



McLuhan Program
In Culture and Technology

**How to Determine the Business You're REALLY In
and
Other Tales of McLuhan Thinking, Innovation
and Integral Awareness**

by

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Keynote Presentation



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How to Determine the Business You're REALLY In, and Other Tales of McLuhan Thinking, Innovation and Integral Awareness

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Abstract

What haven't you noticed lately? Determining the business you're really in requires developing an awareness of the dynamics and effects that emerge from the business when considered as a McLuhan medium. McLuhan's Laws of Media are a particularly useful tool that provides non-judgemental clarity of perception into these effects. IBM's initial success, loss of industry dominance and subsequent recovery is a prime example of how the company's nominal business differs from "the business it's really in" when viewed through the McLuhan lens, an insight that is applied as well to Microsoft, Amazon.com and GroceryGateway.com. Examples of how "creating an culture of innovation" requires one to use the media law of reversal to break through conventionally-trained business thinking are demonstrated among some of the most successful companies in computer software, food service and electronic component manufacturing. "To be able to perceive 21st century dynamics is to ... change the tools with which we perceive the world and thereby restructure the way we think about our business."

Before I begin, I'd like to get a sense of what businesses some of you folks are in. So I'm hearing that you are in a wide variety of different businesses. Now let me ask you all another question. How many people here in the room today are measured or evaluated in their jobs according to some financial measure – revenue, profitability, cash flow, return on capital or other similar measurement? Almost all of you. From this response, is it fair to say that much of what dominates your time is closely related, or even driven by, those financial results? Well then, what I perceive is that you weren't entirely accurate in what you told me a moment ago in response to my asking you what business you're in. What I perceive by asking you about the dominant processes of your work environment is that nearly all of you are in exactly the same business: You're all manufacturers, and you manufacture money.

Now before you say that I've just pulled a cheap trick, or that this little demonstration was trite or trivial, let me share with you that I am not in the same business as you are. I don't manufacture money – just ask my wife, if you don't believe me. That's not to say that I don't work for money (except for today's talk, as it turns out), but rather, the dominant effects that I bring about in the world are not the same as yours. Specifically, I manufacture ideas. I build awareness. In the same way that you may be measured according to the amount of earnings that you retain each year, or dollars of profit that you produce each quarter, I am measured by the number of ideas and new insights that I create... literally, each minute. If you don't meet your financial targets, you'll end up like most of Donald Trump's would-be apprentices – "You're fired!" If I don't meet my insight and awareness targets, you each individually



have the opportunity to fire me, but walking out of my session and into someone else's.

I know what business I'm in. I understand its dynamics, and how its market has changed – and continues to change – in response to the tremendous acceleration it has experienced in recent years. Most of all, I know how to perceive the realities of the world in which I live and in which I play my role.

The question is, do you truly know how to perceive the realities of your world?

A few moments ago when I asked several people the simple question, "what business are you in?" they each gave me a fairly obvious answer. But with one simple question, I was able to get you to notice that there was something that was equally obvious – once you noticed it – that is, in fact, far more important, and significant. It represents processes that govern your work life to a much greater extent than the nominal business you believe you're in, and different too from the business your company as a whole believes it's in. So the first step in determining the business you're really in is to ask a very simple question: 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. When we build our businesses, we conceive a mission statement, we conceive a business plan, we segment our market and functionally decompose our operations. In other words, 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. This is, in fact, what we're taught in institutions such as this one.

But we are not necessarily effective, that is, we do not manage so that we achieve the overall desired effects within our total environment. Why do I say this? Simply because, what we conceive about our enterprises and institutions is not sufficient to fully understand all the effects that are actually happening in and around our enterprises and institutions. Like the border guard in the story, we are completely unable to perceive all of the dynamics of our environment because our *conception* limits our *perception*. Our intense focus on precisely what we have been trained to do 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 awareness in our complex interconnected environment, 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 ground or context. It is like asking a fish to suddenly become aware of water. Marshall McLuhan, the visionary who gave us "The Medium is the Message" and the "Global Village," 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 achieving "integral awareness" of our total 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. This is dangerously easy to do because 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 to be effective these days 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 ground, and is having the greatest unseen effects on us, our enterprises and institutions, costing lots of attention, potentially draining significant resources, and contributing to the mismanagement of opportunities.

