



## **Maximize the Value of Data Center Hardware Maintenance**

### **Abstract**

**Increasingly, the reliability of data center hardware extends its useful life well beyond the terms of maintenance warranties. In specific circumstances, some IT managers and implementers devalue warranty and post-warranty maintenance services or deny the need for maintenance outright.**

**Written for technical decision makers (TDMs) and IT managers, this paper describes the business value of third-party maintenance (TPM) services and compares this value to that of original equipment manufacturers (OEMs). The paper describes how organizations can maximize the value of their hardware maintenance services and illustrates the method by introducing Park Place Technologies, a data center hardware maintenance provider.**

## Overview

Economic and competitive conditions continue to pressure IT managers to make significant cuts in costs for internal capabilities and external services. When the time comes to cut IT costs, hardware maintenance contracts are often viewed as low-hanging fruit that is easy to dispense with. Why? This paper, which reviews aspects of hardware support commoditization and discusses the business value of third-party hardware maintenance services, provides the answer.

## Customers Take a Skeptical Look at Hardware Maintenance

A 2009 Gartner study surveyed customer opinions about computer hardware reliability and the need for third-party maintenance (TPM) services. Survey results indicate that customers are reconsidering the value of hardware maintenance and in some cases, the need for third-party hardware maintenance at all.<sup>1</sup>

These attitudes about reliability and the need for maintenance support (or the lack of it) include data center hardware such as servers and external storage devices.<sup>3</sup> In each of these categories, at least one in five of the study's 427 respondents feel that these devices do not fail.

So, if reliability extends the useful life of data center hardware beyond the terms of standard OEM contracts, why pay for maintenance services, especially in Year 4, Year 5 and beyond?

The desire to control costs and limit various types of risk is involved. But, when stakeholders decide that there is—or is not—a need for data center contract maintenance services, they assess (sometimes intuitively) the business value that these services can provide. The next section identifies the many types of business value of data center maintenance services, value that goes beyond contract cost savings and risk management.

DATA CENTER HARDWARE RELIABILITY				
Hardware Component	Survey respondents say "Hardware never fails"	Average MTBF (months)	Standard OEM warranty term ( years)	Useful life (years) <sup>4</sup>
External data storage	31%	16	3	5 to 7
Entry-level servers	22%	16	3	3 to 4
Mid-range servers	17%	17	3	5 to 7

A possible cause of this notion is that overall hardware reliability extends the useful life of hardware devices beyond the length of basic OEM warranties.

*A major driver in the ongoing commoditization of support services is the perception that hardware reliability now exceeds business requirements. At least 15% of all respondents claim that any of the 11 types of hardware surveyed "never fails." Three-year warranties on equipment that lasts five years has customers wondering about the wisdom of paying for support in Years 4 and 5.<sup>2</sup>*

1 Data taken from "User Survey Analysis: Problems of Hardware Support, North America, 2009," Ron Sillman, Gartner/Dataquest, ID # G00165213, February 2009.

2 Ibid, p. 1.

The Gartner survey used 427 respondents from enterprise organizations using external hardware maintenance services.

3 Ibid.

These values were provided for data centers operating in the United States. Other, similar values are also provided for Canada.

4 Data provided by Park Place Technologies.

## How Third-Party Maintenance Services Deliver Business Value

More than ever, IT managers must rationalize the value of the hardware maintenance services that they purchase. In the past, many large organizations did not consider third-party maintenance services because they refreshed their hardware with the OEM every three years. Now about two-thirds of these organizations' IT departments are under such severe budget constraints that they actively pursue TPM options.<sup>5</sup>

Whether TPM services are “a good deal” depends on the specific types of benefits that each IT organization values most. This section:

- Describes the types of benefits and value that TPM and OEM maintenance can provide organizations after initial hardware warranties expire.
- Compares the business value of TPM and OEM support services.<sup>6</sup>

Third-party hardware support enables four types of business value: cost reduction, cost avoidance, business agility and risk reduction.

### Cost Reduction

TPM services enable organizations to reduce their direct (budgeted) costs for IT labor and outsourced maintenance services.

**Lower third-party maintenance costs.** The benefit of TPM services most often cited by IT managers is a lower maintenance service price, which ranges from a 30 percent to 60 percent less than OEM pricing.<sup>7</sup>

**Internal IT labor costs.** Organizations can reduce their internal IT labor costs by outsourcing storage, inventory, installation, and testing tasks related to replacement hardware and spare parts.

**Consolidation of multiple support vendors.** Historically, OEMs have preferred to take on mixed support contracts only when their own equipment is the largest element of the overall IT infrastructure. As a result, IT organizations are likely to carry multiple OEM agreements, each of which incurs overhead. A single TPM provider can reduce this extra overhead by

consolidating data center hardware and services under one contract.

