FROST & SULLIVAN

2015

2015 North American Data Center Management Customer Value Leadership Award

FROST & SULLIVAN

50 Years of Growth, Innovation & Leadership

Contents

Background and Company Performance

Industry Challenges

Enterprises today face increasing pressure to maximize every available on-premises resource in the data center. Capacity requirements often outpace availability, as both data and storage needs explode due to new services, applications and workloads. And as these new applications are updated to improve performance, even more capacity is required. This often leads to a capital-intense, vastly heterogeneous data center environment, as enterprises add equipment to meet capacity demands. Often, the equipment added is from different vendors or uses different configurations, some physical, some virtualized, and some cloud-based. All of these are managed differently and separately, through different portals with different interfaces from different vendors. The result is a chaotic data center with unsustainable management and budget demands.

The need to easily scale existing infrastructure to accommodate times of peak usage or growth in applications or services instills additional complexity. How can the enterprise data center maintain enough capacity for times of peak usage without overspending for excess capacity that is not immediately used? The need for a capacity cushion can cause overspending of up to 30% in the average enterprise data center, according to industry estimates.

The high cost of maintaining the data center, coupled with capital budget constraints that can limit the ability to replace aging infrastructure, lead many enterprises to seek out solutions such as public cloud computing. The consumption-based pricing, easy scalability, and provider-maintained equipment cures many common data center woes. And yet, cloud-based infrastructure as a service, or IaaS, is not a panacea for all that ails the data center. Workloads that require high security, have strict compliance rules, or simply aren't architected to work well in a cloud environment often remain in an on-premises data center. Most IT leaders consider cloud an adjunct to the data center, not a replacement, and as such they must continue to effectively manage and secure such environments. This leads to hybrid—and often heterogeneous—IT environments. Management and security of hybrid environments represent additional challenge for many data center managers. An effective response to these mounting challenges is critical.

In light of these challenges, many enterprises turn to outside help in managing their data center environments, leading to a rise in data center management services. For example, many providers that have responded with managed IT and data center offers do not meet the full breadth of enterprise demands. Some such services take the form of "break/fix" maintenance contracts. While many vendors will only provide services in conjunction with their own hardware, managed IT suppliers that charge a fixed fee based on endpoints or components have little incentive to optimize resource capacity utilization in a way that reduces the number of components. In addition, vendors that manage on-premises equipment and applications rarely offer easily scalable capacity similar to what is available

in cloud-based environments. Finally, many on-premises equipment offers still require the same up-front capital outlay that is needed when the enterprise manages the equipment itself.

In contrast, HP's Datacenter Care service, and particularly its Flexible Capacity option, addresses enterprise needs for a flexible, cost-effective holistic data center management service. For this reason, Frost & Sullivan awards HP its 2015 Customer Value Leadership award in Data Center Management.

Customer Impact and Business Impact

Criterion 1: Customer Purchase Experience

At the start of a Flexible Capacity engagement, HP analyzes customers' current data center usage and future business requirements, and then tailors a contract to meet those needs, based on a minimum capacity commitment. Upon signing the contract, HP delivers servers, storage, networking devices and software to the customer's premises. HP service delivery managers install and configure the systems, along with metering software that tracks actual usage. Throughout each month, usage data is collected and sent to HP through a secure customer portal. Customers can access data usage in real-time, to monitor their own usage as well.

Pricing is customizable for each enterprise. Capacity can be billed per virtual machine (VM), or per server, storage, network, and software capacity. Enterprises pay only for the capacity that is actually used per month, subject to an agreed-upon monthly minimum that is outlined in the contract. The company places an agreed upon amount of local, on-premises buffer capacity to handle spikes in application traffic or growth requirements. Customers need not pay for this buffer capacity until such time as they use it, and HP agrees to replenish the buffer to maintain the agreed-upon level should capacity requirements dictate. HP also meters capacity and the customer is only billed for the amount used each month above the minimum agreement.