One way to accomplish this anti-environment awareness is simply to wait. By looking back through the passage of time, we can slowly become aware of the true effects of our environment. 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 toll-free 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. 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 artefact, 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 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 — the ability to respond instantly as in normal conversation — and other socialized skills of responding to aural or physical cues, in other words, tone of voice, vocal nuance and body language.

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. So now you know why email is the medium of choice for all those confidential business proposals you have been receiving from Nigeria.

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? These are the fundamental effects, or messages, of a medium. When McLuhan said, “The medium is the message,” what he was telling us was that we know the nature and character of anything we conceive or create — the medium — by virtue of the effects — the messages — that emerge.

The Laws of Media are an important and powerful tool that help us to create a cognitive anti-environment, from which we can gain new awareness and insight into the complex interactions in our world. But what we'd really like to know is what's coming next? How do we predict the future by foretelling the present? What haven't we noticed lately?

Let's start with something simple. Have you noticed how successful companies achieve their success? I walked into Chapters the other day and saw an entire wall full of books on leadership and management, each one with a different explanation of how to achieve business success. One thing that I noticed about them is that many of these books share a common fascination with a company that dominated the business world in the second half of the 20th century — IBM.

IBM began life in 1911 as C-T-R, Computing-Tabulating-Recording Company, only becoming International Business Machines Corporation thirteen

years later. The nominal business focus of the company during its first couple of decades was hardware devices that, as the original name of the company suggested, computed, tabulated and recorded all sorts of information, such as production tallies, job tickets, school attendance and accounting data. But we get a clue into the business it was really in when we examine the dynamics of the business environment that its first general manager, and then president, Thomas J. Watson, Sr., brought with him when he joined the company in 1914. Watson was the number two executive at competitor National Cash Register, the quintessential salesman, and very much a “people person.” He instilled a team-spirit and competitive mind-set into the company, including a focus on company sports teams. He introduced the company songbook and sing-alongs of catchy tunes like “IBM Ever Onward.” He insisted on what became known as the IBM company uniform — dark suits, white shirts and red ties for its salesmen — and introduced generous sales incentives and compensation, and an unwavering focus on the customer that set the standard for an entire industry. To complete this people-orientation, Watson led industry with such innovations as paid vacation, group life insurance with survivor benefits, hiring disabled workers, and internal education programs. Even during the Great Depression, Watson kept his workers busy producing new machines in spite of scant demand while other companies laid off employees. IBM was thus well-situated in 1935, able to supply equipment to support the new Social Security Act, called “the biggest accounting operation of all time.” As a result, its revenue doubled by the end of the decade, and earnings increased by a third.

IBM's business practices enhanced and extended people relationships throughout its entire business environment that manifested in a variety of effects on employees, customers and competitors. It pioneered “relationship selling” in which



salesmen were not only intimately involved in their customers' businesses, but in their personal lives as well, belonging to the same clubs and service organizations in the community. "Nobody ever got fired for buying IBM" became a personal reassurance in a nascent information technology industry; on the other hand, Fear, Uncertainty and Doubt ("FUD") became the ominous reversal sales tactic that emerged simultaneously.

In keeping with its media effects relating to people, it is interesting to observe that IBM was the first major open source software company. Back in the late 1960s and early 1970s, a customer would buy one of IBM's revolutionary mainframe computers and be given – for free – the operating system software, along with its source code on microfiche. Customers were encouraged to make modifications to the operating system to improve its capabilities. A user organization called the "Society to Help Avoid Redundant Effort," or SHARE, was formed through which these system modifications were freely disseminated and occasionally made their way into the standard operating system distributed to all users by IBM. One of its most popular programs ever and still in operation today, the Customer Information Control System, or CICS, began life as a "Field Developed Program," written as a free demonstration of the transaction processing potential of these new mainframe computers. Having primarily a people orientation, the dominant company in the computer hardware industry created environmental conditions that enabled and accelerated its own growth. And largely, this enabling software environment was created through the reversal of its nominal hardware business.

