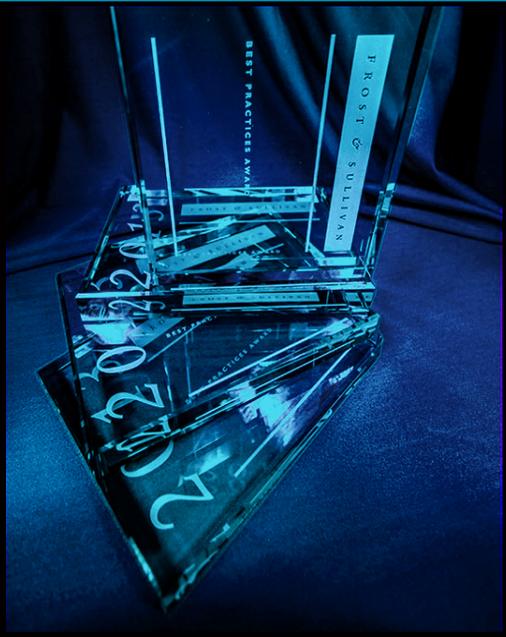


# ManageEngine

## 2016 Global Application Performance Management Price/Performance Value Leadership Award



FROST & SULLIVAN

BEST  
2016 PRACTICES  
AWARD

GLOBAL  
APPLICATION PERFORMANCE MANAGEMENT  
PRICE/PERFORMANCE VALUE LEADERSHIP

2016  
BEST PRACTICES  
AWARDS

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## Background and Company Performance

### *Industry Challenges*

Current network complexity has given rise to a host of concerns that need to be addressed promptly by service providers and enterprises to optimize network performance. With technological advancements, the volume of data traffic is increasing exponentially. Frost & Sullivan points out that network operators are unable to precisely monitor network performance - thus creating massive errors and limiting network visibility for enterprise customers.

A more holistic software-oriented platform must be implemented to enable precision in monitoring networks to improve the performance of business-critical applications. Using conventional monitoring solutions available in the market merely amounts to higher end-user dissatisfaction due to their meager capability to depict average data traffic and other related statistics, without enabling customers to dig deeper into the real network problems.

Both private and public enterprises report to Frost & Sullivan that they are looking for a comprehensive solution that will help eliminate the need for additional tools and overhead costs and assist in simplifying the management of applications running over complex network infrastructures. Many companies are purely focused on application performance management (APM) areas and not on server monitoring, which further results in a huge loss for network operators due to the use of a generic monitoring solution that does not assess the quality of the network infrastructure properly and does not facilitate network performance optimization. The ability to obtain clear details of the overall application's performance from an end-user perspective is in demand.

In addition, in the face of the network becoming virtualized with increasing technological complexity, enterprise customers are vying for a real-time monitoring solution that can effectively map network performance in a granular manner. This need is a key business driver for companies that can develop a holistic network analytics solution that identifies network problems in a detailed manner and with ease from the huge amount of data traffic available. Thus, Frost & Sullivan believes that companies that properly develop robust real-time analytics solutions that promptly examine every single packet flowing through the network are positioned to ensure network performance optimization.

Moving forward, companies need to gain control of the end-user experience to understand how applications and the network affect service quality. Accordingly, solutions that unify the management of applications, infrastructure, and networks will prevail and deliver even more value. In today's highly competitive market, separately analyzing the network and the applications is a clear mistake. In such a scenario, companies that offer comprehensive, client-focused monitoring solutions (providing visibility across all tiers of the application infrastructure, including Web servers, application servers, networks, databases, and storage) enjoy a better position to sustain and grow in the APM market.

## *Price/Performance Attributes and Customer Impact of APM*

### **Functionality**



ManageEngine, an operational division of Zoho Corp, is an outright leader in the global APM market due to its persistent drive to tap into and analyze the untapped network data of its end users. Incredibly strong in its technological abilities, ManageEngine has delivered huge customer satisfaction by providing one of the most comprehensive application management solutions that covers every aspect of infrastructure management.

To ensure the highest levels of performance of the network infrastructure, ManageEngine has introduced 4 solutions in 1: Web site monitoring, Web application performance monitoring, server monitoring, and on-premise and cloud-based solutions. ManageEngine's solution is quite unique in managing and looking into transactions and understanding how they perform in the application. To respond to the most demanding end-user requirements in the APM space, ManageEngine has introduced 2 main products: Applications Manager and Site24x7.

