### Technology Desire vis-a-vis Technology Need

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#### Introduction

Last week a colleague bounced into my office with a smile on her face that was absolutely blinding. "I have to show you this! It is soooooo coooool!" Without allowing me time to object, she pulled out her brand new iPhone and in rapid succession breezed effortlessly through a stunning series of photos, videos, websites, and a variety of creative new phone applications she had downloaded from the web.

## Confession of a "life-long technophile"

I was positively mesmerized. Demonstration finished, and with appropriate applause ringing in her ears, my friend left me alone to reflect on the unfairness of life. Just a few moments ago, the gleaming new Blackberry World Edition phone hanging in its holster at my hip (with its just-renewed 2-year service contract) had been my pride and joy. Now I knew that, despite its marvelous effectiveness for my business-oriented needs, I could never again think of it as anything more than a mobile phone. I had survived this drive-by iPhone-ing, but my innocence had been lost.

As a life-long technophile, I have certainly experienced these emotional peaks and valleys before. Every new computer I have ever purchased lost its luster with the next edition of PC Magazine, or the next Best Buy advertisement. The pace of change and improvement renders our newest acquisitions technologically-dated from the time our credit card is charged for the purchase.

### "Obsolete" or "outdated"?

There is a problem, however. In fact, I almost fell into the trap myself in the previous paragraph. I originally did not use the word "dated.' I started to write instead the word "obsolete" instead before changing it. Is my cell phone "obsolete" because my friend has

a newer alternative with more bells and whistles? Have any of my computers over the years become "obsolete" because a newer version of the CPU was 0.2 GHz faster, or had an additional 512 MB of memory on the video card? Were any of my computers even "dated" because months after purchase a core technology was updated? They could do all that I was asking them, and in every instance their performance far out-paced my own so why was I even concerned?

## Your improved performance or they have more sales?

It is this cycle of "user dissatisfaction" upon which technology manufacturers exploit for new sales. The number of new users being added to the marketplace is greatly eclipsed by those who are already fully-equipped, but who are willing to allow themselves to be convinced that even their newest systems are inadequate and in need of replacement. Microsoft is surely hoping to convince all of us that Windows 7 will be such a superior operating system that it will be a must-buy immediately upon release. And Apple certainly hopes that by reducing the weight of their notebook computers by a pound or so they will drive arm-weary travelers to their stores to purchase hundreds and thousands of new systems in the next year.

And they will both probably be right.

Both philosophically, and as a much-needed spur to the economy, I have no problem with a healthy, and innovative, computer / technology industry. I think we live in one of the most exciting times in history largely because of the advances in technology that have been both liberating and empowering. My concern is that for many of us – and I must count myself in this number - the recurring perception that we lack the newest and best tools can result in a decrease in effectiveness that can border on paralysis. For those of us in ministry roles where we will likely never have the newest and best, the issue has enormous potential impact.

## Frustration and performance

Who has not heard a comment like this: "How can I be expected to do my job? Just look at my computer...it only has an 80 gig hard drive!" Or perhaps "Of course we can't do video for the web. We need a high definition camera and we only have a Digital 8!" I am afraid that I have not only heard these kinds of concerns expressed broadly and frequently, but I have on occasion been guilty of similar comments myself.

But voicing frustration is seldom where it stops. We too often feel the moral freedom to underscore our need for new tools by proving to those who are responsible for budgeting and acquisition that we cannot function well without them and our output suffers. In some instances work is never initiated because to use Adobe Premiere 6.5 for our video just wouldn't provide the same *absolutely-necessary* toolset as Adobe Premiere CS3. "If you give me the tools I need, I will knock your socks off with the video" seems to be the inference.

# "Technology acquisition" or "technology use"?

The story – likely apocryphal – is told that when the United States entered the space race they spent millions of dollars inventing a pen that would write in zero gravity. The Soviets, on the other hand, used a pencil. If this story is true, it appears that someone was wise enough to understand that technologies are tools that help us move toward a desired outcome and not the outcome itself. Our goal must never be technology *acquisition*, but technology *use*. If we don't have access to the newest and best, most of us still have unfettered access to tools that just a short time ago were the newest and best across all of recorded history.

So I suppose my point is this: If Thomas Jefferson, Albert Einstein, Shakespeare and Galileo could turn out some pretty-impressive work without a 2 terabyte hard drive and a 22" LCD monitor with surround sound, then what is our problem? If Ansel Adams didn't have access to a 21 megapixel Canon EOS 5D Mark II digital camera, are we really

limited by the fact our camera is "only" 15 megapixels? Or, do we need to create a zero-gravity pen, when a pencil will work equally well?

To illustrate, let us imagine that we are asked to develop a new teaching video for your organization that will be delivered over the Internet to ministry candidates. You have a good standard-definition camera but you really would like to use the project to propose an upgrade to a high definition system. Since most of those in budget authority would accept your counsel as to what is necessary for the project, this *could* be your opportunity to get that incredible new Panasonic HD camcorder you have wanted for the department. What do you do?

#### **Guidelines for decision-makers**

Here are just a couple of guidelines that I have found useful when I have been asked to make a decision in similar circumstances:

1. What will a new technology (in this case a new high definition camcorder) do that I cannot do with existing technology, and is that outcome *currently necessary / possible*?

It is clear that high definition video has distinct visual advantages over its standard-definition predecessors. Currently, however, it is unlikely that either you or your viewing audience currently has the necessary Internet bandwidth to make that a viable option.

Aggressive compression will be necessary for either high definition and for standard definition.

Stage One Filter: Stay with standard definition.

2. What will a new technology do that cannot be accomplished with existing technology that will be necessary *within the anticipated lifespan of the technology*?

The state of the Internet is changing rapidly. Bandwidth is no longer the pricy commodity it once was. It is conceivable that within the lifespan of a good video camera the issue of

delivery and end-user bandwidth will no longer be a concern at all. Still, until then, the standard definition camera will probably perform admirably. When all the Internet bandwidth issues are eventually resolved, you will be able to appropriately acquire a new high definition camcorder that is current to its time rather than having an older camera that is hanging on to life.

Stage Two Filter: Stay with the standard definition camera.

3. Will planning for future use of your technology-developed *product* merit a new technology now?

In this case, it is not a question of whether the camera be useful when Internet technologies change, but will the videos you create with the camera still be used? If the answer is no, the videos will have been replaced by a new generation of materials, our process has largely resolved the question of a new video camera. If, however, the video training products will continue to be useful, and if your budget permits an camera upgrade, I believe the quality benefit for possible *multiple uses* – even if the full impact will not be realized until much later - would recommend a new video camera.

<u>Stage Three Filter</u>: If budget allows, and if the products will be used in the future, purchase a new high definition camcorder.

(This is, in fact, an issue we faced recently in our distance education program as we added new video courses and updated several others. For compressed DVD ROM and Internet use, our standard definition cameras were fine. With the anticipated life of our courses extending 3-5 years into the future, and as we anticipated additional delivery options for our courses, we purchased a new Sony SRII digital camcorder for course production.)

# Conclusion

We live in a time when technologies interpose themselves into every fold of our lives. It is important for each of us to establish the terms of engagement. I am working each day to resolve that issue in my life and, as a hopeless technophile, I have a long way to go.

How about you?