

Costs and Benefits Still Favor Windows Over Linux Among Midsize Businesses

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Microsoft will remain the dominant server operating-system provider for midsize businesses through 2010. For midsize businesses, Linux presents many challenges, including not fully understanding the OS's benefits, resource constraints and the perceived high switching costs to move from Windows.

STRATEGIC PLANNING ASSUMPTION(S)

Windows will remain the dominant server OS in the small and midsize business market through 2010 (0.8 probability).

ANALYSIS

With more than 90 percent of midsize businesses running predominantly on a Windows environment, Microsoft is the server operating system (OS) leader among small and midsize businesses (SMBs). Although Linux has made inroads in recent years, interest appears to be flat; Linux constitutes only a fraction of the server OS market, mostly enabling Web servers, the network edge and security firewalls. Here we discuss what midsize businesses consider and value, including numerous cost elements when making server OS investments.

Gartner has said that Linux is unlikely to make significant inroads in the small and midsize business server market before 2010. Despite backing for Linux from some powerhouse vendors, such as IBM, midsize businesses will continue to be wary of wholesale Linux adoption. Although Linux licensing is considerably less expensive and complex than that of Windows, a shortage of needed skills, lack of external vendor support and difficulty of integration into the established OS environment can offset these savings or erase them completely. Gartner continues to advise midsize businesses to base their server OS choices on total cost of ownership (TCO), rather than on one-time savings from a licensing perspective. TCO takes into account the costs not only for hardware and software, but also for management, product support, migration, personnel, training and possible downtime. However, midsize businesses

tend to have different perceptions and levels of understanding with regard to how to calculate TCO.

The results of a survey that Gartner conducted in the second quarter of 2005 among North American midsize businesses identify midsize-business CIOs' primary considerations when selecting server OSs. For example, respondents from the lower-end midsize-business market (those with 100 to 499 employees) said that the three most important criteria for selecting an OS are:

- The OS works best with the application we are considering
- Recommendations from our IT staff
- Same as the predominant OS we already have

Compatibility between applications and the prospective OS is a prime consideration, doubtless because these businesses lack the internal resources to modify and support disparate applications. Also important to resource-constrained midsize businesses is the desire to stick with the OS environment that the business is already running for the sake of simplicity in terms of skills acquisition, retention and management of technology complexity.

Among upper-end midsize businesses with 500 to 999 employees, the list is similar. These businesses say their primary OS investment considerations are:

- Selecting the OS based on a thorough cost analysis
- The OS works best with the application we are considering
- Same as the predominant OS we already have

Here, cost considerations lead the way. When it comes to costs, midsize businesses place operational issues, maintenance costs and application costs above licensing cost and complexity – a Windows weak point. For midsize businesses, the prospect of having to hire or retrain staff is a powerful motivator to stick to the status quo.

Figure 1 shows how representatives of midsize businesses responded to the Gartner survey about the importance of cost elements in server OS selection. It also outlines a summary of the most- and least-important server OS cost considerations.

Additionally, we explored the benefits that SMBs seek from a server OS. Figure 2 shows the most- and least-important benefits that midsize businesses want to gain from a server OS. Better security and improved reliability topped the list, while licensing costs – which market hype suggests is one of Linux’s strong points – are considered least important.

Despite the many security issues that have arisen in connection with Windows, a large number of midsize businesses favor Windows environments because of some distinct advantages (for example, skills availability and fit with the existing environment). Access to source code, another perceived Linux strength, is also ranked relatively low on the scale of desirable qualities for a server OS. Other benefits often tied to Linux include lower acquisition costs and decreased licensing complexity.

Because security, reliability and reduced downtime are such crucial considerations, it is important for midsize businesses to conduct a risk assessment to ensure appropriate fit among options. This must be balanced against the technology’s maturity and ever-present switching costs (related to skills, infrastructure and integration). A business’s risk tolerance and how it plans to use a particular server may influence the decision makers in favor of using Linux, or another OS – for example, in support of an isolated process, such as connectivity, via a Linux-based “plug and play” appliance with little integration or upkeep required.

Through 2010, Linux is likely to become increasingly prominent among large enterprises. As this occurs, the Linux-focused independent software vendors, IT service providers, channel partners and available employee skill base will increase in support of large enterprises, feeding the skills and technology pool to the benefit of midsize businesses as well. With a more robust ecosystem in support of a Windows alternative, the result is a more-mature open-source software (OSS) environment for increased

Figure 1. Importance of Cost Elements When Selecting an OS Server Platform

	100 to 499 Employees	500 to 999 Employees
Most Important	Operational management (virus protection, user administration, storage, security, data management)	Operational management (virus protection, user administration, storage, security, data management)
	Maintenance costs (staff hiring, training, retention)	Maintenance costs (staff hiring, training, retention)
	Cost of compatible applications	Cost of compatible applications
Least Important	Intellectual property/legal costs	Licensing complexity
	Licensing complexity	Licensing costs/cost of acquisition
	Hardware costs	Intellectual property/legal costs

Source: Gartner (October 2005)

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Figure 2. Importance of Benefits When Selecting a Server OS

	100 to 499 Employees	500 to 999 Employees
Most Important	Better security	Better security
	Increased reliability	Less downtime
	Less downtime	Increased reliability
Least Important	Access and ability to modify source code	Access and ability to modify source code
	Access to product road map	Access to product road map
	Lower licensing cost	Lower licensing cost

Source: Gartner (October 2005)

consideration by midsize businesses. OSS vendors are putting forth a great deal of effort to enable a mature reseller base, in addition to developing simplified management interfaces and Exchange-compatible servers to shield much of the complexity from the user. This mature ecosystem increases the risk of market share loss for Microsoft when it releases the new Windows server OS; midsize businesses will have a more substantial alternative to Windows than they have had. Until the end-of-life of Windows Server 2003, Microsoft will work diligently on developing midsize-business-specific products, services and channel programs to strengthen loyalty and relationships with midsize businesses. It is Microsoft's business to lose, and it must execute diligently against its midsize-business strategy to secure its position.

Through 2010, there is unlikely to be a wholesale switch of Microsoft for Linux on midsize-business server OSs. Businesses that are considering such a switch should do so for the right reasons. If cost is your driver, look at all the costs associated with such a migration and be sure that the total savings are genuine; there are hidden costs in operations and maintenance related to both OSs. It may be worth considering an investment in an open-source alternative. However, if you are planning a use outside of Linux's more-mature areas – such as Web servers, security and connectivity – SMBs should ensure that Linux has proved itself for comparable

Acronym Key and Glossary Terms	
OS	operating system
OSS	open-source software
SMB	small and midsize business
TCO	total cost of ownership

uses in a company conducting a business similar to their size and resources.

Bottom Line

Concerns related to TCO, better security and reliability rank high as server OS investment considerations, while licensing costs are low on the list. Windows likely will continue to dominate in the server OS market through 2010, largely because midsize businesses are traditionally conservative adopters of nonmainstream technology; therefore, benefits have not resonated in the market, and switching costs still aren't worth it. In the near term, midsize businesses will remain wary of Linux, despite the upfront savings offered by Linux's lower licensing fees, which are frequently offset by higher switching costs associated with staffing and application development, and by a perceived lack of external vendor support for Linux applications. Midsize businesses should consider experimenting with Linux in low-risk areas in preparation for additional opportunities that might arise as the ecosystem matures and expands.