The BuyerSphere



The Digital
Generation Gap



The Rise of the Digital Native

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What We Heard from the Digital Natives

The BuyerSphere project started with interviews—over 100 of them. We talked to dozens of people about how they bought things within their organizations. A number of interesting trends emerged, but perhaps the most interesting one was the significant difference between age groups and technology use. Those under 30 talked about things like social networking and mobile computing differently than those over 30. It was almost as if they were referring to the same things, but using different languages. Of course, there were differences between individuals, but this was more than that. There was a distinct digital divide that seemed to separate the two groups and the date of that divide seemed to fall somewhere around 1980.



That sounded familiar to us. We had read Marc Prensky's theories about Digital Natives and Digital Immigrants. Humans are shaped by their environments and Prensky believes that the environment changes because of rapid advances in technology within a generation. There are significant differences in behaviors, attitudes and beliefs towards the technology between the two generations. Those who grow up with the technology become fluent in it. They're Digital Natives. Those who adopt it as adults gain proficiency but interact with it in fundamentally different ways. They remain Immigrants.

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Digital Natives

Growing Up with Technology

And here, we saw the same characteristics emerging in our B2B buyers. Intrigued, we explored further. Sure enough, much of what we found in general research into this fascinating area lined up with what we were finding in our own BuyerSphere research.



In this white paper, we'll explore the concepts of Digital Natives and Digital Immigrants and explain why this digital divide exists. We'll also explore the fundamental social shift that happened the last time a new technology created a significant divide between generations—with the introduction of television. We'll spend some time looking at the differences in behavior and attitudes between Digital Natives and Immigrants. And finally, we'll look specifically at the differences that emerged within our B2B buying group and try to determine what it means for B2B marketing.

Marc Prensky and the Digital Native/ Digital Immigrant



Marc Prensky is a writer and education consultant who first coined the terms Digital Native and Digital Immigrant. Prensky saw that traditional teaching methods seemed to be less effective with children born and raised with technology and has advocated a move to a curriculum based on problem-solving methodology. He has created several educational games designed specifically for Digital Natives.

More on Marc Prensky

http://www.marcprensky.com/
Books by Marc Prensky
The Original Digital Native article from *On the Horizon*

What is Synaptic Pruning?



In the last two decades, one of the most important discoveries in neuroscience has been the amazing adaptability of the human brain. We have learned that the brain is a plastic organ, continually reshaping itself to adapt to new demands and situations. Billions of synaptic connections determine who we are and what we do and these connections are constantly being overhauled. As we learn new things, we form new connections. As we forget unneeded information, old connections are "pruned" out of the way. The brain is a constantly shifting landscape of neural activity, with new paths formed and old ones discarded.

We have also discovered that there are two degrees of plasticity in the brain: the normal day-to-day forming and reforming that gives us our ability to learn and adapt and massive restructurings that determine who we are as people. This "super-plasticity" occurs during two unique phases of our lives, when the need to adapt to our environment is at it's greatest. During these times, much of the groundwork is laid to determine who we are and how we react to the world around us. During these times, the brain is literally rewired with sweeping changes.

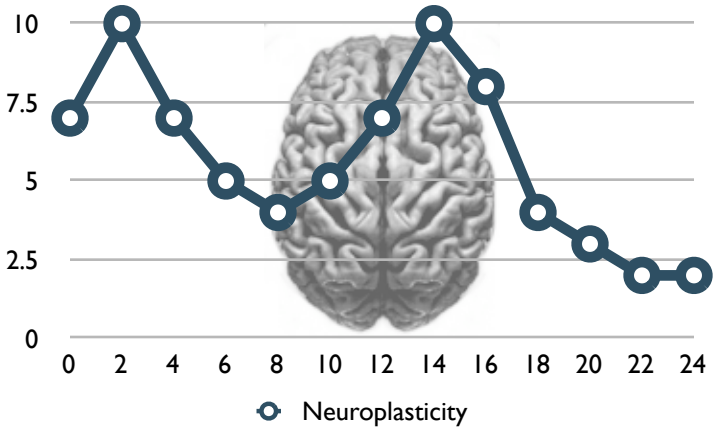
The first of these periods of "super-plasticity" is in infancy, from about 18 months to three years of age. Parents remember these times as the "terrible twos." Babies explore their environment and set in place many of the mechanisms to both explore and control their worlds. They push the boundaries, touching things they shouldn't, ignoring the word "no" and interacting with everything they can, whether they should or not. At this time, the brain massively restructures, shedding abilities that aren't needed and strengthening ones that are. The brain builds up the most important synaptic connections (for example, the one that allows a baby to recognize human faces) through a process called myelineation, which insulates and strengthens