By the late 1970s, IBM began to realize that its customers were buying its computers specifically to gain access to its software – software programs, and more significantly, software support, were major factors in the buying decision. The reversal from hardware to software, while

maintaining their primary people business, proved to be a successful strategy: Customers were often deathly afraid to lose the IBM support for the IBM software that ran their businesses if they bought another company's hardware.

But within 10 years, IBM was matched, and often surpassed, by its primary competitors, Amdahl and Hitachi Data Systems, not only in hardware, but in software support as well. It soon found itself seriously foundering, facing attacks in both of its nominal businesses by mainframe competitors, on the one hand, and by smaller, distributed computing platforms, on the other.

Enter Louis V. Gerstner Jr. Gerstner realized that the real strength of IBM – the dominant effects that actually drove the business for decades – was not in its hardware or software, its products and nominal offerings. Rather the dominant effects emerged when IBM was intimately involved with its customers in the context of projects and initiatives strategic to the customers' own businesses. And that all hinged on IBM providing people, not products. Gerstner moved the company towards its current orientation of IBM Global Services, in which IBM's provision of hardware and software products became convenient, but incidental, to meeting the requirements of key customer initiatives. This proved to be tremendously liberating, and a counterintuitive reversal for the company: For the first time, customers could acquire an IBM solution without necessarily acquiring IBM proprietary hardware or software. And this interestingly retrieved its open source roots in the computer industry. The results have been nothing short of amazing. In 2002, Global Services revenue represented 44% of total revenue, compared with just 23% ten years before. In fact, services revenue now exceeds hardware and maintenance revenue combined that was, until recently, the historical mainstay of IBM's income.



Now some of you might be thinking, well, we're all in the people business – people buy from people, people are our most important asset, our product is steel our strength is people – and other such bumper stickers. People are important. But when it comes to the fundamental message – the dominant dynamic effects that reveal what business we're truly in – our practices and behaviours may reveal that we may not be as people-oriented as we might like to think. Let's take a look at a company that, in McLuhan thinking, is a direct descendant of IBM – Microsoft.

As almost everyone here probably knows, Microsoft got its big break when a young and brash Bill Gates stepped in where Digital Research feared to tread, and offered a Disk Operating System for the then-new IBM Personal Computer. Gates met IBM when the computing behemoth dominated the computer industry. It was the both the world's biggest computer hardware company and the biggest software company. IBM was ubiquitous, and remember – ubiquity is one sign of a medium entering obsolescence. But back to Microsoft. Gates learned the power inherent in IBM's dominant marketing style – the way it set the agenda for an industry, its laser-like focus on being the single supplier for both operating environment and applications, its use of Fear, Uncertainty and Doubt to throw off competition, the tacit threats of non-compliance wrapped around issues of compatibility, retraining and total cost of ownership. Microsoft's battle cry of "embrace and extend" not only describes Microsoft's technical strategy, but its marketing strategy as well – assimilate the technical capabilities of other companies and rebrand them as Microsoft.

So if we look at Microsoft through the McLuhan lens, we see that its marketing – "embrace and extend," "*where* do you want to go today?" – enhance and intensify its technology base that was largely innovated elsewhere, and

particularly its industry dominance. In that respect, Microsoft retrieves IBM's marketing of the late 1970s and early 1980s that had largely been obsolesced by competitors. Pushing technological and market dominance beyond the limit of its potential threatens reversal – from dominance to a significant loss of influence that we saw with IBM and are now seeing with Microsoft in the strengthening of the open source movement. Throughout its history, IBM primarily extended and enhanced people relationships and people relationships are at the heart of IBM's positive business reversal.

When IBM faced obsolescence – the loss of its dominance in the computer industry of the 1980s – its management recognized what business they were really in, transformed themselves into an archetypal people business, retrieved their open source roots and out of it emerged IBM Global Services. Microsoft is another story. Microsoft represents a retrieval of IBM's aggressive marketing style and tactics at its peak, becoming the dominant supplier in its industry. Microsoft is now faced with a similar challenge to their market dominance. By using similar, McLuhan-inspired reasoning, we can predict the future by foretelling the present and understand the ground-effects of Microsoft's tactics. Remember the dominant effects of Microsoft's business practices intensify and amplify IBM's former marketing techniques. Through the 1990s, Microsoft's marketing strategy was primarily focused on their Windows brand. But with the growth and pervasiveness of the Internet, Microsoft now considers its brand to include the entire computing environment, regardless of whether the devices involved are actually called computers.

