NonStop Stimulus

A penny saved is a penny earned. -Benjamin Franklin

Traditional computer systems with enclosed cabinets, cables, and other trappings have been giving way to the more flexible blade configurations for quite some time. The reality is that such configurations dramatically reduce cost for the manufacturer. The vendor has the opportunity to pass this savings onto the customer, thus providing greater value to the solution. Today, IT is more and more focused on the total cost of ownership (TCO), return on investment (ROI), and risk to justify investments versus technology capability. For most organizations it means tightening the belt, but for some industries like health care, it means an opportunity to increase their coverage. Investments in the context of IT are the actions of putting resources into solutions to enrich the organization through increased services. In this research note we look at two traditional high-end systems, HP NonStop and IBM zSeries, and compare them to their new counterparts to evaluate how blade technology has improved total cost of ownership.

Each year The Standish Group determines the Top 10 trends/issues for CIOs. Investment tops the list of our annual research on IT priorities for 2009. While IT investment is one of the fundamental decisions of IT management, driving most other decisions throughout the IT organization, there are other considerations, trends, and priorities. These include security, readiness, project management, optimization, and so on. Here we compare the NonStop BladeSystem against investments and the other priorities to determine how blade technology affects other areas of the IT environment.

Standish offers financial assessment services and provides meaningful advice in the form of presentations and reports. The charts in this research note are based on such engagements and come from a real assessment. This case study is confirmation of the thousands of case studies and data points in our VirtualADVISOR® system. The Standish Group International, Inc. (Standish) has collected a number of case studies and gathered data to provide meaningful comparative estimates. The intent of this information is so customers can make a more intelligent and economical decision on the most cost-effective solution for new and changing applications.

The research unveiled in this report is based on our DARTS surveys and other research instruments. All DARTS par¬ticipants must satisfy a qualification process and join our Standish User Research Forum (SURF). All data and informa¬tion in this report should be considered Standish opinion, and the reader bears all risk in the use of this opinion.

IT Top 10

1 Investments

2 Security

3 Project Management Leadership

4 Green Computing

5 Compliance

6 SOA

7 Optimization

8 Readiness

9 Business Process Management

10 Open Source & Standard Infrastructure

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1. Investments: In the context of IT, the actions of putting resources into solutions to enrich the organization through increased services. IT investment is one of the fundamental decisions of IT management and it drives most other decisions throughout the IT organization. IT is more and more focused on the total cost of ownership (TCO), return on investment (ROI), and risk to justify investments versus technology capability. In this regard, HP has had a major decrease in price for the NonStop BladeSystem (NSB). This, in turn, has reduced the overall cost of ownership as much as 30% over the previous generation.

2. Security: The condition of being protected against danger or loss. This means IT assets, which are critical to business success, must be secured. Assets can be physical, such as servers, PCs, and storage subsystems, or intellectual property such as information. In the general sense, security is a concept similar to safety. IT is responsible for computer security and guarding against breaches. The three most important issues around IT security are viruses, hackers, and malicious behavior. CENTS respondents reported no security incidents and our research shows that the HP NonStop family has had no security issues over the last five years.

IBM Series Z			
Basic Cost ($000)	**IBM-Z9**	**IBM-Z10**	**Difference**
Hardware Cost	848	458	46%
Software Cost	693	170	75%
Manpower Cost	463	534	-15%
Maintenance Cost	398	230	42%
Other Cost	543	487	10%
Total Basic Cost	2,945	1,879	36%
Application Cost ($000)			
Basic Cost	2,945	1,879	36%
Software Infrastructure	818	702	14%
Database & Systems Administration	362	393	-9%
Application Maintenance	542	587	-8%
Other Cost	240	185	23%
Total Operating Cost	4,907	3,746	24%
Cost of Downtime	53	66	-25%
Cost, Including Downtime	4,960	3,812	23%

The chart below shows the cost of a traditional payment application running about 200 transactions per second on an IBM z9 and z10.