Applications Manager is an on-premise solution for physical, virtual, and cloud environments. This platform identifies slow transactions and the problem's root cause, reducing troubleshooting time in dynamic environments. ManageEngine clients have been able to reduce their help desk calls by at least 30%. This solution offers a comprehensive value proposition to network operators, wherein they can gain deeper visibility into the performance of business-critical applications with microsecond precision. Applications Manager provides real end-user monitoring within the datacenter. The product is downloaded directly from the company's Web site, and the user configures the monitoring. Applications Manager has expanded the capabilities of application components, application servers, database monitoring, and server monitoring into virtualization.

Site24x7 is a cloud-based monitoring solution external to the datacenter monitoring the end-user experience of Web applications from different geographical locations, including more than 50 locations worldwide. Site24x7 is uniquely positioned to identify problems and monitor performance in various locations -such as different branches. Installing or downloading the solution is not needed.

Both products have 4 major modules: automated application discovery and dependency mapping, application and system performance monitoring, end-user experience monitoring, and mobile APM. The 'mobile APM' feature is available only in Site24x7. The 'Automated application discovery and dependency mapping' feature is available only in Applications Manager.

The automated application discovery and dependency mapping module provides detailed insights on the relationships between applications and fundamental components. Users can generate a dependency map between different applications and components that shows clear visibility and which applications are related to specific databases and Web servers. Having a separate product to perform the mapping and integrate it as part of the APM solution is not needed, as this is nicely embedded into the product. With the application and system performance monitoring module, ManageEngine expanded its portfolio into applications servers and databases. ManageEngine's philosophy is to offer the entire monitoring performance of the business infrastructure as part of a single product, without users needing to install different point solutions. Frost & Sullivan notes that other solutions require

different databases, server streams, and virtualization as separate tools. ManageEngine combines all of these into a single clever monitoring tool that provides performance insights into the IT environment.

ManageEngine provides real end-user monitoring at the server side. With a holistic capability that exceeds competing solutions with regards to end-user monitoring, ManageEngine's APM platform provides an agent-based instrumentation technology that monitors user transactions end-to-end across the application infrastructure in real time. The enriched functionalities of this platform allow operators to monitor transactions end-to-end through code analysis and rapidly isolate performance issues. ManageEngine's unique solution has server-side monitoring and can recognize SQL queries performed during transactions and find the poorest performing database queries. Moreover, ManageEngine's platform has the potential to offer considerable granularity into response time from a network perspective (including resolution and connection time).

The capability of ManageEngine's APM tools to retain data longer than the industry (data storage for 90 days) and the possibility for storing data even longer by changing the settings allow the company to further strengthen its competitive position in the market through high growth potential.

### **Ease of Use**

ManageEngine has demonstrated the unique capability to meet the market needs with its best-in-class, easy-to-deploy solution. The solution's implementation process does not involve a steep learning curve, and configuration of agents and resources is not needed.

ManageEngine's highly flexible platform provides extensive visibility of the response time, time server, and application performance over the browser level required by the operator. ManageEngine allows users to work with end-to-end visibility of the application with anomaly detection and predictive analysis. The company defines a baseline value for a particular application. A subsequent performance is then compared to this net value, and anomalies are rapidly identified and adjusted.

Moreover, ManageEngine's highly flexible platform allows for the customization of intuitive dashboards. Users can create a dashboard for any attribute for a particular application or service. Specialized views are customized into the product to track critical applications that need to run all the time. In addition, customized report capabilities are available. Applications Manager and Site24x7 have over 100 report modules. These reports can be dragged to the dashboard, downloaded as a pdf file, and emailed to IT personnel. Frost & Sullivan research tracks how this solution's unique ease-of-use, simplicity, flexible configuration, and ability to adapt features for customized reports have facilitated its penetration into different customers in North America and worldwide.

ManageEngine has built a simple way of tracking background transactions. According to the company, end users can easily identify slow internal queries and view the entire path in serving the Web request in a tree format. From the map itself, users can drill down into the monitoring stage and the particular details of the application and database and then proceed to the root cause analysis. ManageEngine has made significant inroads in providing root cause analysis directly into



the compound application analysis and determine the performance problem. Users can easily identify the SQL queries completed in the transaction and classify the poorest executing database queries.

Frost & Sullivan applauds how ManageEngine's APM platform truly outperforms legacy monitoring solutions and provides consolidated visibility, prediction, and easy-to-use recorder tools. ManageEngine APM solution's comprehensive ability to capture user paths in an application, record Web transactions, and replay the sequence in a browser is highly remarkable.