### Cost Avoidance

TPM services also enable organizations to avoid hardware-related IT operating, capital and opportunity costs.

**Delayed capital expenses.** Increasingly, organizations have found it more cost-effective to maintain their data center hardware rather than constantly replacing it on standard OEM refresh cycles. This approach delays the capital expense for hardware by extending the hardware's useful life.

Generally, the more expensive or mission-critical the hardware, the more likely an organization will maintain rather than replace it. For example, a company might keep their UNIX servers for 6 years, their tape storage devices for 5 years, and their Windows-based servers for 3 years.

**Sunk costs of purchasing and storing replacement hardware units and spare parts.** Engaging a TPM provider that stocks and installs data center hardware for customers eliminates the sunk costs of buying replacement units and spare parts and storing them in dedicated facilities.

**Downtime-related opportunity costs.** In many industries, when data center hardware fails, business stops. The time needed to notify and mobilize maintenance providers and the time that providers need to identify and resolve problems can quickly add up to an average of \$70,000 per hour or \$100,00 per incident—unless service procedures and spare part storage, installation and testing methods are in place before the problem occurs.<sup>8</sup>

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5 Frank Eagle, “Busting the Myths of Third-Party Maintenance,” Smart Business Cleveland, October 2009.

6 This paper limits its analysis to organizations that are considering the value of third-party (TPM and OEM) maintenance services after the initial OEM warranty has expired.

7 Paul Smith, “5 Reasons to Choose Third-Party IT Maintenance Over the OEM,” The CanvasEdge Blog, November 2009 and Frank Eagle (above).

8 Strategy Guide to Risk Mitigation for Midsized Businesses,” HP Tech Dossier 0310, IDC for HP and Intel, p.2.

## Business Agility

Flexible warranty terms promote business agility, the ability of an organization to respond quickly to changes in its business environment. TPM service providers can offer flexible contract terms, offer more customized service packages that best meet customers' needs and eliminate unneeded charges. This ability enables organizations to avoid locking up money that could be allocated more efficiently during the warranty term.

Working with a TPM provider enables budget reallocation by freeing budget dollars that can be used to hire or keep IT personnel or to purchase additional products and services. More flexible terms enable organizations to control the lifecycle of their technology investments rather than depending on the OEM product lifecycle, which is designed to drive the timing of customers' investment.

## Risk Reduction

Both TPM and OEM contracts can reduce various types of risks, including:

- Business risk (avoiding downtime-related opportunity costs and loss of business agility),
- Project risk (ability to deliver relevant maintenance services and to do so in a timely way)
- Technology risk (avoiding hardware failure)

The need to address these types of risk is why many customers purchase OEM maintenance agreements. But as a later section will show, all of these risks can be reduced by careful planning, experienced maintenance engineers and establishment of inventory and response processes.

## Comparing the Value of OEM or TPM Services

As the following table shows, both OEM and TPM services can provide one or more of the types of value discussed earlier.

<b>VALUE COMPARISON OF TPM AND OEM SERVICES</b>			
<b>Benefit</b>	<b>TPM</b>	<b>OEM</b>	<b>Value</b>
Lower overall maintenance service costs	✓		Paying 30% to 60% less IT costs than OEM
Consolidate vendors to reduce IT costs	✓		Paying for one TPM provider rather than several
Delay capital expenses (extend useful life of hardware)	✓		Less frequent hardware purchases than in OEM refresh cycles
Avoid sunk costs of internal IT labor, hardware and parts	✓	✓	IT organizations can allocate funds to higher-value programs and initiatives.
Avoid downtime-related opportunity costs	✓	✓	Minimizing lost revenue due to hardware failure
Promote business agility (avoid resource allocation-related opportunity costs)	✓		IT organizations can reallocate funds otherwise used in inflexible OEM contracts
Mitigate perceived risk related to TPM services		✓	Reducing hardware-related business, project and technology risks

9 Smith and Eagle, above.

Which type of vendor provides the greatest overall value in hardware maintenance services? The answer depends on each organization's available IT budget for third-party maintenance and its profile of acceptable risks.

Engaging in OEM contracts might be a rational decision—if stakeholder concerns about TPM-related services make the 30- to-60-percent premium of OEM contract fees and rigid contract terms worth the cost. However, given current economic conditions, fewer and fewer IT organizations have been willing or able to make this tradeoff. So, for most IT organization, the TPM option provides the greatest business value.

## TPM Capabilities that Maximize Business Value

Organizations can maximize the value of TPM services by looking for vendors with capabilities that enable the benefits described in the previous section.

**Maintenance-focused business model.** The OEM business model is designed to recoup extensive investment in hardware research and development through the sale of new hardware. By focusing only on providing hardware maintenance rather than on OEM contracts that focus on hardware sales, TPM providers can provide hardware maintenance services at 30% to 60% lower those of OEMs. By concentrating on the resources and capabilities needed to serve customer maintenance requirements, TPM providers can also avoid hardware bias and conflicts of interest.