HP's mode of engagement brings a very personal experience to data center procurement, with pricing that mimics the self-service environment of cloud. It enables the IT department to maintain a significant amount of control over workloads, without having to overcommit—or over invest—in upfront equipment purchases.

HP is a leader in that the company is one of the only providers currently creating an offer that enables customers to first tailor on-premises equipment, while only paying for what they use. Competitors that provide or manage on-premises equipment do not offer such "buffer" equipment on the customer's premises without upfront payment, or without recovering all of the payment through fixed lease payments.

Criterion 2: Customer Ownership Experience

Enterprises pay only for the capacity that is actually used per month, subject to an agreed-upon monthly minimum that is outlined in the contract. HP's metering, which is delivered through a third-party application, tracks usage at a very granular level, down to the individual VM if configured to do so. After the monthly contractual minimum is met, HP bills customers monthly for any additional capacity that may have been used. Depending upon the Flexible Capacity service level that the customer selects, HP can also allow customers to shrink capacity as needed, based on business requirements.

HP Flexible Capacity mitigates risk for enterprises by allowing them to pay only for what they use each month. This allows customers to commit to a lower monthly minimum, because they are assured that additional capacity will be available on an as-needed basis, at a moment's notice, to meet changing business requirements. This reduces the need to overspend to assure availability of capacity, which can sometimes account for up to 30% of an enterprise's infrastructure spending.

In addition, because the infrastructure is provided by HP as part of the service, IT may be able to shift infrastructure from being a capital expense to an operating expense, despite the fact that resources deployed remain primarily physical in nature. With budgets remaining tight throughout most IT departments, reducing capital expenditures in favor of higher operating expense is a benefit.

Finally, the Flexible Capacity service often enables IT to more quickly accommodate deployment of new applications and workloads, since infrastructure to support such initiatives is already on the premises. Service delays based on long infrastructure procurement cycles are not a concern for customers that use the Flexible Capacity service.

The entire Flexible Capacity service is designed to make "ownership" easy from the customer's perspective. Technical engineers work with each customer to design a suite of on-premises services that best meet the business's needs, without over-commitment. But, the availability of buffer capacity ensures that the customer is never without resources when they are needed.

Most competitors will design personalized configurations for their customers, but require upfront payment for equipment with monthly recurring revenue for service maintenance. There is often an option to lease the equipment, but that does not deliver all of the features of HP's consumption model. HP's Flexible Capacity provides a pay-as-you-use model for on-premises equipment—a rarity in the data center market today.

Criterion 3: Brand Equity

In the Flexible Capacity service, HP has capitalized on its long-standing reputation as a solid hardware vendor. The processes that the company has evolved through sales and

provisioning of traditional hardware have helped to inform the Flexible Capacity offer, and customers leveraging HP for this service are reaping the benefits.

At a time when many competitors are turning their focus to cloud computing, HP has honed this data center management offer that recognizes the need to retain on-premises hardware and leverages its strong history in that arena.

Criterion 4: Customer Acquisition

HP has taken a dual approach to customer acquisition, targeting enterprises, which represent approximately 60% of its customer base, as well as service providers, which represents 40% of its base. HP reports that the service grew 100% year-over-year in 2014 and the company expects similar growth in 2015.

While an effective and economical offer for enterprises interested in keeping some IT on its own premises, channel partners are also big winners with this offer. Benefits to channel partners include:

- Improved commission structure – HP structures Flexible Capacity with an initial three- or four-year contract term. Channel partners are able to resell Flexible Capacity or use Flexible Capacity to convert part of their business to become a services provider. Channel Partners can recognize hardware orders upfront and get an upfront fee paid for the services, maintaining the up-front revenue stream that comes from traditional deals, while offering their customers an attractive, consumption-based payment model. Cloud deals that offer similarly priced infrastructure to end users typically only offer commissions on the small, monthly revenue number—a payment structure that has caused significant revenue losses for many channel partners.