### Product/Service Quality



ManageEngine has been quite successful in the APM market due to the execution of its customer-centric strategies. With ManageEngine's APM solution, end users do not need to install agents on the product server or product application.

ManageEngine is not focused on providing a classic monitoring solution. The ability of ManageEngine's APM platform to provide insights into real end-user experience testifies to its potential to acquire an increasing number of customers worldwide. ManageEngine's ability to provide synthetic transaction monitoring and gather application server metrics from the application side attracts increased customer attention towards its APM platform. Users have comprehensive visibility with transaction-level metrics by application, including response time, throughput, and detailed understanding of slowdown causes and how much of the component is contributing to the response time. Users can drill down to the core level transaction for any slowdown.

### Perceived Value

ManageEngine's products offer high quality at an affordable starting price in an annual subscription, which is clearly superior to many offerings available in the APM market. The Applications Manager Professional Edition starts at \$795 for monitoring up to 25 applications. The company's strategy to offer the best price value at a fraction of the current price of other APM companies provide has positioned it in a leading market position, with strong double-digit yearly growth. ManageEngine is in a unique position to support customers beyond Fortune 500 that are deploying the APM technology to grow their business and need to optimize their infrastructure with a faster and more cost-effective solution than available solutions.



### Customer Purchase Experience



In the present network environment where operators are still lagging behind and looking for a solution for ensuring best-in-class customer purchase experience and service delivery, ManageEngine's APM platform is a highly differentiated offering, the result of high investments in R&D. Compared to its other competitors, ManageEngine has adopted a deep focus on development - with around 40% of its revenue allocated to R&D activities.

In the APM market, ManageEngine addresses customers' unmet needs with acute efficiency. Enterprise customers are seeking solutions that can promptly assist in troubleshooting and identifying network areas requiring adjustments. Rightly identifying this challenge, ManageEngine used its technological expertise to develop an intuitive APM platform with superior ease-of-use. In complex environments, users can easily obtain actionable performance metrics in a few minutes of operation.

In addition, ManageEngine has implemented the concept of the Apdex score formulated by the Apdex Alliance to reflect the user experience and transaction level. The Apdex score (on a scale from 0 to 1) converts into an index over a period of time and shows user satisfaction and perception of the Web application based on the application responsiveness. The score has different categories such as "satisfied," "tolerating" and "frustrated." With this platform, users can measure customer satisfaction and identify if the user experience is optimal, offering customers a superior experience.

## *Conclusion*

ManageEngine's Applications Manager and Site24x7 provide customers with an end-to-end application management solution that covers every aspect of infrastructure management at an unbeatable price and performance in the APM market. Facing the imperative need to scale up operations for transmitting huge data traffic loads, enterprises have chosen ManageEngine's APM platform; it accurately and smartly monitors at the browser level to determine the application performance as perceived by end users.

With its strong overall price performance, ManageEngine has earned the 2016 Frost & Sullivan Global Price/Performance Value Leadership Award.

## Significance of Price/Performance Value Leadership

Ultimately, growth in any organization depends upon customers' purchases from a company and then making the decision to return time and again. A key component of customer retention is the delivery of a high-quality product at a reasonable price. To achieve these dual goals (customer engagement and price/performance), an organization must strive to be best in class in three key areas: understanding demand, nurturing the brand, differentiating from the competition.



## Understanding Price/Performance Value Leadership

Best-in-class organizations are particularly successful in two critical areas: first, helping customers to appreciate and enjoy the product at every price point; and second, ensuring that customers perceive a demonstrable difference in performance features at every escalating price point. Ultimately, this balance allows companies to profitably deliver a variety of product options to customers, differentiate the product suite, and compete at every level of the market.

## Key Benchmarking Criteria

For the Global Price/Performance Value Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Price/Performance Attributes and Customer Impact—according to the criteria identified below.

### Price/Performance Attributes

- Criterion 1: Functionality
- Criterion 2: Ease of Use
- Criterion 3: Product/Service Quality
- Criterion 4: Performance Reliability
- Criterion 5: Prioritization of Features

### Customer Impact

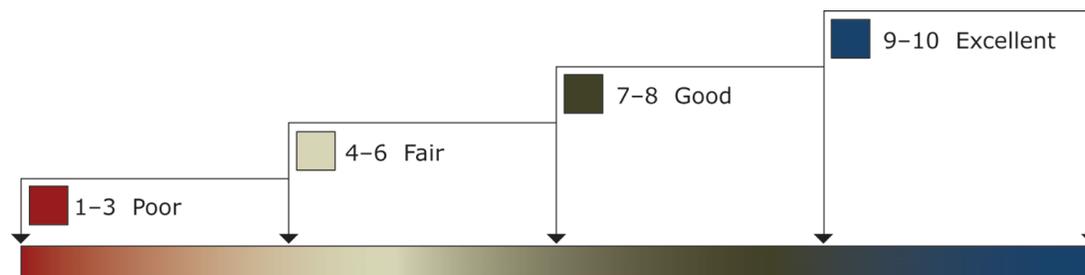
- Criterion 1: Perceived Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

## Best Practice Award Analysis for ManageEngine

### Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows our research and consulting teams to objectively analyze performance, according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are illustrated below.

