Centralized Computing

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The Market:

The costs associated with help desk, IT infrastructure, application deployment, etc have grown tremendously. Enterprises are shifting to a centralized computing model to better control existing IT infrastructure, support business continuity, reduce help desk costs, support disaster recovery, decrease cost of operations, etc. As business environments grow, the cost associated with each of these areas begins to have a noticeable effect. In order to reduce overheads while better utilizing resources, a centralized model becomes essential. By far the largest areas of market pain are seen in help desk costs and business continuity. More explicitly, the TCO associated with enabling a user or employee to perform their job function by providing them with a computing environment. Business continuity speaks to the downtime associated with disaster situations.

Thin client computing is a large and growing sector that is focused in decreasing TCO while providing optimal security. In addition to supporting a centralized computing model, thin client computing fosters the foundation for business continuity and disaster recovery implementation. With all data residing in a central location, disaster recovery becomes easier and more feasible. As a result, the down time associated with disaster scenarios is reduced substantially, minimizing the loss of business.

Consequently thin clients are the perfect solution for an enterprise that wants to lower costs associated with help desk management, TCO, and IT infrastructure while promoting business continuity applications like disaster recovery.

Value Proposition:

With enterprises growing, a multitude of problems are arising with IT overhead. Centralized computing focuses in alleviating this pain point by leveraging the following:

1. Reduction in Help Desk Costs
2. Focusing User Behavior
3. Business Continuity
4. Security

Help desk costs are primarily associated with maintenance of end user computing environments, support personnel, and software updating/upgrading. The total cost of ownership associated with the traditional PC environment becomes drastic when the before mentioned items are taken into perspective. The upgrades, updates, software support, etc that is associated with PC's becomes a major enterprise pain point.
The thin client computing model alleviates this pain by creating an end user environment that has no local storage, software, or moveable parts.
This reduces help desk costs by minimizing support personnel and having a centralized management location. With all things residing centrally on a server, software updating and upgrading is done centrally and distributed throughout with the touch of a button. In addition to help desk advantage the cost associated with the terminal itself is substantially lower then a basic PC.

Thin client computing also lends itself to focusing user behavior. Studies show that personnel spend a large portion of their working time on tasks unrelated to their job

function. A PC environment fosters this type of behavior by providing a user with an environment that is flexible and has local control. Thin clients remove local control and replace it with centralized application deployment. Users are no longer allowed to locally install software. With application deployment residing centrally, the enterprise has complete control on the environment that is passed to the user. This not only increases productivity but enhances security as well.

Business continuity speaks to the issues arising in disaster scenarios. When an enterprise's IT infrastructure goes down or is corrupted, the associated downtime is one that can have a disastrous impact. Traditional disaster recovery has a multitude of complications due to the lack of central control. With each user environment being abstracted, disaster recovery becomes a difficult task. Additionally, many of these environments are different due to the sporadic updates that occur locally. Centralized computing makes disaster recovery a more feasible task by creating a centrally managed location. Data management and backup for disaster scenarios is only needed at a single point. Furthermore, a centralized model creates uniform deployment

throughout the enterprise. Since applications are deployed from a single location, updates and version control is also managed at a single point.
Taken altogether, business continuity is implemented most effectively in this environment.

One of the major concerns of all enterprises is security. The notion of where data is and where it goes is an underlying concern that drives all IT decisions. Thin client computing is one of the best forms of local security control. With no local storage, all data has to be centrally stored and accessed. This creates the foundation for the most secure computing environment.

The benefits associated with centralized computing make it the clear choice when it comes to IT infrastructure. Outside of the reduction in overhead costs, the benefits of security and business continuity alone warrant adoption. Perhaps the most exciting notion is that implementing a centralized model with thin client computing does not create a ceiling for IT infrastructure efficiency. In fact, a centralized computing model can further reduce costs and increase associated benefits by virtualizing an enterprise's IT infrastructure.

Virtualization is designed to optimize and consolidate IT infrastructure. A centralized computing model creates the foundation for virtualization. With all applications deployed and running centrally, the need for efficient utilization of IT infrastructure becomes essential. Virtualization consolidates the entire IT infrastructure and focuses on efficient resource allocation in order to utilize all available computing power. Virtualization is

known for increasing computing utilization by up to 50%. Therefore, not only does centralized computing reduce costs, enhance security, focus user behavior, and support business continuity but also create an environment that is ready for virtualization.

Conclusion:

Rising IT overheads and a unique combination of concerns is driving the enterprise marketplace to consolidate its IT infrastructure. The centralized computing model has emerged as the solution for the next frontier of IT environments.