

IBM Network Station Solutions

The IBM Network Station has great potential. It is cost effective and enjoys a high degree of user acceptance.

Such comments are the norm for a group testing the IBM Network Stations at a Fortune 500 distribution company. IBM Global Services' Distributed Systems Management Services team was asked by the customer to evaluate the technical feasibility, cost effectiveness, and end-user acceptance of the IBM Network Station technology.

A pilot group was identified with the intent to establish a reference point against which the Network Station's effectiveness and efficiency will be judged. The study utilized the customer's actual costs which were collected through direct observation and validation. Assumptions were used when specific cost elements could not be validated and developed using interviews, surveys, IBM experience, and existing distributed system cost models. It was determined that the customer could save 30% per year when deploying Network Stations.

The distributed system environment and end-user evaluation group operated in well defined fixed function environment. The desktop environment required end users to access multiple host sessions. Additionally, the customer's desktop application software is NT server based. Compaq brand desktops were identified as the preferred technology and many manufacturers' laptop PCs are used. Interviews identified low-end desktops as the norm with Laptops being preferred, but secondary. Although a desktop technology refresh strategy was not evident, interviews determined that the desktop refresh cycle is three years. The pilot work group used non-programable terminals or a non-programable terminal and PC combination.. A common requirement for this user group was to access a mainframe and an AS/400 by using TC3270 emulation.

Cost of Ownership

There are numerous studies touting LAN based PC's desktop life cycle annual costs that range from \$10,000 to \$13,000 per desktop. Although debate is fairly

polarized, it is widely accepted that the primary cost drivers are labor related. Labor is expended in desktop support and lost productivity. Both IT and end users are seemingly consumed with a desktop obsession leading to business distraction. Every day occurrences include desktop crashes, ongoing training, and user tinkering with hardware and software. This all translates into reduced productivity and higher labor costs. Although these costs cannot be removed totally, the Network Station platform isolates the user from self-inflicted problems.

Every cost of ownership study must be tailored to meet individual customer evaluation criteria. This can vary



based on application requirements, expected service levels, and unique policies and practices. Typically, evaluations will attempt to compare or contrast alternative desktop solutions. Moreover, it is not always necessary to evaluate total costs. Rather, customers often elect to evaluate only those cost elements that may vary when selecting one desktop versus another. For example, there may not be a need to include the overhead associated with the "back office" infrastructure as it would remain the same regardless of which desktop was used. Accordingly, reliance on published benchmarks should be limited.

With this pilot, the elements of costs that were evaluated for both the traditional LAN based PCs and the IBM Network Station fell into two groups. One group comprises elements that may change (Dynamic) with the technology platform and the other group (Static) is not expected to change significantly.

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<i>Dynamic</i>	<i>Static</i>
Hardware (Desktop/Server)	Procurement
Software (Desktop/Server)	Financing
Maintenance	Application Support
Technical Support	Network bandwidth
Network Admin.	Shipping & Tax Costs
Security	Back room Costs
Help Desk	Application Training
Training	
Standards Development	
End-User Productivity	
IT Compliance Management	

Static elements are assigned to the baseline by observations, IBM cost models, and IBM experience. The Dynamic cost elements are the points of focus for the Network Station product evaluation.

On a qualitative basis, the customer discovered that the IBM Network Station implementation can be very cost effective in utilizing labor and equipment. In this computing model all applications reside on and are executed from a central server. This eliminates the need to perform repetitive software downloads to individual desktops. Administrators can support, troubleshoot and administer the Network Station from a single location. More devices can be managed with fewer people. The Network Station is a means of lowering support costs.

The Network Station delivered a desirable desktop alternative for the terminal user. It also provided general PC users with comparable computing power. For non-PC users, they saw improved computing power, replacing dumb terminals with more useful devices. For the casual user the Network Station was better than the PC for most functions (e.g. speed, stability, ergonomics, backup, resource availability, etc.). Users found the Network Station to be a very reasonable platform providing the functionality required to accomplish their daily business tasks. Having neither a floppy diskette drive nor a CD ROM, it reduced complexity, but did not hinder or limit the user's capacity to execute business responsibilities. The Network Station's ergonomics are added benefits for some users.

PILOT SUMMARY CONCLUSIONS:

The Network Station was seen to have great potential for

wider deployment in the customer environment. It proved to be cost effective and enjoyed a high degree of user acceptance.

COST OF OWNERSHIP

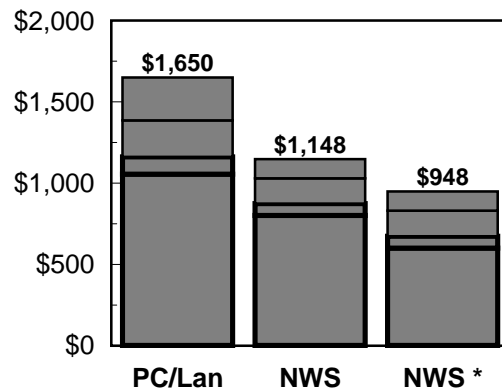
3 Year Life Cycle PC/LAN Baseline Cost \$4,950

3 Year Life Cycle Network Station Cost \$3,444

3 Year Life Cycle Network Station Cost \$2,844*

It was empirically demonstrated that by deploying IBM Network Stations that savings of 30% can be achieved. Because of higher reliability and lower failure rates, it

Total Cost of Ownership Annual Cost per Seat



■ Capital	\$1,055	\$800	\$600
■ Admin.	\$107	\$73	\$73
■ Operation	\$224	\$157	\$157
■ End User	\$264	\$118	\$118
Totals	\$1,650	\$1,148	\$948

* 4 year depreciation over 3 year life cycle.

could be argued that the Network Station may have a longer life cycle. Assuming a four year average life, savings would amount to 40%. Often times, IT executives downplay "shadow IT" costs or labor costs associated with end user productivity. In this pilot, one user who was required to access multiple host sessions, reported that having the ability to have multiple windows opened simultaneously saved two hours every day. Clearly, these savings should not be discounted.