3. Project Management Leadership: Goes well beyond the basic project management skills as outlined in PMI's PMBOK. The entry fee for project management leadership is qualified PMPs. Organizations that want to be leaders in the profession of project management invest their corporate resources in education, training, and research and development. Project management leadership advances the profession and creates an environment where such expertise is recognized, valued, and rewarded. The software infrastructure is based on integrated component services. The NSB component architecture offers organizations the ability to provide of small, iterative, and continuous software product delivery.

4. Green Computing (or enviro-computing): Making environmentally responsible decisions when it comes to the purchase, use, and disposal of electronic equipment. The goal is to reduce the use of energy, encourage the purchase of products that adhere to environmental standards, and promote Earth-conscious initiatives throughout the corporation. The blade story is also a green story, for if organizations double the performance for the same amount of power consumption, they have in effect reduced the power by half. Last spring we did a little study called Project Shamrock to see if the reduced consumption of electricity would cost-justify moving to blades. What we found was the electrical consumption was itself highly efficient, making the blade story even better.

5. Compliance: Generally means federal regulatory compliance with government-mandated regulations such as SOX or HIPAA. IT is then responsible for building systems to ensure that employees and other people or organizations comply with the current relevant laws and regulations. Organizations also have other compliance requirements, such as state, local, and industry rules and regulations. While the NSB does not address compliance directly it can aid in meeting security, readiness, and other governance issues.

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6. Service-Oriented Architectures (SOA): A business strategy to achieve business agility through the ability to recognize, precisely document, store, categorize, discover, and make more efficient the organization's business processes. SOA depends on business process management and modeling. SOA is not a technology, it is not a service bus, it is not the new "object technology" – though software can help implement the strategy. Done right, SOA can achieve efficiencies both within organizations and across enterprise lines. From the very inception the HP NonStop platform is a service-oriented architecture and allows for efficient of use and integration of business processes.

HP NonStop			
Basic Cost ($000)	**HP -NSS**	**HP-NSB**	**Difference**
Hardware Cost	1,354	419	69%
Software Cost	672	153	77%
Manpower Cost	323	323	0%
Maintenance Cost	318	253	20%
Other Cost	585	302	48%
Total Basic Cost	3,252	1,450	55%
Application Cost ($000)			
Basic Cost	3,252	1,450	55%
Software Infrastructure	740	552	25%
Database & Systems Administration	362	362	0%
Application Maintenance	495	495	0%
Other Cost	399	173	57%
Total Operating Cost	5,248	3,032	42%
Cost of Downtime	37	37	0%
Cost, Including Downtime	5,285	3,069	42%

The chart above shows the cost of the same traditional payment application running about 200 transactions per second on an HP NonStop S-Series (NSS) and NonStop BladeSystem (NSB).

7. Optimization: A complete approach, that when fully implemented, covers systems, people, processes, applications, and data – in other words, the whole IT organization. The goal is to provide the best value for the highest level of service and function. IT optimization comprises procedures used to make systems, applications, processes, and people as effective and functional as possible, at the best possible value with the least possible risk. The average organization has a stated yearly goal of 7% improvement to optimize its IT infrastructure and facility cost reductions. We estimate that the average NonStop user will experience a 30% decrease in their TCO.

8. Readiness: Programs are based on a comprehensive approach. When fully implemented, a readiness program covers systems, people, processes, applications, data, and interdependencies (such as vendors). It is enterprise-wide and covers IT as well as business operations, with no interruptions. A readiness program should cover natural disasters, man-made disasters, and run-of-the-mill mishaps and mischief. Sixty-five percent of SURF members said they were either skilled or highly skilled at their organization's ability to maintain critical hardware systems for high availability and disaster recovery. This is the traditional strength of the NonStop platform and the NSB continues this condition.

9. Business Process Management (BPM): A field of management focused on aligning organizations with the wants and needs of clients. It is a holistic management approach that promotes business effectiveness and efficiency while striving for innovation, flexibility, and integration with technology. Business process management attempts to continuously improve processes. Fifty-three percent of SURF members believe that business process management will have an improvement or a major improvement on optimizing their business process. The HP NSBs have a discernable advantage for BPM.

