



LAN Connectivity & Internet Business Issues

Background

Companies are evolving as they adopt network technology into their business processes, and customers vary in their readiness for new technology. The technology adoption continuum describes the phases that organizations pass through as their technology readiness increases. Organizations vary in their position on this continuum.

LAN Connectivity

Local Area Network (LAN) connectivity extends the reach of the network to users and systems throughout a facility. It provides high-performance interconnection of people and computing resources within the same or adjacent facilities. LAN connectivity is such a core component of system design that it is often the first or only network element in a computing environment.



Companies that understand the importance of providing LAN connectivity have also come to realize that just providing a LAN is not sufficient. LAN connectivity solutions must exhibit several attributes specific to each company in order to be deemed successful.

LAN connectivity solutions are typically thought of as utilities that are similar to electricity, air conditioning, and telephones: install them and forget them. Unfortunately, today's business environments and opportunities change very rapidly and unpredictably. This pressure requires the LAN to adapt easily, flexibly, and cost effectively to support the changes.

As businesses change and move along the technology adoption continuum, reliance on LAN connectivity becomes more critical, requiring more functionality. Business pressure to contain costs is an opposing force that must be considered.

Cost, in this case, is defined very broadly. Capital, facility, recurring, and support costs all need to be considered within the definition. In addition, the cost to the company of LAN connectivity downtime and the risk need to be calculated to provide an accurate return on investment (ROI) value.

Internet Business Issues

The Internet provides users around the globe with easy-to-use access to information, products, and services. Leveraging the Internet provides new ways of doing business. Internet solutions can include Internet access, extranets, and/or intranets.

LAN Connectivity Issues

- Rapid growth
- Unpredictability
- Increased user expectations
- Cost of facilities
- Cost of downtime
- Cost of ownership
- Cost of complexity
- Service-level management
- Retention of technical skills
- Protection of company information assets

Internet Business Issues

- Rapid growth
- Unpredictability
- Increasing user expectations
- Cost of facilities and services
- Cost of downtime
- Cost of ownership
- Cost of complexity
- Protection of company information assets
- Provision for external access preserving internal assets
- Quality, availability, and cost of external service provision

Definitions

- Capital equipment**
Purchase price of networking supporting equipment.
- Cost of facilities**
Recurring costs including phone facilities and maintenance

As businesses move along the technology adoption continuum, they encounter casual Internet access in Phase 2. As they reach Phase 3, Internet access is permanent and critical; companies begin to use intranets and e-commerce pilots or business begins. In Phase 4, all of the Phase 3 issues are still true, but companies find that extranets are an essential delivery mechanism for their business.

The position of a customer's business within the technology adoption continuum (Phases 0-4) will determine the use of Internet solutions to support that business. Companies are finding themselves competing in a business climate that is changing rapidly, becoming global in scope, and requiring ever-increasing reductions in costs. The reliance on Internet solutions to support the business places increased pressure on the reliability, predictability, and capacity of these solutions.

Conclusion

All of these various issues must be addressed before a complete solution will be apparent. R-Squared will always work diligently to provide the most cost-effective solution that fulfills all client expectations. At R-Squared, we believe that an educated customer is ultimately the best customer. The modern realities of complex computer networks has created a significant technology-gap within small to medium businesses (SMB). As the larger corporations develop and expand their advanced computer networks, the SMB market falls further and further behind. The SMB market must develop cost-effective, advanced computer networks in order to remain competitive in the global marketplace.

Circuit costs

Recurring monthly cost of wide area network services.

Support costs

The major element of support costs is the cost of support staff, although it will also include the cost of tools and support services, as well as the hidden costs of self-supporting users. This cost is driven up by the number of users and the complexity of the environment to be managed.