#### RATINGS GUIDELINES



The Decision Support Scorecard is organized by Price/Performance Attributes and Customer Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criteria are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms 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.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, we have chosen to refer to the other key players in as Company 2 and Company 3.

<i>Measurement of 1-10 (1 = poor; 10 = excellent)</i>			
<b>Price/Performance Value Leadership</b>	Price/Performance Attributes	Customer Impact	<b>Average Rating</b>
<b>ManageEngine</b>	<b>9.0</b>	<b>9.0</b>	<b>9.0</b>
Competitor 2	8.5	8.6	8.6
Competitor 3	8.2	7.8	8.0

## *Price/Performance Attributes*

### **Criterion 1: Functionality**

Requirement: The product offers enhanced functionality to serve the broadest range of applications

### **Criterion 2: Ease of Use**

Requirement: Customers typically feel that the products are easy to use to generate optimal performance

### **Criterion 3: Product/Service Quality**

Requirement: Products or services offer the best quality for the price, compared to similar offerings in the market

### **Criterion 4: Performance Reliability**

Requirement: The product consistently meets or exceeds customer expectations for performance over its life cycle

### **Criterion 5: Prioritization of Features**

Requirement: The features that customers most value and expect are most commonly available and most aggressively priced

## *Customer Impact*

### **Criterion 1: Perceived Value**

Requirement: Customers typically feel that they received more from the product or solution than they paid for it

### **Criterion 2: Customer Purchase Experience**

Requirement: Customers feel like they are buying the most optimal solution that addresses both their unique needs and their unique constraints

**Criterion 3: Customer Ownership Experience**

Requirement: Customers are proud to own the company’s product or service, and have a positive experience throughout the life of the product or service

**Criterion 4: Customer Service Experience**

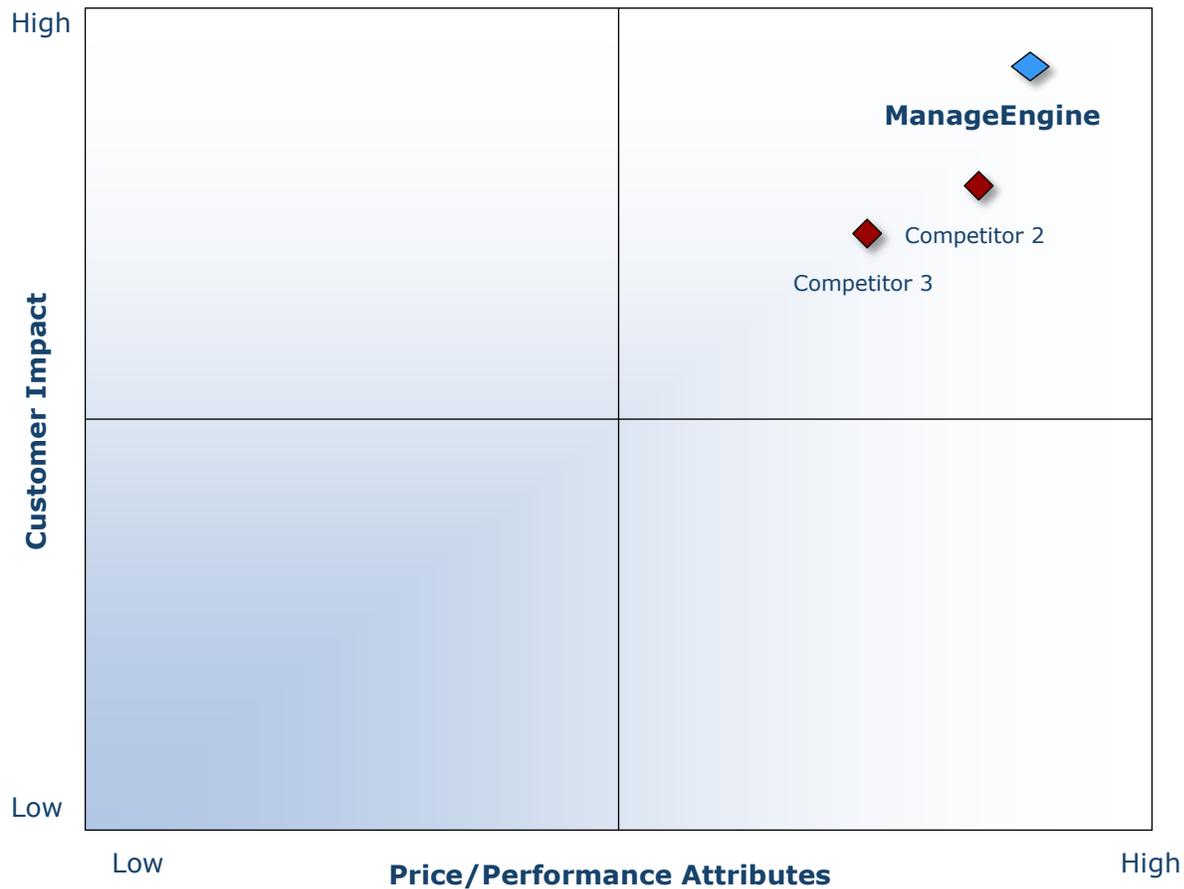
Requirement: Customer service is accessible, fast, stress-free, and of high quality

