E Commerce and Alpha

My column a few months ago about the demise of NT on Alpha generated quite a bit of email, some of it very thoughtful. I really do enjoy the dialogue, even when readers barbeque me. Well, in truth, I like complements better.

Some emails presented a view of the future I hadn't thought of before. The line of reasoning goes something like this: As the price of telecom drops like a rock, the price for high-bandwidth Internet connections will also drop. Need evidence? I'm buying a 144KB DSL Internet connection from a local ISP, with free installation, free router, and a static IP address, for $60 per month. If my house were a little closer to a local Telco central office, I could get an even better deal. With economics like this, virtually everyone will soon be connected to the Internet, because it will be essentially free.

The other trend is e-commerce. In the last couple months, I spent several thousand dollars on PC's, components, books, and software from several web sites. I also spent several late-night hours before Christmas shopping online for a kitchen mixer for my wife. I really did literally shop with my fingertips from the relative comfort of my house at any time, night or day.

Despite my profession, I'm really not an early adopter of technology. I did my very first ATM transaction only a few years ago, and it took me several years before I learned to set up VCRs. So if I'm buying over the web, I know it must be wildly popular.

This means that 24 X 7 X 365 uptime is no longer an advantage, it is the price of entry. It is not acceptable for an online store to tell people that they can't take orders now because their server is down, because customers will click somewhere else and buy their goods. Capacity and redundancy issues will become even more important in the future.

All this, in turn, means that many ISPs will have enormous challenges to meet very soon. They will need to spend fortunes to improve their infrastructures, many built with electronic bailing wire and chewing gum, but will face ever shrinking revenue as Internet connection prices plummet.

My friends at Compaq argue that this scenario means products such as OpenVMS and Tandem, which run or will run on the Alpha platform, have rosy futures as ISPs and others who need enormous reliability in the Internet era buy them like hotcakes.

This picture of the future is good for equipment vendors, especially for what's left of the former Digital Equipment Corporation, and very bad for small ISPs squeezed between shrinking revenues and enormous costs.

As I thought about this scenario, it dawned on me that the ISPs I know aren't stupid. The ones I know are fiercely independent, tough as nails, and as smart as they come. They're always short of cash and they live and die by getting the absolute maximum use for every piece of equipment and service they can get.

Anyone who suggests to these guys that they'll need to shell out hundreds of thousands or millions of dollars for a wholesale replacement of their current very low cost Linux or

Free BSD machines with top of the line Alphaservers, expensive OpenVMS multisite clusters, and all the other associated real-estate and other costs, better duck because the meeting could get downright violent. Yet, assuming a future with essentially free high-bandwidth Internet connections and e-commerce everywhere, we have too many ISPs and not enough customers. This means small ISPs will be run over by the new economics - they must either raise the money, combine with each other, or sell to somebody bigger to survive.

This is where creativity comes into the picture. Necessity is the mother of invention, after all. For example, what happens if the Linux community starts cranking out cluster code - real cluster code with real shared locks, not the widely advertised junk we have today? Suddenly, small ISPs will have a low cost server solution again, this time with credible redundancy and scalability. The solution may not be particularly elegant, and might not have nearly the features of a top of the line OpenVMS solution, but it will be something a cash-strapped ISP can afford. It will be "good enough" for a small ISP to stay in the game.

One of the biggest mistakes Compaq is making with Alpha is focusing on upward scalability. They make enterprise solutions that accommodate thousands or millions of users, but don't offer scaled down versions of these solutions that the rest of the world can afford. That's why Alpha still hasn't caught on.

If Compaq is serious about selling Alpha to ISPs and others who need increased reliability, then build configurations these people can afford and put together a convincing case on why they should buy them. Make it easy for independent service providers to make a living with this technology and it could still be a winner.