So how do the Wizards of Redmond accomplish this? McLuhan thinking would tell them to be like artists by asking: What precise *effect* do I want to have on my market? The artists starts with the *effect*, and works out the causes



afterward. So let's paint this picture: To extend Microsoft's brand to incorporate the entire computing environment, they must obsolesce other platforms, rendering them incapable of exerting influence. To do this, they would conceive of a computing environment that only accepted content – documents, audio, video, graphics – from Microsoft-approved sources. In such a case, Microsoft would indeed have its dominant control of the entire computing environment. This would mean that only media outlets that used sanctioned Microsoft platforms would be able to disseminate their content via computer connection. Such a situation would not only obsolesce open source software, but also the availability of independently created content now emerging from individuals around the world who only recently have had access to a personal mass medium. Richard Stallman, in his famous article, "The Right to Read," published in *Communications of the ACM*, describes such a future in which even the right to read for free is indeed restricted. This, of course, impinges on the right of free expression. And, in the political realm, these sorts of controls nip the emerging transparency that is increasingly providing a new level of government accountability in the bud.

Sounds far-fetched? Well, what haven't you noticed lately? The scenario I have just described for Microsoft is a foretelling of the present. It is now being implemented technically in the guise of Microsoft's so-called "Trusted Computing" initiative. Its enabling ground is contract law, increasingly restrictive copyright law, the newly granted ability to patent software and the various new "anti-piracy" laws recently passed in the United States and forced on legislators around the world via bilateral trade agreements, the World Trade Organization and the World Intellectual Property Organization. Through the McLuhan lens, it becomes clear that there is much more at stake when we talk about open source, and

legislated solutions to music downloading and file sharing.

But let's get back to business by having a look at one of the poster children for e-business and e-commerce, Amazon.com.

The conception of Amazon.com was emblematic of the New Economy during the dot.com bubble era. Eliminate the friction in buying fiction by being a virtual bookstore. Focus on the user experience, make the site "sticky," and use customer's buying information to drive sales. In fact, the disintermediation potential – remember that one? – of the information economy meant that a business's use of information technology was key to success, and that its proprietary intellectual property was the primary competitive differentiator. Or at least that's what many venture capitalists told me at the time. But by employing that perspective as a strategy – the conception that Amazon.com was fundamentally in the information-as-commodity business along with many of the other dot.com start-ups – Amazon lost hundreds of millions of dollars quarter after quarter.

But the Laws of Media suggest a different fundamental dynamic to Amazon's business. Amazon enhances and accelerates getting books into the hands of the customer, obsolescing the physical bookstore's dominant role of getting books into the hands of the customer. When pushed beyond the limit of its potential – when too many books are intended to get to the customer, the process reverses, so that shipments are delayed, or received damaged and must be returned, or simply wrong. And what does it retrieve from the past? Perhaps the old "Book of the Month Club" or the Harlequin Romance novels, both of whose businesses are fundamentally all about logistics, warehousing, distribution, fulfillment. Not sales. Not information. Shipping.

In 1999, Amazon executives slowly began to realize this, after accumulating a



deficit on the order of nearly a billion dollars since their inception in 1995. They built warehouses and hired people to handle the distribution. Their costs soared and so did their cumulative deficit – nearly three billion dollars by the end of 2001. But by then, they realized that distribution and fulfilment was more than mere warehouses and pickers. They became very sophisticated about batching orders to reduce the fulfilment cost. They shifted some of the logistics expense to their suppliers who could accommodate inventory shortfalls at Amazon distribution centres at a lower cost. They even managed to make free shipping for orders over \$25 pay by building in a slight shipping delay that reduced the marginal cost of making that shipment. In other words, when Amazon finally realized what business they were really in, they were able to direct their management focus to become very smart at that business, and subsequently pulled the company out of its nose-dive.