**Criterion 5: Brand Equity**

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty

*Decision Support Matrix*

Once all companies have been evaluated according to the Decision Support Scorecard, analysts can then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.



## 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.

### 360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



## Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan Awards follow a 10-step process to evaluate Award candidates and assess their fit with our best practice criteria. The reputation and integrity the Awards are based on close adherence to this process.

STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1 <b>Monitor, target, and screen</b>	Identify Award recipient candidates from around the globe	<ul style="list-style-type: none"> <li>Conduct in-depth industry research</li> <li>Identify emerging sectors</li> <li>Scan multiple geographies</li> </ul>	Pipeline of candidates who potentially meet all best-practice criteria
2 <b>Perform 360-degree research</b>	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> <li>Interview thought leaders and industry practitioners</li> <li>Assess candidates' fit with best-practice criteria</li> <li>Rank all candidates</li> </ul>	Matrix positioning all candidates' performance relative to one another
3 <b>Invite thought leadership in best practices</b>	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> <li>Confirm best-practice criteria</li> <li>Examine eligibility of all candidates</li> <li>Identify any information gaps</li> </ul>	Detailed profiles of all ranked candidates
4 <b>Initiate research director review</b>	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> <li>Brainstorm ranking options</li> <li>Invite multiple perspectives on candidates' performance</li> <li>Update candidate profiles</li> </ul>	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 <b>Assemble panel of industry experts</b>	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> <li>Share findings</li> <li>Strengthen cases for candidate eligibility</li> <li>Prioritize candidates</li> </ul>	Refined list of prioritized Award candidates
6 <b>Conduct global industry review</b>	Build consensus on Award candidates' eligibility	<ul style="list-style-type: none"> <li>Hold global team meeting to review all candidates</li> <li>Pressure-test fit with criteria</li> <li>Confirm inclusion of all eligible candidates</li> </ul>	Final list of eligible Award candidates, representing success stories worldwide
7 <b>Perform quality check</b>	Develop official Award consideration materials	<ul style="list-style-type: none"> <li>Perform final performance benchmarking activities</li> <li>Write nominations</li> <li>Perform quality review</li> </ul>	High-quality, accurate, and creative presentation of nominees' successes
8 <b>Reconnect with panel of industry experts</b>	Finalize the selection of the best-practice Award recipient	<ul style="list-style-type: none"> <li>Review analysis with panel</li> <li>Build consensus</li> <li>Select winner</li> </ul>	Decision on which company performs best against all best-practice criteria
9 <b>Communicate recognition</b>	Inform Award recipient of Award recognition	<ul style="list-style-type: none"> <li>Present Award to the CEO</li> <li>Inspire the organization for continued success</li> <li>Celebrate the recipient's performance</li> </ul>	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10 <b>Take strategic action</b>	Upon licensing, company may share Award news with stakeholders and customers	<ul style="list-style-type: none"> <li>Coordinate media outreach</li> <li>Design a marketing plan</li> <li>Assess Award's role in future strategic planning</li> </ul>	Widespread awareness of recipient's Award status among investors, media personnel, and employees

## 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 almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.