

Enterprise Awareness McLuhan Thinking

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I just attended a conference whose slogan was "Building the knowledge-powered enterprise." It was designed as a day and a half of seminars, themed on four different types of power, all, presumably, derived from knowledge. There were to be sessions on integration power, productivity power, people power and learning power. Sounded like a powerful conference. But really, the conference I attended happened about 10 minutes ago, out in the hallway, when someone I was near said, "Knowledge is Power." That's all we need to know. If we have knowledge we have power. If our enterprise has knowledge, it has power. If our customers have knowledge, they have the power; if our competitors or suppliers have the knowledge... they have the power. So in that one phrase, that one cliché — knowledge is power — I have the full effect and message of the conference. Learn how to acquire and manage and use as much knowledge as you can, and, like our evangelical friends say, "YOU WILL HAAAAAVE TH' POWA!"

Most certainly, having more knowledge than someone else will allow you to exercise control. One of the early theories of business on the internet had to do with "empowering" customers with knowledge of pricing and supply, so that the most efficient price could be obtained in all competitive situations. Businesses could no longer keep prices artificially high simply because of the customer's lack of knowledge. Customers had the knowledge; they had the power... the control. Customers thought they could always get the best product for the best price from anywhere in the world. What happened? In many cases, businesses that ceded such control to customers were unable to sustain themselves and went out of business. Others simply gave customers the illusion of the knowledge-power control axis, and blithely manipulated prices and supply behind the scenes. If you are still buying airline tickets online, congratulations, you are living proof of this situation.

Another theory says that with the best knowledge, a business can be more efficient, more productive. It can "do more with less." But in many cases, companies who proudly say they are doing "more with less" also have people who are doing more work with less satisfaction, have more stress but deliver less quality, institute more control or surveillance but engender less trust. These companies have lots of knowledge, in fact, they often spend considerable time and money to collect, store, manage, disseminate and report on, knowledge. They sometimes achieve tremendous efficiencies. But, it is often the case that such efficiency is not sustainable through good times and bad, and, perhaps worse, these companies are not entirely effective — that is, they are not having the effect they want to have on their customers, on their market or on their people.



So it seems that despite creating systems, complex organizations and supporting infrastructure to acquire and manage knowledge, we often miss something. There is always something of which we are unaware. No matter how much knowledge we have of our operations, our customers, our markets, our competitors, there is always more to know. So perhaps we're going about it all wrong. In trying to capture as much information as we can possibly find, we may be undertaking an exercise in which, like the Red Queen says in *Through the Looking Glass*, "it takes all the running you can do to keep in the same place." Perhaps we should ask a simpler question. Like...

What haven't you noticed lately? What HAVEN'T you noticed lately?

There's a cute story about a man who, during wartime, would come to the country's border with a wheelbarrow full of dirt. The border guard looked at the man's papers and all was in order for him to cross. But the guard was certain the man was smuggling some sort of contraband in the wheelbarrow. So the guard took a shovel, poked around in the dirt, but found nothing. The man was allowed to cross.

The next week, the man once again comes to the border with a wheelbarrow full of dirt. Again, the border guard found that the papers were in order and dug through the dirt, but still found nothing. And again, the man was allowed to cross. Week after week, it was the same story: Man approaches the border with wheelbarrow full of dirt. Guard finds nothing of interest and the man crosses. At the end of the war, the guard sees the man and asks him: "Look, I know you were smuggling something across the border, but I could never find a thing hidden in the dirt. What were you smuggling all those years?" The man answered: "Wheelbarrows."

The border guard was unable to perceive what had been right there under his nose for years, simply because it did not match his conception. We collect and manage knowledge. We create elaborate systems to disseminate that knowledge. Many enterprises have tied aspects of their compensation plan directly to their employees' participation in this quest for knowledge. And what do we do with it all? We create elaborate mental models of how things are supposed to work. We create conceptions, and then manage our affairs so that our business attempts to match those preconceived notions.

But we are not necessarily effective, that is, we do not manage for the overall desired effects. Why do I say this? Simply because, what we conceive about our business is not sufficient to fully understand all the effects that are actually happening in and around our business. Like the border guard in the story, we are completely unable to perceive all of the dynamics of our business environment because our *conception* limits our *perception*. Our accumulation of, and intense focus on, our knowledge, controls what we believe. And, what we believe controls what we are able to see.