A local example: GroceryGateway.com. When it first started here as the online grocery store in 1996, they really believed they were in the grocery business. Bill Di Nardo, GroceryGateway's founding president and first CEO, tried to think like a grocer, organizing the operation like a warehouse-sized version of the Longo's stores he used to pilot his idea. After a few years of so-so customer experience, a fellow with the ironically appropriate name of Al Sellery took over in the driver's seat – literally. What GroceryGateway.com retrieved from the past was not the grocer, nor the grocery store, but rather the delivery boy. Di Nardo knew it implicitly in the company's retro marketing that featured 1950s-style iconic images of grocery delivery. But to properly implement the realization that GroceryGateway.com is actually in the delivery business, they had to team up with a real grocer – Sobey's. They also realized that as a delivery company, they could deliver for others as well. Now, GroceryGateway.com delivers for the

LCBO, Staples/Business Depot and Home Depot. So here's the quiz: As a delivery company, who are their competitors? Obviously, they would include UPS, FedEx and Purolator. But very few people, if anyone at all, would consider those three as direct competitors of GroceryGateway.com. But they're in the same business... aren't they?

The conventional approach to that question is, they either are, or they aren't. But McLuhan awareness tells us that there is another dynamic at work here – ignore your competitors. I'm often invited to speak at business meetings or lead playshops or facilitate strategy and brainstorming sessions at various corporations. When I tell business leaders to “ignore their competition,” I am, of course, referring to their nominal or obvious competition – other banks, if you're a bank; other phone companies if you're a phone company. When you take the approach of determining the business you're really in by way of observing the effects through McLuhan's thinking tools, you suddenly are able to make observations about your business environment that you've never noticed before. The real “Pepsi Challenge” is not against Coke, it's against Nike.

What does it mean to reverse our conventional thinking in this way? Because thinking is intimately tied to language – our minds structure our words and our words structure our minds – among the first things that change is indeed the way we speak. In business we often talk about winning and losing, upsides and downsides, strengths and weaknesses, pros and cons, advantages and disadvantages, you're either with us or against us. Even that trite cliché, a “win-win situation,” suggests that both parties winning is somehow an exceptional occurrence, because under normal circumstances, if I'm right, you *have* to be wrong. This sort of dichotomous thinking that pervades the cubicles of the business world is an obstacle to awareness



and perhaps the number one impediment to creating a culture of innovation.

Think about what actually happens in your companies when someone comes up with a new idea. When you are asked to consider the pros and cons, or the upsides and downsides, your thinking is immediately restricted to that particular model which attempts to describe the situation in black and white. We focus on features or the uses of whatever it is; but we tend to ignore the dynamic effects that emerge from the interaction of this medium – the thing or situation we are considering – within its ground or context. That one-dimensional, dichotomous model defines an adversarial situation that requires those with opposing points of view to square off, each one defending his own territory to the death. When we are put into that circumstance, we will ignore or push aside any argument that may weaken our position, because, after all, for me to be right, you have to be wrong.

By employing the multi-dimensional Laws of Media to explore the dynamics of new and changing situations, we avoid all of that macho head butting because no one has to defend a point of view. Advantages and disadvantages, that are essentially value judgements rather than an understanding of dynamic effects, are simply not useful in this sort of exploration. McLuhan tells us, “Value judgements create smog in our culture and distract attention from processes.” The processes that interested Marshall McLuhan the most were retrievals, as he maintained that retrieval is the dominant mode of the Laws of Media tetrad. It brings back cultural memory and the influences of the past. But for me, the most interesting quadrant is reversal, since it is the evolutionary quadrant, and the one from which innovation emerges.

Innovation is a hot word these days, bordering on becoming a what I call a management cliché – something everyone understands because we each have our

own, not necessarily common, definition. So let me tell you what I mean by innovation, and in doing so, let's see if we can figure out how to create a culture of innovation.

Innovation is a substantial, non-linear change in a situation that is observable by its effects. And more than non-linear, it is non-deterministic in nature. This means the outcome is not directly predictable from what has come before. And, the effects of the change that ensue from an innovation sustain and create substantial changes in the ground or context in which the innovation is situated. This has several major implications. You cannot plan innovation. You cannot manage innovation. Once you begin planning and managing, you create deterministic conditions that, by definition, stifle innovation. You see, innovation is an emergent property of the complex, chaotic system that is our business environment. It requires autonomous agents, proximity and interactivity – both feedback and feedforward. Innovation stands in stark opposition to all the good management principles you have been taught in this fine school. And, believe it or not, you have been specifically taught not to notice innovation when it occurs.

