll-out. Specifically, the solution addresses various challenges faced by service Providers during service design, service activation, monitoring and troubleshooting. Additionally, SAMTEST can also be adopted by cloud service providers to ensure that their network services meet customer expectations and help enterprises with network performance when migrating to cloud based infrastructure.

With the introduction of the [SAMTEST](#) solution, Veryx has been able to drastically reduce the time and effort required to manage Ethernet circuits. Hence, by using this solution, service providers can ensure quick and effective activation as well as diagnosis of their Ethernet-based network services. Additionally, the product can also be used by service providers offering data center co-location services efficiently to meet their customer SLAs.

Focus on Delivering High Product Value

In addition to offering a product portfolio for legacy testing, Veryx demonstrates a strong focus on catering to the emerging market needs and challenges. This is evident from the company's dedication to building a strong expertise in MEF standards. Veryx boasts a deep understanding of these standards, which is primarily driven by its active participation in the MEF standards development process. The company specifically designed its conformance suite in partnership with the official MEF test laboratory that provides certification for original equipment manufacturers (OEMs) and service providers (SPs) on their MEF circuits.

Using its deep insight into the MEF standards, the company developed its flagship test platform, SAMTEST, which provides service providers the ability to ensure high reliability in their network services. The SAMTEST platform is currently available in two versions: SAMTEST for network services and SAMTEST for cloud services.

SAMTEST for network services is a solution that allows service providers to ensure quick, accurate - activation and troubleshooting of their network services. The platform supports test and measurement based on a variety of standards, including MEF CE 2.0, MEF 9, MEF 14, Y.1564, RFC 2544, 802.1 ag and Y.1731. Designed to manage all Ethernet-based network service types, such as E-line, E-LAN, E-Tree and E-Access, this test solution can quickly categorize network issues, leading to fast diagnostics and reporting.

Veryx SAMTEST is fully aligned with MEF CE 2.0 and carriers use this solution to ensure that the quality of the service is maintained for each service they turn-up. Getting the service certified for MEF CE 2.0 is only the first step. As carriers continue to offer services

and circuits over time to more customers, the equipment and configurations they use tend to vary, apart from the operational changes. Hence the challenge is for these carriers to ensure that they offer the same configurations and quality of service that they got certified for.

While this proactive way of service assurance is applicable for all service types, it is extremely important in wholesale E-Access scenarios. A solution like SAMTEST which verifies the MEF E-Access requirements, would be of immense value to the wholesale providers. The partnering nature of these services, wherein a customer circuit could originate and terminate in multiple carrier territories, requires continuous circuit architecting precision to ensure customer satisfaction, and quick resolution of circuit problems. SAMTEST provides service providers a simple, flexible and affordable way to manage these premium services with tremendous operational efficiencies. With SAMTEST, the wholesale service providers can be confident that each of the E-Access products purchased from several access partners in various regions, meet the same SLA commitments. Similarly, the solution provides a way for wholesale access providers who sell the circuits to their partners to demonstrate each of their circuit SLAs.

SAMTEST for cloud services, on the other hand, is designed for service providers that provide data center co-location services. Various issues might crop up while service providers help enterprises migrate to cloud infrastructure. These issues typically include performance degradation, interoperability between equipment and incompatibilities in configurations. The inability to diagnose these issues in time might lead to customer dissatisfaction. SAMTEST for cloud services provides performance testing and troubleshooting, enabling service providers to effectively meet their SLAs and delivering high customer value.

Superior Ownership Experience

Veryx has designed its SAMTEST solution with a view to delivering enhanced value to its target customer base comprising service providers offering Ethernet-based network services. As a relatively new product, the SAMTEST solution has been demonstrated by Veryx to a handful of potential customers across the globe. These include two well-known North American carriers -- one of them has already been using the solution for 6 months, while the other is currently in the implementation phase. All of the other potential customers have shown interest in the solution, and are in various stages of evaluation.

