No Time For Standards Michael Munroe October 21, 1994

It is hard to pick up a communications magazine today without reading of another new ATM product. This telecommunication protocol seems poised to be the vehicle destined to carry much of the burgeoning information highway traffic.

With so many companies at all levels in the telecommunication hierarchy developing products based on this protocol, my management keeps asking me what sort of backplane standards will be supporting these products.

To answer this question I have been talking to likely IEEE members who represent the major telecom companies and members of the ATM Forum. Everywhere I go I keep getting the same message. Rick Townsend of AT&T Bell Labs who is the working group chair for the Physical Layer Subcommittee of the ATM Forum made it the most clear. He said in response to my question about the development of ATM backplane standards, that not only was he not aware of anyone within the ATM Forum working on such a standard but that no one had yet expressed an interest in discussing the subject.

The standards process is by nature a slow beast. The only standards that have been developed quickly, that I am aware of, are ones that are developed by a single company and brought to a standards group with all work completed. The standards process in this case is essentially just a blessing.

The original VME standard and more recently RACEway and Industry Packs are examples of such standards. However, it appears that the developments in ATM transport mechanisms are moving far too quickly to be burdened by the slow consensus building process of committee standards development. In the case of VME and RACEway and Industry Packs, the sponsoring companies were anxious to have standards completed because they saw a benefit to having third parties build compatible products that would consequently increase the overall market that the originators would be able to participate in.

As Ray Alderman is so fond of repeating "Standards represent the creative destruction of capital." The corollary of this is that the lack of standards protects the competitive advantage of proprietary products.

If you examine the ATM market in the light of these observations you can see that to standardize on the data protocol helps to force a change in the existing proprietary networking architectures. However, by avoiding the establishment of physical layer equipment and backplane standards, companies are able to protect the markets into which they deploy this new proprietary equipment. Router companies like Wellfleet and Cisco and switch manufacturers like GTE and Bell Northern have no incentive to make it easy for their respective competitors to build plug compatible cards. After all when it is time for their customers to increase circuit capacity, the OEM who controls the account doesn't want to make it too easy for their customer to shop all around for upgrades.

The good news for packaging vendors is that each product will require a new backplane design and the products cannot ever be considered a commodity. This further protects the investment they make in developing a relationship with a customer and serves to help wed the customer to a successful vendor. The high volumes per sale in this industry as in contrast to the low volume sales typical in the general VME industry, alone, will insure that the customer gets an aggressive price from his vendor.

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