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frequently used neural connections. Glial cells, which drive myelination, turn the most important paths into protected thoroughfares. Neurons and axons (the actual synaptic connectors) are referred to as "grey matter" and myelin is referred to as "white matter." As the brain matures and adapts, the ratio of grey matter to white matter shifts dramatically.

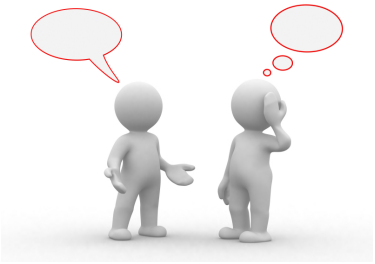


The chart above shows an approximation of the ages when humans display the greatest degree of neuroplasticity. There are significant peaks during between one and three years of age and again during the teenage years.

The second period of "super-plasticity" occurs, not coincidentally, during the other phase dreaded by parents — the teenage years. Here, the brain is bathed in a potent soup of neuro-chemicals, again massively restructuring our cortical and sub-cortical structures. This time, there is a rapid change in the neural circuits that control our social capabilities. We learn to empathize and connect with others. Females and males draw further apart in behavior while at the same time discovering sexuality. Our children begin to develop the skills of adulthood as they prepare to leave our protective nest. The independence that is so frustrating for parents is a necessary step for building self-reliance.

After this second period of rapid neural change, much of who we are has been formed. Our brains will continue to change and develop, but the foundations of our personalities have been laid down. How we interact with the world and with each other has been largely determined and hardwired into our neural circuitry. The engineer of this massive project has been our environment, working with the raw material of our own genetic inheritance.

Our Mother Tongue



As an example of the efficiency of these two massive overhauls, let's look at what happens when we learn a new language. Our fluency in the language depends on when we learn it. If we are exposed to a language during the first phases of neuroplasticity, it becomes our mother tongue. It's part of the environment we adapt to, contained in the "coping" rule book we create to help us deal with the world. Learning and using the language happens naturally.

But if we try to learn the same language as an adult, it's much harder. The language pathways have already been laid down and are occupied by another language. We can learn it, but it tends to be layered on top of our mother tongue. We're constantly translating between the two. Although we might master the new language and become fluent, it's never quite the same as if we had learned it as our mother tongue. We tend to carry over accents and idiosyncrasies that were hardwired during those critical first few years of our life.

For example, my in-laws are Italian. My father-in-law immigrated to Canada when he was 18, just after the second teenage phase of neuroplasticity had been completed. The basics of his neural circuitry had already been laid in place. For that reason, although he's been primarily speaking English for almost 50 years now, he still struggles with some of the finer points of the language and has a noticeable accent. Yet, he can slip easily back into Italian (actually, Calabrese—a dialect) without a second thought.



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My mother-in-law immigrated to Canada when she was 12, right in between the infant and teenage periods of neuroplasticity. She switched to speaking primarily English through the second phase of brain restructuring. For her, English is much easier to speak than Italian and her accent is barely noticeable. One has to listen carefully to recognize that English is not her native tongue.

My wife was born in Canada, so was exposed to English from birth. The only Italian she heard was with her grandparents and older relatives. Obviously, English is her mother tongue but she has very limited capabilities in Italian.

Our brains have an amazing ability to be moulded by their environments at an early age, setting in place the foundations of environmental coping for the rest of our lives. Language is part of that environmental adaption. Evolution assumes that the environment we're born into will be the environment we live in for the rest of our lives, so does all the heavy lifting at the beginning of the process. We become native to that environment. From then on, our ability to adapt to our environments is more limited. We can learn a language as an adult, but it takes more effort and our capabilities in that language will always limited by the neural pathways laid down during our childhood and adolescence. While we can function in this new environment, we remain immigrants. For 99.99% of human history, this approach has worked quite well, but such may not be the case any longer. Technology is propelling us forward faster than ever.