- Higher-level Customer Conversations – By offering Flexible Capacity, channel partners are able to focus more on their enterprise customers' business goals and desired outcomes, rather on a major capital outlay project that drives higher commission. Partners can leverage the cost efficiencies of a consumption-based model, which moves costs from the capital balance sheet to the operating expense balance sheet—an outlay many customers may find easier to justify within the business.

It's rare in the data center market to find a provider supporting offers that enable consumption-based pricing for the end user, while preserving upfront revenue for partners. It is a unique channel partner offer that mitigates the revenue issues that cloud services pose to partners.

Criterion 5: Operational Efficiency

HP's entire Flexible Capacity offer is based on the tenet that HP's service delivery team is very effective in helping customers operate in their data centers with minimal waste, because of the Datacenter Care component. By managing capacity in a very lean fashion, HP is able to charge the customer upfront for only the monthly commitment, while effectively estimating the buffer capacity usage that will be billed on a monthly basis.

In sharing the risk for unused capacity with enterprise customers, HP displays confidence in its ability to efficiently help the customer manage the on-premises data center and provide improved productivity in a way that is cost-effective to all involved.

Few competitors are able to create a consumption-priced service for on-premises equipment that maintains effective profit margins without becoming a commodity. HP excels in this area.

Criterion 6: Growth Potential

In a time when equipment prices are continuing to fall and data center infrastructure is increasingly viewed as a commodity, HP's sacrifice of additional equipment purchases for over-capacity planning is a smart move made in favor of a more consistent stream of ongoing, usage-based revenue. It also helps to ensure that current customers remain in the HP fold, rather than moving to a lower-cost equipment provider.

Since its launch in 2012, HP reports that demand has grown more than 100%, a trend HP expects to exceed in 2015—a testament to the success of the Flexible Capacity service.

With its Flexible Capacity offer, HP has taken a bold step toward addressing enterprise desire for a cloud-like experience in the on-premises data center. The offer demonstrates that HP recognizes the need for IT to:

- Retain on-premises infrastructure for security, compliance and performance reasons
- Optimize on-site infrastructure in order to maximize ROI
- Move to a consumption-based payment model that only requires payment for resources actually consumed.

- Quickly to support new business initiatives and opportunities without waiting for long procurement cycles.

As such, the Flexible Capacity offer is expected to enjoy continued growth and be a model worthy of attention from both customers and other vendors. Today, it is a paradigm that is not common to the data center marketplace, with few if any competitors leveraging it.

Conclusion

HP leverages its stronghold in the enterprise data center with its Datacenter Care Flexible Capacity service, assuring continued demand for its infrastructure products as well as revenue from high-value management services. In a time when equipment prices are continuing to fall and data center infrastructure is increasingly viewed as a commodity, HP's sacrifice of additional equipment purchases for over-capacity planning is a smart move made in favor of a more consistent stream of ongoing, usage-based revenue. It also helps to ensure that current customers remain in the HP fold, rather than moving to a lower-cost equipment provider.

In sharing the risk for unused capacity with enterprise customers, HP displays confidence in its ability to efficiently manage the on-premises data center and provide improved productivity in a way that is cost-effective to all involved.

HP Flexible Capacity is also a boon for channel partners. The resale structure with Flexible Capacity alleviates the common loss of up-front commission. It also allows the partner to elevate customer conversations to include strategic business goals and outcomes while delivering significant cost efficiencies that come along with consumption-based pricing.

The HP Flexible Capacity offer is distinctive in today's IT marketplace. With its strong overall performance, HP has earned Frost & Sullivan's 2015 Customer Value Leadership Award.

Significance of Customer Value Leadership

Ultimately, growth in any organization depends upon customers purchasing from your company, and then making the decision to return time and again. Delighting customers is therefore the cornerstone of any successful growth strategy. To achieve these dual goals (growth and customer delight), an organization must be best-in-class in three key areas: understanding demand, nurturing the brand, and differentiating from the competition.

