Blade PCs

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When considering managing desktop PC costs, it is generally agreed that supporting a PC over its useful life is one of the core vectors on which to focus. In large organizations that have many PCs, there are various approaches to address these cost concerns. Blade PCs have been introduced to aid organizations in managing costs around desktop deployment and controlling the hardware. They

have greater security of the physical assets and the data that resides on them, resulting in increased utilization of your hardware and higher uptime for end user clients. Given the benefits, IT organizations want to analyze their current environment and their long term plans to ensure Blade PCs are the right solution or if a hybrid approach of traditional PCs, Blade PCs and Virtual Desktop makes the most sense.

IDC has shown that a Blade PC environment can cut support costs up to 40% over traditional PC deployments. These hard cost savings are realized in maintenance and service, facilities, IT staffing, and security losses. This also addresses both noise and thermal considerations in a work environment.

The Blade PC allows companies to take the PC off the desktop, even though a whole PC equivalent is available in blade format, and centralize those PCs in a secure environment. The access device that sits at each user's desk is either directly connected or dynamically allocated and can be routed depending on the users application needs.

The Blade PC is indeed a single user machine, and the use of these resources can best be realized in the example of call-centers, telephone services pools, or help center locations. An example would be to have a help center user logged on for their eight hour shift, and at the end of their shift, the same Blade can then be used by a remote user that may be outsourced in another part of the world. Therefore, the client PC is being used nearly all the time instead of an asset sitting on a desk that is inaccessible a majority of the day. In addition, Blade PCs can be used in a hybrid model methodology where the system can be shared and to the end user it still appears that they are accessing their own system.

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One can think of examples where a US based call center is available during core business hours and then using those same devices for the 2nd and 3rd shift in call centers on a global basis. Those same PCs can be shifted in their use during downtimes, where a company can realize the computing power of all the assets they have and handle data in a grid environment, such as the Blade PC, which can be repurposed easily from the management console. The utilization of most or all of the computing power that a company owns is a way to maximize the investment in technology. The computing power of an average desktop or laptop far exceeds

the needs of typical users. Wringing out every bit of performance of those processors when they are idle can lead to better company productivity and reduce costs in additional investments in dedicated single purpose hardware.

While the initial investment in going to Blade PC architecture is higher than traditional PC computing, the benefits can be recognized in the operation of PC's over their useful life, typically three to four years. Cost savings realized are in reduced facilities cost for space, HVAC, security and electrical, and has been demonstrated up to 25% less. In addition, in a shared environment, Blade PC's can offer up to 24% more usage on one device.

Security is a major consideration when considering Blade PCs. Consider the fact that most companies lose one to two PCs per 100 users in a year. When securing those PCs in a datacenter the potential for loss is eliminated along with the concerns of "where did the data go?"

IT efficiency is an area many companies are looking at very extensively. The end user install base has grown by about 13% per year on average. In a Blade PC environment, the IT support staff usage can be reduced by up to 60%. Many times this reduction in support time can allow existing staff to be reallocated to other functions to continue other business projects.

Removing PCs from the hands of users has demonstrated a reduced maintenance cost from catastrophic wear and tear incurred by having systems desk side with little or no control.

Centralizing PC operations allow IT staffs to configure and deploy each desktop up to 40% quicker. In addition, help desk calls can be handled in a much more efficient manner and problem resolution times have been decreased up to 28%.

Differentiators from Thin Clients

Many customers will consider thin clients in this type of environment and view the solution as very similar. While thin clients may be considered more reliable and stable, the cost of building redundancy and capacity planning may elevate the cost of the total solution. Blade PCs excel when an end user needs high availability and dedicated bandwidth. Thin client implementations also may require that IT organizations have to deploy another type of computer for high end users.

Centralizing the computing and putting access devices at the desk side in business centers makes sense. One can imagine a hospital that may have five business offices spread around a large hospital campus. In a traditional desktop scenario, if a user has a problem it could take up to two hours to get to that user's desk and then the standard period of time to complete problem determination and fix those problems. With Blade PCs, the hardware is all centralized in the data center and if a user is having a problem, a diagnosis can occur immediately or that user can be moved over to another available blade.

A common question on the minds of many in IT is "where is data residing?" With a Blade PC, the data is always housed in the data center and you can create policies as to how that data is accessed. There is no data stored locally at the user's desk, hence they have no ability to compromise compliance directives by either having that data local or create exposures by equipment loss. In a Blade PC environment, modern tools of convenience, such as USB Memory Keys, can be eliminated as a factor in taking data away from where it can be controlled. While there are measures in place on traditional PCs to control USB device access, ambitious users can overcome these configurations. In a Blade PC environment the access device can be configured to not have physical USB ports, and in addition, since the configuration can be managed in the data center, an IT administrator can monitor and reconfigure each blade much more easily on a regular maintenance schedule.

Blade PCs also make a lot of sense in grid computing applications. If you want to crunch a lot of data, and have limited space, Blade PCs provide the most computing power per square foot. Blade PC management software allows for monitoring and failover, if a Blade goes down, with the ability to shift to another blade.

The key benefits of using Blade PCs can be demonstrated in that the end users realize the same look and feel or the same performance and transaction speed of traditional PC deployments; however, the ability to control the environment and management is built into the architecture. Blade PCs enable end users to focus on their work and not on the technology that they are using.