What haven't you noticed lately? This is really an odd question, because, how can you notice that which you haven't yet noticed? And if, as I am proposing to you, this is a key question for business awareness, even if we answer it once, how can we consistently continue to answer it?

Unfortunately, it is almost impossible to achieve the requisite awareness of what we haven't noticed while we are immersed in a comfortable, or at least accustomed, environment. We are all subject to the ground-rules, that is, the rules and unperceived effects that govern our business ground or context. It is like asking a fish to suddenly become aware of water. McLuhan observed, "One thing about which fish know exactly nothing is water, since they have no anti-environment which would enable them to perceive the element they live in." It is only when it is pulled from the water that the fish becomes acutely aware of its former environment. The challenge in achieving the awareness to notice the formerly unnoticed — what we call "integral awareness" of our total business environment — is to create an appropriate "anti-environment."

We tend to notice many things. In fact, we're very good at noticing what is entirely obvious, to the extent that we often become obsessively focused on it. For example, many companies obsessively watch their competitors, and attempt to match them, move for move, feature for feature, technology for technology, dollar for dollar. In doing so, they often lose sight of their customers' particular needs and desires relative to their business strategy. One telecommunications company in the United States was planning to base all of its future network build-out on a foundation of a technology called MPLS. They believed — and not without justification — that such a foundation would allow them to offer expanded services at a lower cost, with higher overall reliability. One of their major competitors, however, could not afford to invest the necessary capital to implement the requisite infrastructure for MPLS. Naturally, they came out with a marketing message downplaying the benefits of the technology they couldn't afford to implement. What happened? Instead of proceeding aggressively to promote the benefits of the MPLS technology and claim technological leadership, the company chose to pay undue attention to their competitor, thereby enhancing the competitor's position in the customer's eyes.

The competitor won the customer's attention. By capturing that attention, the competitor successfully derailed the marketing strategy of the technologically-superior company. They won the competition for attention. In our world of instantaneous communications, everyone is vying for the most precious and valuable commodity to be sought — our attention. Think about it: Every advertiser, every potential vendor and company desperately wants your attention, and will go to great, and sometimes outrageous, lengths to obtain it. If attention is the most valuable commodity, our most valued asset, it may be said that the most valuable personal skill for an effective manager is ignorance, literally ignore-ance — the ability to selectively and appropriately ignore that which is irrelevant or merely distracting. In this context, ignorance is not bliss — it is the practical manifestation of acute awareness and heightened perception.



The challenge is a tricky one: We must create an anti-environment so that we can ignore what we notice and notice what we ignore. And what is most hidden from our perception, that we ignore the most? Well, whatever it is, we know that it comprises our business ground, and is having the greatest unseen effects on us and our businesses, costing lots of attention, potentially draining significant resources, and contributing to the mismanagement of opportunities.

One way to accomplish this awareness is simply to wait. By looking back through the passage of time, we can slowly become aware of the true effects of our business environment. With any luck, the person who uses this technique may still have a job, perhaps even working for a still-viable company. These are the people who march backwards into the future.

What would be entirely more useful is a way to reveal those effects that are hidden from us — now. We need to find the questions that we have not asked after we've asked everything we can think of. We need to raise the issues that have not yet occurred to us. And perhaps most important, we must anticipate the effects that have already happened of things that we are about to do. In other words, our objective is nothing less than to achieve the ability to predict the future by foretelling the present.

After such a build-up, I'm almost tempted to say, "to find out more, have your credit card ready and dial the 800 number on your screen..." But I won't. Instead, I will reveal to you all at least one of the secrets behind Marshall McLuhan's uncanny ability to, indeed, predict the future by foretelling the present. McLuhan was the one who, in 1955, described "television platters" that would allow people to watch pre-recorded television programs and movies on their home television set whenever they wanted. A dozen IBM divisional directors in 1968 literally thought McLuhan was crazy when he described a computer in every home and online grocery shopping. The tool I'm talking about is the Laws of Media.