10. Open Source & Standard Infrastructure: Open source is any program where the source code is made available for use or modification by users or other developers without cost. The standard vertically specified components include such products as server type, database, and middleware. Standard horizontal components include management systems, storage solutions, and network appliances. The NSB platform uses standard commodity components to decrease manufacturing cost and reduce the use of spare parts, so is therefore less expensive for the end user. While the NSB has its own stack of software infrastructure, many open source applications and products are readily available for the platform.

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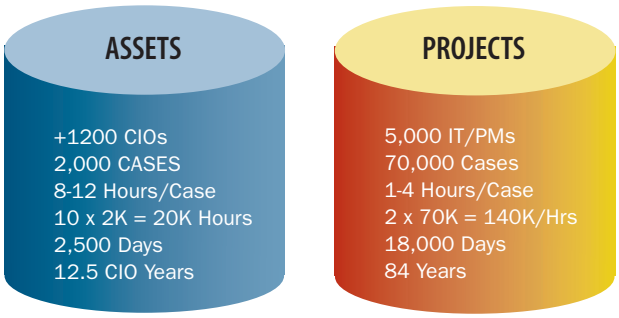
ABOUT THE VIRTUALADVISOR®

The VirtualADVISOR® System is designed to improve the efficiency and value of IT performance, while increasing the delivery speed of critical applications and IT infrastructure. The VirtualADVISOR® System is a collection of proven wisdom-based management tools used by Standish Advisors (STARs) to help IT managers increase their understanding of their business and IT environment by providing case-based and enterprise-wide alternative solutions. Using highly advanced case-based reasoning technology, STARs are able to profile your project, application, or systems for total cost of ownership (TCO), return on investment (ROI), and risk against 70,000 project cases and 2,000 system cases. You can apply these cases against more than 100 applications and uses with over 20 system types, seven database types, and many types of middleware, making the VirtualADVISOR truly virtual. There are several major features that make the VirtualADVISOR an IT management system without comparison:



Freshness: The case database is always fresh and up to date; no case in the cost database is older than six months. Since the VirtualADVISOR is a web-based thin-client tool, new data is added and existing data is updated in the background. Therefore, each time a STAR runs a case for you, you are getting the most up-to-date results.

No Assumption: It is our database of actual cases that drives the conclusions; there are no assumptions used. Your case profile will match against cases in the database. Items in the database have been thoroughly scrutinized and categorized for importance. Each item has a dynamic weight to ensure the maximum relevance to your profile. Currently we are experiencing a 90% match rate.

Extensive: Each TCO case in the database takes about 50 hours of work to complete, usually by several people. This equates to 56 IT person-years of work for the initial database. Every six months we retire a number of cases and update all the rest, plus each month we collect downtime information for about another 40 person-years of IT effort. The project case database, which we accumulate, has about 50 IT person-years of work as well.

Diversity: While the VirtualADVISOR database represents more than 100 years of CIO, IT executive, and IT professional work, its real strength is in its diversity of input. More than 20,000 people have contributed to the database across 100 countries, countless industries, and a wide range of company sizes. This diversity of experience gives you a collection of expertise rather than one person's opinion or the opinion of a small group with their natural limited experience.

User Driven: The TCO was developed by user input; all data is collected from users and **NO** price data, performance, or any other input is derived from vendors. We do not use benchmarks or consultant opinions to calculate cost or risk. This makes the VirtualADVISOR a true unbiased source. The risk model was developed from 14 years of CHAOS University input and CHAOS data of more than 70,000 projects.

ABOUT THE STANDISH GROUP INTERNATIONAL, INC.

Since 1985 The Standish Group, the leader in spotting future trends, has been helping end users and vendors of technology solutions prepare for the future. The Standish Group delivers fast, consistent, reliable, independent IT advice built on a solid foundation of primary research. For further information visit our website at: http://www.standishgroup.com.

The Standish Group International, Inc. • 60 State Street, Suite 700 • Boston, MA 02109 • P: (508) 760-3600

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