

## ***Diabologic: Convergence***

by Frank Dolinar

On October 15, 2010, the Media Lab at MIT celebrated its 25<sup>th</sup> anniversary.

Nicholas Negroponte was the first director of the Media Lab and his inspiration was the driving force behind its creation. He determined that communications technologies – television, telephones, recordings, film, newspapers, magazines, books, and, as a fundamental transformative force, computers – were on an inevitable and unavoidable collision course.

The Media Lab may not be familiar to you, but its innovations certainly are.

Let me give you just one example. Since the mid-1980s, computers became faster, hard disk storage became orders of magnitude larger (even as the disks became smaller), and programs became larger, we made a transition to delivering software on CDs.

We had, decades earlier, realized that computers weren't limited simply to dealing with logic and math. Computers are symbol manipulating devices. These symbols could take many different forms. Word processing spawned desktop publishing, which – to do its job properly – also needed images.

Spreadsheets evolved into tools for developing business models, including a plethora of standard charts. Presentation software acquired the means of “animating” the display of words and images.

The developers of these tools began to consider how we could do more with them, specifically, how to animate images, charts, and other presentation mechanisms. If TV and film provided all these features, why weren't they available on our computers?

Why indeed? (Think back to the classic Apple commercial introducing Macintosh.)

That's all very interesting, but the basic insight which created the Media Lab wasn't just that the collision was underway, but an understanding of how best to deal with the situation.

The convergence of these technologies wasn't going to happen overnight. It might take a couple of decades. As each incremental increase in the overlap of existing technologies occurred, we could solve the problems generated by the changes (again and again for each incremental change), or – and here's the insight – we could assume that we were going to achieve complete overlap of all of these communications technologies and provide solutions based on what that environment was expected to look like once that overlap was achieved.

As part of this, the Media Lab undertook a project, originally called “Paperback Movies”, an attempt to record an entire, full-length feature film on a CD, which resulted in the development of the DVD. Get the picture?

The Media Lab isn't the only organization dealing with the ongoing – and continuously accelerating – convergence of technologies. The latest examples of this convergence are products that bring the internet directly to your TV.

There's VoIP (voice or video over IP, aka Internet Protocol). Think of Vonage for phone calls and Skype for both phone calls and the long awaited video phone.

Smart phones, tablet computers, and other devices continue and extend this theme.

I don't know where this is leading except to say that change is continuous and the world is becoming more connected at reduced costs. One of the more visible consequences of this trend in 2010 is that the traditional phone companies are already heading the way of the dinosaur. To survive at all they must change their mix of products and services.

The smart phone is just the beginning.

If you point your browser to this link, <http://www.media.mit.edu/press/event/25th-anniversary>, you can see about 5 ½ hours of informative webcasts from the Media Lab's celebration.