The Laws of Media: They are precisely four aspects or effects that apply without exception to all creations of humankind — everything we conceive or create. In McLuhan's lexicon, "medium" is not merely limited to our conventional idea of mass-media: radio, television, the press, the internet. Rather, a medium refers to anything from which a change emerges. And since some sort of change in us or society accompanies anything we conceive or create, all of our tools and technologies, policies and plans, a cup of coffee or a coup d'état — they are all McLuhan media. The Laws of Media apply regardless of whether the creation is tangible or intangible, abstract or concrete, and they serve to reveal the nature and effects of our innovations relative to us. As Marshall and his son, Eric, worked on these Media Laws for the decade before Marshall died — and for Eric, an additional 8 years thereafter — they challenged others to find an example to which only three of the laws applied, or a fifth that applies in every case. No one ever could. Now to Marshall McLuhan, the questions were always more important, and indeed, more revealing, than the answers. Thus, the four Laws of Media are framed as four questions or probes.



The first probe is asked like this: What does the thing — the artifact, the medium — extend, enhance, intensify, accelerate or enable? We can ask this question about any product, any service, any initiative, any policy. We can ask this enhance question about any word or phrase in our vocabulary, including, most interestingly, our buzzwords and acronyms. Email, for example, enhances and accelerates our ability to communicate in writing. Its rapidity and characteristic terseness intensifies the sender's meaning.

A second probe: When pushed or extended beyond the limits of its potential, the new thing will tend to reverse what had been its original characteristics. Into what does the new medium reverse? People typically have difficulty thinking through the characteristics of the reversal law, often because we tend to be very focused on what a new idea or creation will obviously do for us. The effect of reversal is really very easy to state; discovering the circumstances under which it emerges might be more tricky. So, continuing with email as an example, it enhances our ability to communicate, but when extended beyond the limit of its potential — with spam, for instance, or dozens of unimportant FYI- or CC-type of corporate emails — email reverses into no communication at all due to an overflowing inbox.

The third Law of Media probe: If some aspect of a situation or a thing is enhanced or enlarged, simultaneously, something else is displaced. What is pushed aside or obsolesced by the new thing; the new medium? Now when I say "obsolescence," I do not mean that the older form is eliminated, never to be heard from again. In fact, it is quite the opposite: One sure sign of a medium in obsolescence is its ubiquity. Does everyone remember what happened right before the dot-com bubble burst? There was a saying then: "You know the end of the market is near when you're getting stock advice from your garbage collector." Another way to think of obsolescence in this context is to picture a supernova. The star glows brightest just before it is about to explode and be annihilated. So what does email obsolesce? In a corporate setting, email obsolesced the interoffice memo, and those large brown envelopes tied with a string that had all those boxes for a chain of recipients. It also obsolesces synchronicity in communications and other socialized skills of responding to aural or physical cues in conversation.

And the final Law of Media probe: What does the new medium retrieve from the past that had been formerly obsolesced? This reflects the aphorism that, "there's nothing new under the sun," and essentially asks, "How did we react as a society the last time we saw a medium with analogous effects?" The law of retrieval brings in precedence and historically-based experience. So what does email retrieve from the past that has long been obsolesced? Thinking way back through the history of communications, email may retrieve Hermes the messenger, scribe and herald of Greek mythology. Interestingly, from the perspective of the retrieval aspect of email, Hermes was also the Greek god of commerce, invention, cunning and theft. Has anyone here received a confidential business proposition from Nigeria lately?

The Laws of Media are simultaneous effects — emergent properties, really — of anything we conceive or create. What does it extend, enhance, amplify or enable? When pushed beyond



the limit of its capacity into what does it reverse? What does it obsolesce? And, what does it retrieve from the past that was formerly obsolesced?

With these four Media Laws in mind, let us take a practical example that is more directly themed to this conference and see what we might be able to discover. Since I began today with a somewhat provocative look at the role of knowledge in our enterprises, let's continue by applying the Laws to the medium of Knowledge Management. The tactical and strategic benefits of appropriately managing, and using, business information have been well understood for many decades. However, the corporate fascination with Knowledge Management as a medium in its own right seemed to come into vogue in the early 1990s, with the publication of Michael Hammer's and James Champy's *Reengineering the Corporation: A Manifesto for Business Revolution*.