I see some incredulity in the audience – and especially among some of the professors in the audience. Let's take a little quiz to see what haven't you noticed lately about innovation. How many of you were taught to ignore your competitors? Oh, I know that sometimes your competitors will drive you to distraction, and it's the distraction that you must learn to ignore. We actually spoke about this a few moments ago in the context of GroceryGateway.com, and we saw how the awareness of what business you're really in enables you to figure out which competitors to ignore, and from which to learn.



Let's try another. How many of you learned not to listen to your customers? This lesson is the secret to the success of a little company in Silicon Valley... you may have heard of them... Adobe Systems. We'll come back to this one. How many of you were taught that to be successful, at least in the North American economy, you sell neither products nor services? Oh, come on... that one's obvious. You mean to tell me you've never walked into a Second Cup or a Starbucks? Okay, here's the next question. How many of you were present in class the day you learned to give away your intellectual property as a competitive advantage? The example here is another one of these funny business model, Silicon Valley start-up things. This one is called Intel.

Let's take up some of the answers, shall we? When John Warnock brought the kernel of Adobe Systems out of the lab at Xerox PARC, his original business plan was to create a complete turnkey system for publishing – computer hardware, printers, software, the whole shebang. It was essentially the Xerox business plan based on what had become Adobe's Postscript technology. They quickly realized that the most valuable part of the package was the font libraries, and Adobe decided to build their business on licensing that one key component. Adobe grew and was successful, and, had they listened to what their Postscript customers – especially their best customers – wanted, they would not necessarily have lived happily ever after. You see, licensing the font libraries was clever, but not particularly innovative.

As John Warnock tells the story, he had an idea for a virtual printer – a piece of software that would act like a printer to create an image of what the page would look like if it was printed. But instead of a physical copy, the image could be displayed on a computer screen, independent of the software platform – in fact, the file would be able to cross different platforms without conversion. The marketing experts asked

why someone would want to look at a printout on a screen. If they wanted to see the printed page, they would print the page. The technical experts asked why the file would need to be platform independent – after all, any given company used only one type of software platform. The sales experts raised the most devastating objection: None of their customers had asked for it and none of their customers wanted it. And there was a long development queue of things their customers had asked for, so diverting resources would be out of the question.

Pity the expert and his 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. The problem is, the expert may have all the answers, but he rarely has the right questions. In the case of Adobe, Warnock looked to reversal for the innovative leap. None of his current customers wanted this funny little application that could throw print images from platform to platform like an Acrobat, but perhaps there were those who weren't yet his customers who would. So to entice them to try it, he employed another reversal (for the time): He gave away the reader for free, and he still does.

What about that question on products and services. At one time, North America was primarily a product-based economy. When we wanted a cup of coffee, what we bought was the cup of coffee. Over time, we evolved to a service-oriented economy – it wasn't the cup of coffee we bought particularly. Rather we tended to choose establishments for the service they provided. But now, when we walk into a Starbucks or Second Cup, we aren't served by a waitress or waiter – we are served by a “barrista.” We no longer buy coffee. It's an Ethiopia Yergacheffe or a Fazenda Vista Alegre or a Sumatra Mandheling, described as “Heavy-bodied, sweet and romantic.



Complex with a pleasant, hearty flavour, unique in the world.” I don’t know whether I want to drink it or date it. In these establishments there’s specially commissioned jazz playing, richly upholstered arm chairs and couches. We aren’t walking into a coffee shop anymore, it’s a coffee theme park. And we gladly pay extra for it all, because the dominant effects of the North American economy have reversed once again, from a service economy to an experience economy.

What is Ikea, if not a home furnishing theme park, that is as representative of Sweden as Disney World’s Epcot World Showcase is of the nations it portrays. When a teenager buys Nike sneakers, what is he really buying if not the Nike experience? Why are camera-phones so hot? We’re not sending snapshots to grandma; we’re sharing experiences with our tribe. Today, in every industry segment, people are buying, and paying a premium for, the experience – the reversal of the service economy. This is why design principles are particularly relevant to business today, because design speaks directly to creating experience. And it’s also why our McLuhan thinking probe – what haven’t you noticed lately – is so important, because McLuhan awareness is essential to perceiving the subtle effects of an experiential business environment.

