

## “Smart Business” ...Or How We Came to See Senselessness...

For quite a few years now, Harbor Research has focused most of its research and consulting on what we call “the Pervasive Internet”—the convergence of pervasive or embedded computing with the packet-switching “network of networks” called the Internet.

We prefer “the Pervasive Internet” over other terms in common use—notably “M2M,” which usually stands for “machine-to-machine”—because it captures the profound enormity of the phenomenon: the world on the Internet, and the Internet in the world. Pervasive computing—often called “ubiquitous” computing—usually refers to digital microprocessors and sensors embedded in everyday objects, turning them into “Smart Products”.

Many product manufacturers and service companies are already attempting to use embedded computing and networking technologies to deliver smart, remotely monitorable goods that will support entirely new modes of customer-interaction and service delivery. The resulting asset visibility and customer intimacy represent huge new revenue opportunities across the entire life-cycle of products. The emergence of device networking is unleashing an age of continuous “always-on” connectivity in which every connected product turns its manufacturer into a new kind of business we have named “Smart Services.”

If you simply combine the notions of Smart Products and Smart Services you get to the notion of “Smart Businesses.” But how close are we really to a vision of smart business?

From where we stand, it appears we have lost our way. We have so many tools and technologies at our disposal, but we have yet to gain traction. Just look at the vast sums of money spent in the last several years on so-called “innovation” methods and ask yourself: how many truly innovative products and services have we gained from all this investment?

This current state of business reminds us of a story by H. G. Wells, called *In the Valley of the Blind the One-Eyed Man is King*, concerning a group of people living in the Andes Mountains. Due to a geological catastrophe, the valley is totally isolated and, for an unknown reason, the inhabitants have been congenitally blind for a number of generations.

The people in the valley have re-evaluated much of the information handed down through oral tradition; new impressions have been forged based on subjective experience. For example, they have decided there is no difference between angels and birds. The people have reasoned that because they can hear both birds and angels sing and they can feel the wings of both brush their faces, there is no difference.

The story creates the concept of people who, as long as they remain in isolation, can rationalize any type of behavior, no matter how absurd the behavior appears to an outsider. Isolation and blindness lead the inhabitants further away from the truth.

We are currently in a state of isolation and blindness.

Yet, the truth is right in front of us. When products become networked, the predominant value shifts away from the product itself to the experience of owning and using the product inside an “aware,” responsive environment. Eventually, this environment optimizes the customer’s own processes, saves the customer money, makes customers more profitable, and thus becomes the core value that a product company delivers. To accomplish this, product companies need to do something difficult, alien, and even counter-intuitive: move away from the notion that their product is valuable in and of itself.

Products and services, while complementary, have historically had opposite strategic goals and divergent operational models. As a result, each function has had to seek out its own distinct business strategies. The traditional manufacturing-driven business defined services and support as subservient to the product itself, as no more than a “bootstrap” business with little upfront investment. This model is rapidly disappearing. The ability to closely couple products and a wide variety of service values has emerged as a requirement to stay ahead.

Products and services need to be mutually supportive without inhibiting one or the other. The best companies come to see the continuously evolving relationship between products and services as a fertile ground for innovation. The more involvement and information a manufacturer has with the actual use of products, the clearer the path towards innovation becomes. Products and services need to be interwoven and mutually supportive; increasingly, success in either goes to the company that effectively utilizes the combined potential of both.

Now add the fact that we have entered an age where we will network every manufactured thing possible— “getting over” the products obsession doesn’t even begin to address the potential networking brings. Unfortunately,

while most “product-centric” businesses are now embracing the concept of growth-creating services, many are not yet embracing the shift from human-centric computing to “ubiquitous” device-centric computing.

It’s as if we’re wandering through the uncharted jungles of the 21st century with reconnaissance reports and walkie-talkies from 15 years ago. Businesses are thinking services, but they’re not yet thinking Smart Services. They are in serious danger of moving aggressively to implement a strategy that is dead.

How innovative and smart is business today? For all the silicon-based “intelligence” permeating every aspect our lives, we still live in a brutally “dumb” world. That dumbness is starting to cost us—dearly.

The concept of “Smart Business” has far-reaching effects the likes of which have never before been seen in our everyday lives. The Internet versions 1.0 and 2.0 has only taken a first step in changing every aspect of our lives. Intelligent device networking, The Pervasive Internet and Smart Services all represent the next, larger step in this story. It will afford and enable innovation far beyond our imaginations. No matter who you are, what industry, or what job function, this wave of change will be inescapable. It’s about time we opened our eyes and took a look around.