As many of you will recall, in this *Manifesto* — ironically, a capitalist reversal of Marx's *Communist Manifesto* — Hammer and Champy describe a method of redesigning the business processes within a company by which it is run and managed. The authors advocate beginning with a "blank sheet" in order to rebuild the operations of the company from scratch, thereby increasing efficiency, that would result in potentially significant cost savings. Although not necessarily intended by Hammer and Champy, Business Process Reengineering was the justification by which senior management initiated massive rounds of layoffs under the banner of "downsizing," a term that was later made somewhat more palatable by renaming it to "rightsizing."

What did Business Process Reengineering extend, enhance or enable? Its intention was to enhance corporate effectiveness, or enable "machine-like" efficiency, by optimizing the use of human components in redesigned, almost mechanized, factory-like, business processes. The new processes, of course, would be enabled by electronic information technologies. Process reengineering retrieved the old "time and motion" studies from the 1950s and 1960s that were used to make factories more efficient. Recall that one effect of these studies was to turn people into integral — some might say integrated — components of an assembly-line process: person becomes machine. This is, of course, a very curious image when applied to the context of the so-called "knowledge workers" in the 1990s. It seems that Business Process Reengineering had the effect of reversing white-collar workers into something akin to their blue-collar brethren. In doing so, these revised processes obsolesced "superfluous" people and processes — allowing management to down-, or right-, size their organization. Unfortunately, the departing people took their experience and understanding of "how things really work" with them. Thus we have another source of the reversal: When efficiency is enhanced beyond the limit of its potential, it reverses into inefficiency because of the loss of the indigenous knowledge that had been developed by the company's many "tribes" over the years.

We know from McLuhan that electronic technologies have an implosive, or integrating effect among people, as opposed to mechanical processes that are explosive or divisive. Yet BPR ironically intended to use these same cohesive technologies to retrieve a fragmentary Industrial Age management favourite — time and motion. Its effects work in opposition to



the integrating and cohesive effects of the technologies that BPR employed. Had senior managers employed the Laws of Media instead, they may have recognized this fundamental inconsistency and saved themselves, their companies and their people considerable grief. But there is one additional observation we can make from the reversal aspect. Reversal often provides the impetus for metamorphosis or evolution. The loss of indigenous knowledge that resulted from the reengineering debacle created the conditions for the emergence of what we now know as Knowledge Management, phase one.

Phase one recognized that, with downsizing, lots of good stuff that existed solely inside the heads of the company's staff walked out the door along with those heads that were so unceremoniously cut. Our initial take at Knowledge Management attempted to enhance our ability to retain processed and digested information as a corporate asset without requiring the associated person. In doing so, it obsolesced the expert. After all, all the expert provided was the expertise... You all know what "expert-tease" is, don't you? It's the tease of the little bit of information that the expert provides, making you want to return to the expert for more. The expert dances the "expert-tease" and thus makes himself indispensable to the organization. With Knowledge Management, that's obsolesced. What is retrieved from the past? Perhaps Plato's Dialogues and Letters, that were among the earliest instances of an oral history and tradition that were recorded for future generations. Plato's writings are demonstrative of a way of fixing the corporate culture of the day in an archival fashion. And finally, when retaining information without people is extended beyond the limit of its potential, into what does it reverse? Retaining knowledge, storing knowledge, categorizing knowledge, that were characteristic of early Knowledge Management endeavours, all essentially appear to be putting knowledge in some sort of stasis. The reversal is to release that knowledge, and allow it to flow throughout the company. Reversal gives us the evolution to Knowledge Management phase two: Conversations and Collaboration, which is roughly where we are today.

We now extend and enhance the dynamic flow of information, sharing it throughout the company. This obsolesces information in stasis, and more importantly, it obsolesces information that exists as figure without ground, out of context, and thus devoid of meaning. It retrieves study groups from school or aspects of story-telling from our civilization's oral roots. But what does it reverse into? What's coming next? How do we predict the future by foretelling the present? What haven't we noticed lately?

Anyone notice the Internet lately? I'm willing to bet that you aren't noticing the Internet in the same way that you were being asked to notice it a few years ago. I remember then that a favourite question that a CEO would put to his CIO was, "What is your Internet Strategy?" I'm curious: In your most recent budget or planning cycle, how many people here were explicitly asked, "What is your Internet Strategy?"