What about Intel’s experience with its intellectual property? Intel takes a decidedly open position by publishing much of their intellectual property into the public domain. In other words, they give it away – for free. This sounds crazy, but it demonstrates the power of reversal, especially when you truly understand what business you’re really in; or even if you realize the business you’re not in.

Intel is not in the intellectual property business. And they realized that this could be a liability, especially if another company would “out-invent” them in integrated circuits and subsystems. So instead, they give away much of their

integrated circuit design intellectual property to encourage other companies to develop circuitry that creates an enabling infrastructure and support systems for Intel’s own products. In a sense, they have evolved their own economic ecosystem, creating conditions that are conducive to the emergence and survival of other companies with whom Intel shares a symbiotic relationship, sometimes even providing them with the benefits of the business Intel is really in, silicon wafer fabrication.

There is a myth that a company’s intellectual property provides its strategic competitive advantage, but since the vast majority of companies are not in the business of creating intellectual property, this notion is really overvalued. If I were Johnny Carson, right now you’d all be saying, “How overvalued is it?” A recent study of patents and patent licensing at six leading U.S. universities showed that the top 10% of patents generate 92% of all royalty payments. Flipping that around means that 90% of patents generate a grand total of 8 cents of every royalty dollar. In other words, intellectual property has very little value on its own.

However, by deploying your intellectual property in an innovative way, you can help to create an environment that enables your real business to grow and to thrive. And what is the best example of this? Without question, it is the Internet itself that has been built primarily from freely contributed intellectual property. From this seemingly altruistic, anti-capitalist behaviour, what was created is an infrastructure that enables long-term structural economic growth among a wide variety of traditional industries and enterprises. Now isn’t that an interesting reversal. We now have an environment that has radically enhanced, extended, accelerated and enabled otherwise conventional businesses to do business and to manufacture money, which is where we started today.



What haven't *you* noticed lately? We are now about 200 years from the beginning of the industrial age, and over the last 100 years or so we have learned how to run our industrial processes with tremendous efficiency. We know how to define, instrument, measure, analyze, sample, survey, model, improve, control and forecast our industrial processes to the nth degree, and we have translated all these techniques to apply equally to both the mechanical and human components in our corporate machinery. But all of these management practices that are firmly grounded in the 19th century focus on the

content of the business, not on the message – the effects – of our businesses on the dynamics of its people, its customers, its competitors and our complex interconnected world at large. To be able to perceive these 21st century dynamics is to gain an awareness of the business you're really in. To do so means changing the tools with which we perceive the world and thereby restructuring the way we think about our business. When we do these things, we create a culture of innovation for our business and, more than that, we create an environment of noticing.

About Mark Federman

An unconventional, yet strategic thinker, Mark Federman has more than twenty-five years' experience in the high-technology industry as executive, manager and consultant, spanning disciplines including research and development, marketing, sales, operations and strategic leadership. Mark is currently a lecturer and the Chief Strategist at the McLuhan Program in Culture and Technology at the University of Toronto, a visiting professor at the Fachhochschule in Kiel Germany, and guest lectures at Högskolan för Lärande och Kommunikation in Jönköping Sweden. His most recent corporate role was that of President of PersonaMedia, a small company whose focus is on the use of Voice as an object of rich business information, enabled by Internet technologies. He is the co-author, with Derrick de Kerckhove, of *McLuhan for Managers — New Tools for New Thinking*. Some of his recent explorations have examined "Integral Awareness in the Connected Society," "The Cultural Paradox of the Internet," and "Creating a Culture of Innovation." His current research examines the roles that individuals play in their workplace as emergent media forms, from which people can gain new awareness of their location and effects within corporate cultures, and how corporations can respond to emergent role, rather than job, dominance.

An internationally sought lecturer, speaker, facilitator and playshop leader, Mark coordinates the research of the McLuhan Fellows at the McLuhan Program and consults to businesses and government agencies as a strategy advisor, using McLuhan's thinking tools as an approach to gaining awareness, perception and insight into complex issues in an environment of continual change.

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