Understanding Customer Value Leadership

Customer Value Leadership is defined and measured by two macro-level categories: customer impact and business impact. These two sides work together to make customers feel valued, and confident in their products' quality and long shelf life. This dual satisfaction translates into repeat purchases and a high lifetime customer value.

Key Benchmarking Criteria

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

Customer Impact

Criterion 1: Price/Performance Value
Criterion 2: Customer Purchase Experience
Criterion 3: Customer Ownership Experience
Criterion 4: Customer Service Experience
Criterion 5: Brand Equity

Business Impact

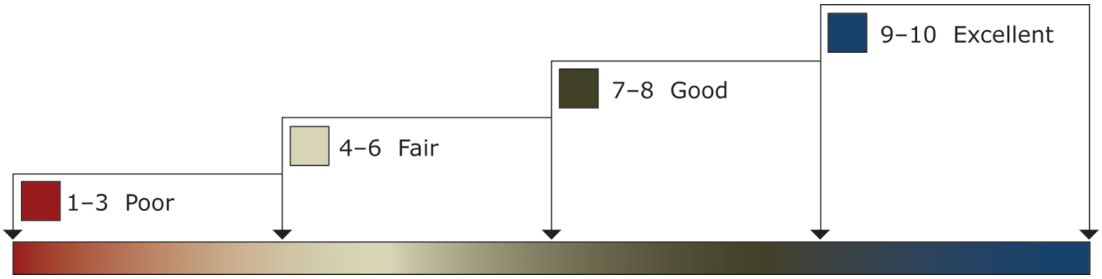
Criterion 1: Financial Performance
Criterion 2: Customer Acquisition
Criterion 3: Operational Efficiency
Criterion 4: Growth Potential
Criterion 5: Human Capital

Best Practice Award Analysis for HP

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 Customer Impact and Business 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 as Competitor 2 and Competitor 3.

DECISION SUPPORT SCORECARD FOR CUSTOMER VALUE LEADERSHIP AWARD

Measurement of 1–10 (1 = poor; 10 = excellent)			
Customer Value Leadership	Customer Impact	Business Impact	**Average Rating**
HP	10	9	9.5
Competitor 2	7	6	6.5
Competitor 3	7	7	7

Customer Impact

Criterion 1: Price/Performance Value
Requirement: Products or services offer the best value for the price, compared to similar offerings in the market

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

Business Impact

Criterion 1: Financial Performance
Requirement: Strong overall financial performance in terms of revenues, revenue growth, operating margin and other key financial metrics

Criterion 2: Customer Acquisition
Requirement: Customer facing processes support the efficient and consistent acquisition of new customers, even as it enhances retention of current customers

Criterion 3: Operational Efficiency
Requirement: Staff is able to perform assigned tasks productively, quickly, and to a high quality standard

Criterion 4: Growth Potential

Requirements: Customer focus strengthens brand, reinforces customer loyalty and enhances growth potential