That tells us that the Internet is receding from figure — that which we obviously notice — into ground — that which begins to have unseen and unnoticed effects on us and the way we



do business. Let's see if we can apply McLuhan thinking to discover some useful ground-effects of the Internet.

McLuhan gave us a guide to understanding the nature and effects of instantaneous, multi-way communications when he distinguished between "visual space" and "acoustic space." While these metaphors usefully tie to two of our senses, they do not necessarily relate exclusively to that which is seen or heard. Visual space is linear and bounded. It is ordered and continuous, yet continually fragmented by our eye's (and brain's) automatic process of grouping and classification. In contrast, McLuhan described acoustic space as "a resonant sphere whose centre is everywhere and whose boundaries are nowhere," a world of "simultaneous relationships." Therefore, everywhere in acoustic space is here, and every-when in acoustic space is now. This describes the effect of the Internet perfectly, an ever-present presence, the world of simultaneous relationships.

We can make an additional observation from the interesting metaphor of acoustic space. McLuhan points out that a characteristic of "visual space" is that we can shut it out, in much the same way we can shut off our vision by closing our eyes. We have eyelids, but we have no "earlids." We cannot shut out acoustic space, or the space of relationships and connections that are all around us. This suggests that we cannot shut out the effects of the Internet on our business and society, even if we choose not to use the Internet directly.

So perhaps we should look at this aspect of relationships and connection — the social or cultural construction of the Internet — in order to understand its ground. Manuel Castells is a professor of sociology at University of California at Berkeley and senior professor at the Internet Interdisciplinary Institute of the Open University of Catalonia in Barcelona, Spain. He wrote an interesting article in the recent Queen's Quarterly. In it, he argues that the Internet is indeed a cultural creation, and describes the four founding cultures of the Internet and what effects they brought with them.

The first culture he identifies is the one that essentially founded the Internet. No, it was not the military, although that's how the popular story goes. Two academic scientists, Don Davies in England and Paul Baran at RAND Corporation in the United States, tried to figure out a way for several of the very scarce computers in the world in the mid-1960s to communicate. They suggested to the U.S. Air Force that a robust communications system could be built based on their packet-switching technology — it was to be so robust that it could even survive a nuclear attack. It's a great story, except for one minor detail: The Air Force rejected the proposal. However, the Defense Department funded the research as an academic project with the academic objective of allowing every scientist in the world to be able to connect with one another and exchange their data. They brought their academic culture with them and inculcated the fledgling network with the academic ethos: Provide free communications and a free exchange of data, information and ideas that would be available to everyone. And, most importantly, provide a way in which participants and contributors would be recognized by their peers. You see, in academia, the currency is peer recognition.



The second cultural layer that Castells identifies is the one that actually built the Internet: The hacker culture. Or, to be a bit more precise, I would say the hacker community, for it is, indeed a community, and to belong to that community as a respected member is key to the hacker ethos. Hackers strive for the simple objective of creating cool and elegant solutions to technical problems. They also care passionately that the results of their cooperative creative efforts are not appropriated or inappropriately co-opted. That which has been achieved by sharing should, in turn, be shared with the rest of the community. Those who would refuse to participate in this simple ethic are ostracized and expelled from the tribe. On the other hand, those whose work is generally accepted as being of particular significance or exemplary of the hacker ethic are respected, and almost revered, as tribal elders. Think of Richard Stallman, the founder of the open source movement, and Linus Torvalds, the originator of Linux.

The third layer of the Internet's culture is comprised of autonomous communities whose members share a common interest, a common worldview, a common need, or a common desire. This layer continues to morph and evolve, with each new aspect of technology creating yet new sets of community relationships based on new modes of collaborating and exchanging a variety of items of interest. Interestingly, it is not the technology itself that attracts these communities, although some of the earlier ones certainly did share a common technological interest. Rather, it is the basic human need to connect and communicate that drives community culture, and ironically, engenders the technologies and tools that enable their existence, such as chat, listservs, usenet, peer-to-peer networks, weblogs and wikis. Community culture values shared support among its members, and mutual assistance. A community's primary objective is continuity, existence and viability.