The Digital Divide



The pace of change is accelerating at an incredible rate. In his book, *The Logic of Life*, Tim Harford provides this eye-opening analogy:

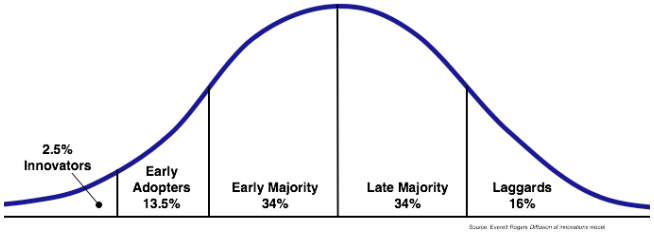
"Imagine compressing the last million years of human history into just one year. Three thousand years would pass each day...On this compressed time-scale, our ancestors first used fire sometime in the spring. Despite this early breakthrough, new ideas were slow to arrive on the scene. Until late October our ancestors were still wielding the most basic stone tools...About December 19, the beginnings of civilization were visible: cave paintings and burial sites. It wasn't until December 27 that there was much evidence of sewing needles, spear throwers, or the bow and arrow."

Following Harford's time scale, the Roman Empire flourished at 8 a.m. on December 31st, Da Vinci painted the Mona Lisa at 8 p.m. and the Industrial Revolution reached its peak at about 10:30 p.m. The digital revolution has occupied the last 14 minutes of the last day of the year. The entire modern history of our civilization has happened in the last 24 hours, and now every minute brings significant shifts to our environment.

What this means is that the environment we grew up in is unlikely to remain the environment we will live in when we have children. The evolutionary mechanisms for environment coping may no longer be nimble enough to keep everyone in sync with his or her everyday lives. We're suffering from what Alvin Toffler called "Future Shock."

The Adoption of Technology

As new technology emerges, it's adopted by society at different rates. Everett Rogers called it the diffusion of innovation.



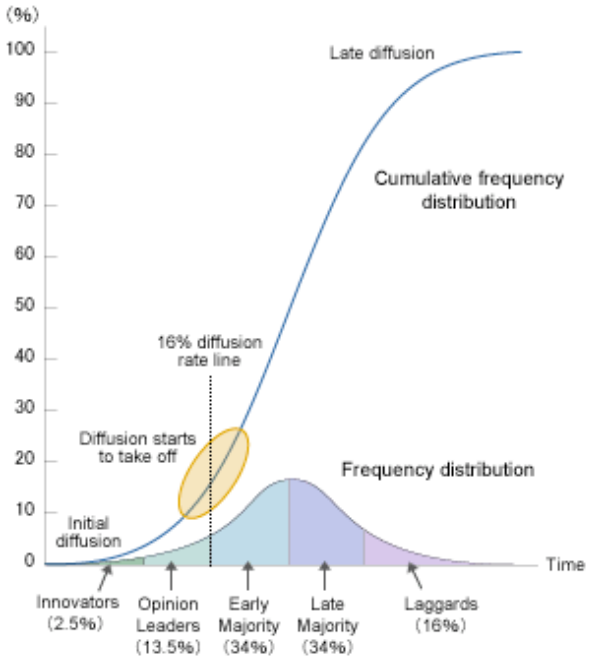
Here we have a normal distribution curve that shows how different segments of our society absorb new technology. In the earliest stages, adoption is restricted to a small percentage of innovators and early adopters. Then, the majority of society adopts the new technology fairly rapidly, with the laggards the last to adopt, largely because they have no choice. The new technology has become the default requirement. You use an ATM because the bank has drastically reduced the number of tellers. You finally give in and get a cell phone because your job requires you to. You get online because your grandkids want to email you.

Now, let's look at the adoption cycle a little differently. Rather than show discrete percentages, let's look at the adoption in cumulative numbers. Now, we have an S-shaped diffusion curve. In this view, we see the spread of technology dramatically increases as the early and late majority adopts it. The technology becomes ubiquitous in the market over a relatively short period of time.