Such a high level of interest in the SAMTEST solution displays the high value proposition offered by the product. With a return on investment (ROI) period of approximately 3 months, the SAMTEST solution has proved to reduce customer time and efforts in managing Ethernet circuits by almost 80%. Additionally, the fact that the product can gather measurements from the network's existing equipment, and provide the required insight without the need for any additional hardware installation, further enhances

customer value. To further enhance the ownership experience of its customers, Veryx offers timely and efficient technical assistance services across the globe through both phone and email. The company also offers a library of product literature that aim to help customers understand and get familiarized with its products.

Strong Vision Alignment

With experience of just over a decade, Veryx has established a significant position for itself in the global test and measurements market. Starting with just a single product, the company now boasts a portfolio of test solutions that support legacy as well as new and advanced network technologies. The success of the company is primarily driven by a highly dedicated and experienced management team that displays a deep understanding of the market along with a strong customer-focused approach. The combined expertise of the management executives, which spans a variety of communication technologies, has enabled the company to continuously identify emerging market trends, needs, and challenges. Such a deep market understanding showcases the company's vision to consistently develop innovative test solutions in order to cater to the ever-changing market requirements, while supporting customers with timely and efficient technical assistance services.

Technological Sophistication

One of the key strengths enjoyed by Veryx is its strong technological expertise. Over a span of about 12 years, the company has gradually enhanced its technological capabilities in line with the emerging market trends. Starting with test solutions for legacy technologies, such as Layer 2/3 testing protocols, the company currently offers one of the industry's most advanced solutions for Carrier Ethernet testing—SAMTEST apart from the latest solutions for SDN, NFV and Cloud. This product, which currently caters to the testing needs of service providers who offer Ethernet-based network services, is designed in a manner to support the testing needs of carriers who offer Business Ethernet Services, Mobile Backhaul Services and Wholesale Access Services apart from enterprises themselves who are considering transitioning their mission-critical applications to private cloud infrastructure and other such as Ethernet exchange providers and MSOs, who provide data center co-location facilities to a cloud service providers.

In addition to SAMTEST, Veryx also offers a suite of legacy testing solutions that boasts over 500 licenses in the global market. The company currently serves over 100 customers across the globe, most of which are well-known carriers, communication service providers and communication equipment manufacturers. Such a strong customer base testifies to the company's superior technological capabilities as well as its focus on developing highly innovative test solutions.

Company Culture

Veryx is a growing company, with about 100 employees across the globe. With engineers constituting approximately 80% of the company's employee base, Veryx displays a strong focus on fostering a technology-focused work environment. With a management team that boasts extensive expertise in the communications industry, combined with an employee base with strong technical skills, Veryx exhibits a dedicated focus on introducing some of the industry's most innovative and technologically advanced test solutions. In addition to its objective to develop innovative products, the company also encourages a strong customer-focused work culture. This has resulted in its ability to offer world-class customer support services, which in turn has significantly contributed to the high loyalty enjoyed by the company across its global customer base.

Conclusion

With a comprehensive portfolio of test solutions supporting both legacy and emerging network technologies, Veryx has established a distinct position for itself in the global test and measurements industry. With a recent focus on developing a strong expertise in MEF conformance testing, the company has introduced its flagship product, [SAMTEST](#). This innovative product is specifically targeted at service providers offering carrier Ethernet-based services to enterprises and other customers. Driven by the manifold benefits offered by this test solution, in terms of features, fast ROI, and timely diagnostics of network issues, [SAMTEST](#) has emerged as one of the most desired solutions for carrier Ethernet testing. Considering its focus on offering such a solution, which has been developed in line with customer requirements, Veryx has been chosen as the worthy recipient of the 2014 Frost & Sullivan Customer Value Leadership Award in the Global Carrier Ethernet Testing Market.

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree 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 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

Decision Support Scorecard and Matrix

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard and Matrix. This analytical tool compares companies' performance relative to each other. It 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. This tool allows our research and consulting teams to objectively analyze performance, according to each criterion, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation.

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