Finally, we come to the most recent addition to Internet culture: The culture of the entrepreneur. This culture was created as a result of Tim Berners-Lee's work, at CERN in Geneva, in developing the software for the World Wide Web, and in particular, HTML and the original Mosaic browser. Entrepreneurs realized that there was a buck or two to be made out of this new medium, and they provided the impetus for the explosive growth of the Internet's infrastructure, its spread around the world, and the creation of all sorts of weird and wonderful new businesses, without, as Castells takes great pains to note, commercializing the entire Internet.

Which groups have been the most successful relative to their respective currencies? Most certainly the academics, whose community the Internet was originally designed to serve, have realized their ambitions. Those who contributed academically continue to receive recognition, both via the Internet and in the embodiment of the Internet itself. The hacker community has benefited tremendously. The open source movement is stronger than ever, and is considered an archetypal model for software development, even within those companies whose software products are themselves proprietary. Almost two-thirds of all web servers run open-source Apache software. Linux has gone mainstream with the blessing and endorsement of none other than the likes of IBM, Dell, Hewlett-Packard and Intel, not to mention otherwise staid institutions like major banks and brokerages. In fact, almost everything that actually runs the Internet is open source. It is clear that communities continue to grow and



flourish on the 'net, with new communities that span the globe being created daily. As new capabilities are created, communities seem to spring up to capitalize on them, the latest phenomenon being the weblog community. The entrepreneurs, on the other hand, didn't seem to do as well, overall. After the metaphoric gold rush to the dot-com Klondike, we experienced the dot-bomb, and now, the relatively quiet dot-calm.

The businesses that are really benefiting from the Internet are those who are making use of it as an enabling environment for radical change in the way their traditional operations are executed. I'm sure we can all recite the anecdotal success stories about how production is streamlined, inventories have been reduced, customers' managers are "relation-shipped," and so on. But in all of this, what haven't we noticed? The Internet exists, grows and continues to thrive based on three of the four founding cultures whose ground consists of an ethic of contribution, sharing, openness and recognition. What was created? Through all of this seemingly altruistic, and apparently anti-capitalistic behaviour, an infrastructure was created that significantly enhanced, extended, enabled and accelerated otherwise conventional businesses' ability to do business and make money. What an interesting reversal! It goes contrary to conventional thinking, but, now that we have noticed it, it's obvious. Mutual contribution that has real value across several different, but intertwined, cultures has resulted in the creation of an infrastructure that enables long-term structural economic growth among a wide variety of traditional industries and enterprises. It is an obvious result — now that we've seen it — but it seemingly defies conventional thinking and economic logic. With very few exceptions, those who attempted to apply conventional capitalistic thinking and spreadsheet economics to commercialize the Internet — the stalwarts of the "New E-comedy" ... "New Economy" — not only failed, they failed spectacularly!

Let's come back to the earlier probe I posed concerning the reversal of Knowledge Management phase two. When we extend the shared dynamic flow of business information throughout the company beyond the limit of its potential, into what does it reverse? It reverses into a shared dynamic flow of business information outside of the company. Now, I'm not talking merely about that silly buzzword "extranet" that describes transaction-oriented data flowing up and down the supply chain. ...

Now that's an odd term, "supply chain." That word, "chain," conveys the notion that we are somehow chained, or shackled to our suppliers and customers... that we can't break free, and neither can they. This is not exactly a useful metaphor, and certainly doesn't reflect reality. How about "supply network" or "supply grid" or "supply plexus..." Now that has a great potential as a new buzzword — supply plexus!

...So we're not talking merely about transaction-oriented data that flows throughout the supply plexus, but rather, critical intellectual property — that which conventional thinking tells us we should preserve, protect, patent and prosecute.



There's that conventional thinking again. If we have learned anything from our brief trip through McLuhan's looking glass, it's that conventional thinking — our preconceived notions — must give way to unconventional integral awareness and perception of what's actually happening. Consider intellectual property. Our modern notion of what constitutes so-called intellectual property comes from a time when the king granted royal favours — copyrights, patents and trademarks — for the exclusive use of those whom he favoured. As this tradition crept into common law, the exclusivity gave way to a limited monopoly that would eventually revert to the common domain and thereby benefit society as a whole. But the term we have come to use, "intellectual property," seems to suggest that what emerges from intellectual activity — in other words, ideas — are, in some manner, property, and hence, should be owned by someone, and be subject to the very different laws concerning tangible property rights.