**Highly experienced engineers and a broad service portfolio.** To enable organizations to save IT services costs by consolidating OEM vendor services, TPM providers must offer a broad service portfolio and skilled engineers with extensive OEM experience.

**Rapid response, mobilization and problem resolution.** Minimizing downtime-related opportunity costs requires skilled technical personnel and an infrastructure that puts replacement units and spare parts within quick and easy reach of service engineers. Also, rapid solution delivery is enabled by digital management systems that monitor the process from the initial service request until the customer signs off following equipment restoration.

### **Established parts purchasing and handling methods.**

To avoid sunk costs of hardware handling, organizations need a TPM provider that uses industry-accepted best practices and has established processes for purchasing, storing, inventorying, installing, and testing replacement hardware and spare parts.

**Flexible, customizable contract terms.** By providing maintenance agreements and programs that reflect each customer's business requirements, TPM providers can help their customers reduce overall maintenance service costs and free up funds that would be locked up in OEM agreements.

## Seven Ways that Park Place Technologies Delivers Business Value

Park Place Technologies is North America's premier provider of data center hardware maintenance services. Although the company is best known for providing hardware maintenance services after initial extended service OEM maintenance contracts elapse, there are compelling reasons to engage Park Place at any time in the hardware life cycle.

For more than 19 years, Park Place Technologies has provided enterprise and mid-level organizations with a rapid, cost-effective, and flexible alternative to OEM services. Here are seven ways that Park Place provides high-value services to its customers.

- **Data center-focused maintenance services.** Park Place is laser-focused on the maintenance of mission-critical servers, storage devices and tape backup. By focusing resources on the data center, the company delivers first-call resolution and platform uptime that ranks with the best in the business.
- **Lower-cost, data center maintenance services.** As a multi-vendor support partner, Park Place avoids hardware bias and reduces the costs and administrative hassles associated with managing multiple vendors and multiple contract expirations. Working with Park Place can simplify management of the data center hardware environment and reduce prices by up to 60% less than OEM services.

- **Rapid response and problem resolution.** As North America's leading provider of third-party data center maintenance services, Park Place is positioned to support large distributed environments and yet be agile enough to respond quickly to urgent or nontraditional service requests. The result: more rapid mobilization and problem resolution.
- **As a single TPM service provider,** all equipment is consolidated under one contract, and it's easy to identify who to call to get service. As the single point of contact, Park Place is the central point of accountability, the vendor to call when customers need to get up and running quickly.
- **Experienced engineers who do the job right –the first time.** Customers can rely on the skill and experience of Park Place engineers, each of whom has worked at an OEM. Senior field engineers have an average tenure of 20 years; service engineers average 16 years. Each staff member brings a depth of knowledge and expertise that enable Park Place to meet customers' technology requirements across multiple platforms.
- **Flexible programs and contracts.** Park Place Technologies processes enable company sales teams to be flexible and react quickly. Agreements are as easy to understand as they are flexible. For example, master service agreements enable a coterminous single agreement, making it easy to add or drop equipment from support with minimal notice. And when customers say that it's time to migrate to new technology, Park Place can help with that, too.
- **Customizable service agreements.** Park Place resolves 43% of client issues without dispatching a field engineer. But when an engineer is required, Park Place offers 7x24x4, business hour, and next-business-day maintenance services.

An online event tracking system uses a Web portal, which enables customers to access the call management system from any web browser. A

desktop dashboard provides real-time visibility into event and contract tracking as well as parts availability, escalation status and alerts. This system offers customers anytime, anywhere access, and enables monitoring of the customer's service levels and events for any incident.

- **End-to-end process management.** At Park Place, process drives everything. Automated tracking technology, best practices, and Fortune 1000 methodology guide maintenance services every step of the way. Managed processes include:
  - **Data center hardware audit,** which provides an accurate data center configuration and helps to ensure selection of the right maintenance plan and parts inventory program.
  - **Parts inventory and availability,** which helps to develop a sound material planning, stocking and replenishment strategies.
  - **Technical and management escalation procedures,** which help to solve equipment failures with the necessary resources to restore system performance.

This is how Park Place Technologies delivers fast, flexible and cost-effective data center hardware maintenance services. For more information about Park Place services, contact Megan Tobin-Jones at 800-531-3366 or [MTobin@parkplacetech.com](mailto:MTobin@parkplacetech.com)

## About Park Place Technologies

Park Place Technologies offers customers 19 years experience as a profitable provider of multi-vendor support services for mission-critical data center systems. With headquarters in Cleveland, Ohio and a North American client service and support center in Boston, Massachusetts, Park Place supports customers at more than 2,500 locations in the United States, Canada and Mexico.

### Park Place Technologies

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