

***Convergence in the Information Technology and Telecommunications World:***

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Will applications drive infrastructure convergence, or will infrastructure convergence drive applications as we migrate to IMT-2000? Probably a little of both. As customers find themselves migrating to convergence as a natural part of the infrastructure replacement cycle, they'll start to see glimpses of what the new applications can do for them, and this will help inform and possibly even accelerate the migration.

Today the term "convergence" has many meanings. In the telecommunications world, convergence has come to mean a moving towards the use of one medium as opposed to many. This paper will highlight drivers for convergence, significantly perhaps with a vision of the future. However, promises often collide with reality. A careful analysis of convergence discloses that there are actually four separate types of convergence, each with a different history and prognosis. Today one type of convergence, namely convergence of everything on Internet Protocol (IP) networks, is all the rage. To gain perspective on the convergence issue, the four types of convergence and their histories will be examined in this paper, along with arguments pro and con, and the business case.

The architecture selected for convergence must satisfy the business requirements before it meets the technical requirements. The architecture must improve the business's operational effectiveness both for internal users and external customers. The business continuity (reliability) of the converged environment must satisfy the requirements of the critical applications and telephone services. Finally, as more critical functions move to converged operation, the security requirements of the applications, data and multimedia services increase. Without security, does anyone want to use the features and functions offered?

The architecture choice should increase productivity. The user interface should meet the following goals: consistent, obvious and, intuitive. These three productivity goals will then strengthen both the user and customer interactions. Collaboration must become the new theme. The architectures for collaboration must address the IT infrastructure, both what is already in place and what can be implemented in the future. Vendors that deliver collaborative operation, especially between voice and data applications will deliver the applications. This presentation will address the network architecture that supports the future of IT and communications.