It is irrelevant to argue that ideas are not subject to copyright. Increasingly draconian copyright protection, coupled with companies' increasingly aggressive litigation is effectively limiting the scope and meaning of fair use and restricting the flow of innovation. Corporations now behave as if they own and control ideas as property. They actively create and promote that conception in the minds of the general public. Many of you may even have signed a document as a condition of employment that your employer somehow "owns" any ideas you may have while in their employ. Well, if this is truly the case, do you forfeit those ideas when you leave the company? How many of you have participated in an "exit interview" that included brainwashing, hypnosis or liberal injections of mind-altering chemicals? Imagine walking out the door on your last day of work and a big alarm sounds — EHHH EHHH — and the security guard approaches: "Excuse me sir, I need to inspect your brain. There may be an idea in there..." You see? With the appropriate antienvironment, perception doesn't necessarily match conception.

The driver of productivity in our world is innovation. For example, the innovations manifested by the Internet's infrastructure have resulted in tremendous productivity gains across multiple industries. What do I mean by productivity gains? According to Alan Greenspan, through the 12 months ending in June 2002, productivity for industrial workers in the U.S. rose by a significant 4.8 percent, the biggest jump for a 12-month period since 1983. The gain is well above what was considered to be improved rates of around 2.5 percent that the country saw since 1995 and far above the dreadful productivity rates of around 1.5 percent which severely impeded American competitiveness in the two decades before 1995.

Innovation has always been driven by the free flow of ideas within an ethic of openness, cooperative sharing, mutual support and peer recognition. What does this obsolesce? Such enhanced innovation, as exemplified by the capabilities of the Internet, obsolesces nothing less than this notion of proprietary intellectual property rights. A business whose foundation is based on the protection of their proprietary intellectual property is obsolete. A country whose legislators increasingly lock down intellectual property is obsolete. And as an aside, as a Canadian, I am tremendously proud that our courts have had the courage to rule against



such lock-downs; I hope our legislators are listening and paying attention with McLuhan-like awareness.

Businesses that are willing to become integrally aware of what is happening right now will begin to create the "open source" licensing of their intellectual property, along the lines of a GNU General Public License style protocol. The businesses that do so will enable not only an explosive growth, but a sustainable growth in the economic infrastructure that will last for decades.

But what about competitive advantage, you may ask. It is true that competitive advantage coming out of the industrial age was based primarily on intellectual property: Processes, devices, formulae, techniques — things that a company could copyright, trademark, patent and jealously protect. But, of course, we're not in the industrial age any longer. We are not primarily a product economy any more. The product economy evolved and reversed into a service economy some years ago. In fact, we are leaving the era of service economy, as much of the service employment is moving to relatively less expensive economies elsewhere. As the service economy evolves, it reverses into the experience economy — for example, we happily pay a premium for "the experience." Even the corner coffee shop has become a Second Cup or Starbucks "theme park."

So what will provide us with the competitive edge if we open-source our now-protected intellectual property? Since every individual company comes from a ground comprised of its people and its customers, each company as a medium is itself unique. It is the company's unique ground that will provide the competitive differential, and the competitive advantage, that every enterprise seeks. When McLuhan thinking is applied in the context of developing businesses, the business's management team can discover new alternatives and approaches to existing markets by noticing things they have never noticed before in their unique ground. These will result in more choice to customers, the end of industrial age competition as we have known it, and the evolution of an economic infrastructure that is consistent with the 21^{st} century, rather than being mired in the 19^{th} century.

What haven't you noticed lately? This conference is themed with the slogan of "building the knowledge-powered enterprise." But, of course, we've all noticed the knowledge-powered enterprise. It's old news; it has all happened in the past. What haven't you noticed that is happening right now? What you had not noticed before coming here this morning is that your knowledge-powered enterprise is obsolete. The new medium, happening now if we do it right, is the truly knowledge powered, "open source," economy. To accomplish this will take considerable courage on the part of business leaders and legislators. It will take integral awareness and perception. And, it will take one more little thing: It will take noticing.