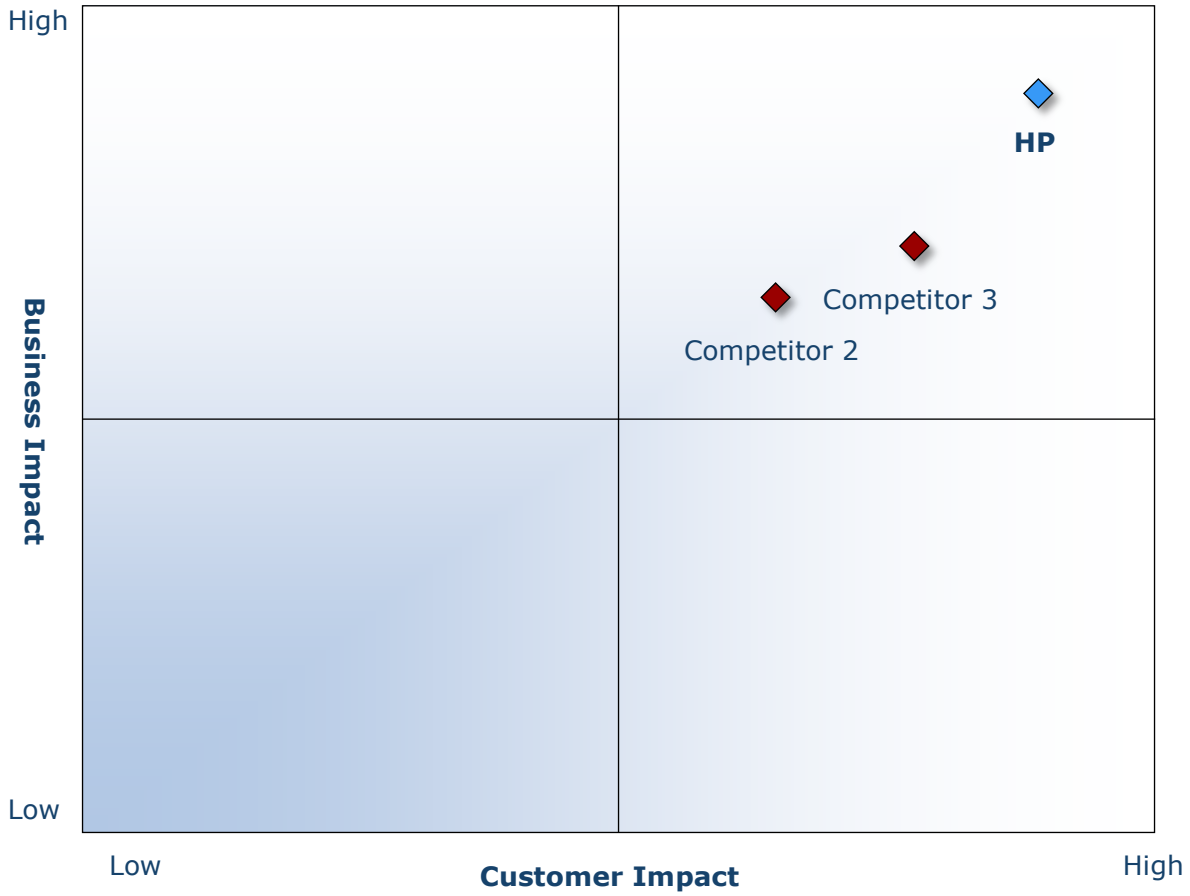
Criterion 5: Human Capital

Requirement: Company culture is characterized by a strong commitment to quality and customers, which in turn enhances employee morale and retention

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.

DECISION SUPPORT MATRIX FOR CUSTOMER VALUE LEADERSHIP AWARD



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 select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

STEP		OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	**Monitor, target, and screen**	Identify award recipient candidates from around the globe	• Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies	Pipeline of candidates who potentially meet all best-practice criteria
2	**Perform 360-degree research**	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates	Matrix positioning all candidates' performance relative to one another
3	**Invite thought leadership in best practices**	Perform in-depth examination of all candidates	• Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	**Initiate research director review**	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best-practice positioning paper
5	**Assemble panel of industry experts**	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized award candidates
6	**Conduct global industry review**	Build consensus on award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible award candidates, representing success stories worldwide
7	**Perform quality check**	Develop official award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	**Reconnect with panel of industry experts**	Finalize the selection of the best-practice award recipient	• Review analysis with panel • Build consensus • Select winner	Decision on which company performs best against all best-practice criteria
9	**Communicate recognition**	Inform award recipient of award recognition	• Present award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of award and plan for how recipient can use the award to enhance the brand
10	**Take strategic action**	Upon licensing, company may share award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess award's role in future strategic planning	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.