Digital Natives

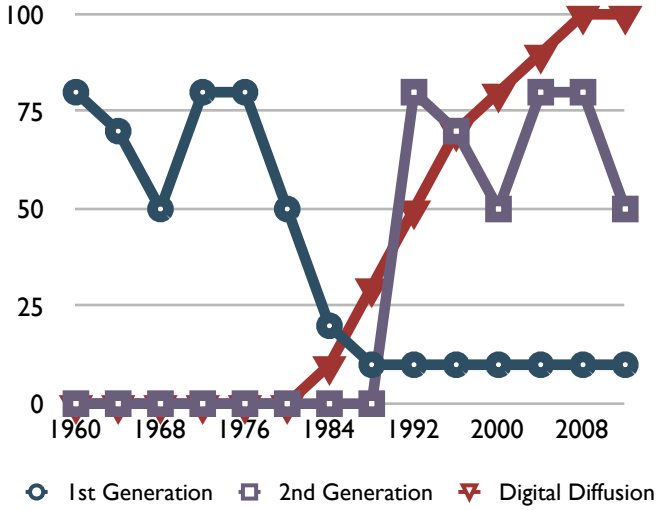
Growing Up with Technology



Adoption of technology has been happening faster and faster. Now, game-changing technologies are often adopted within one generation. The chart below shows how quickly some of the technologies, that have dramatically affected our society, have been adopted.

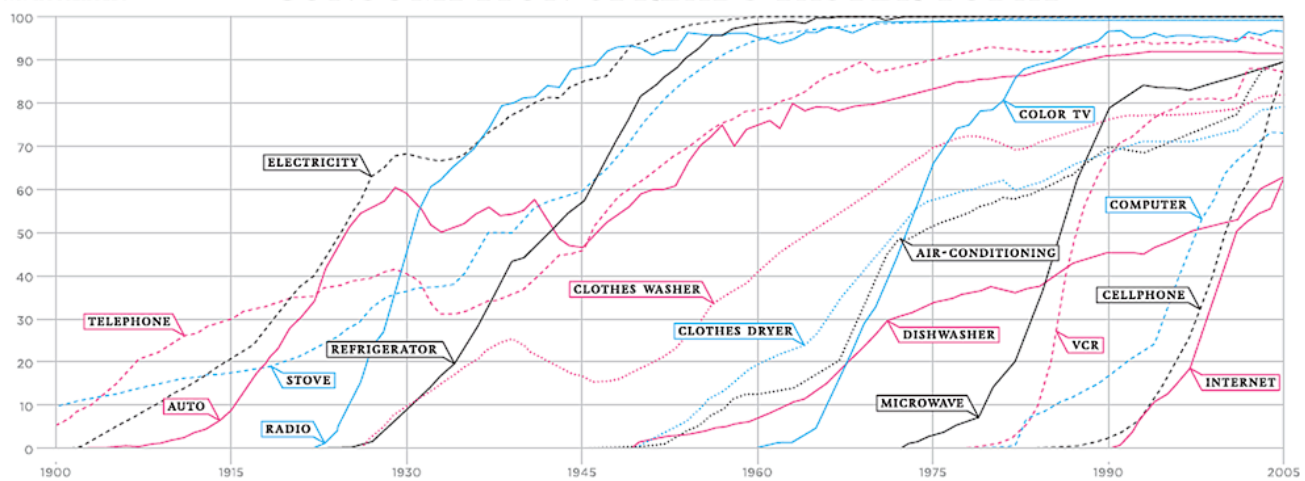
Now, let's combine two different hypothetical views. The first shows the primary periods of neuroplasticity in two successive generations, starting with the birth of the first generation representative in 1960 (degree of plasticity shown by blue line, with round points). The second generation represented was born in 1988, three years past the Digital Native divide (degree of plasticity shown by purple/grey line, with square points). The third line (red with triangle points) shows the adoption of digital technology (as a percent of households).

Adoption of Technology Between Successive Generations



As you can see, the technology is largely adopted in the span of time between the extensive neural adaption of the two generations. If the technology has a significant impact on society, it can dramatically alter the environment from one generation to the next. As the second generation adapts to the new environment, it means their brains are wired in a ways that are fundamental different from their parents. When this shift happens

Adoption of Various Technologies in the 20th Century (% of US Households)



This chart shows the speed of diffusion of various technologies during the last century. Notice the acceleration in the second half of the 20th century.



Digital Natives

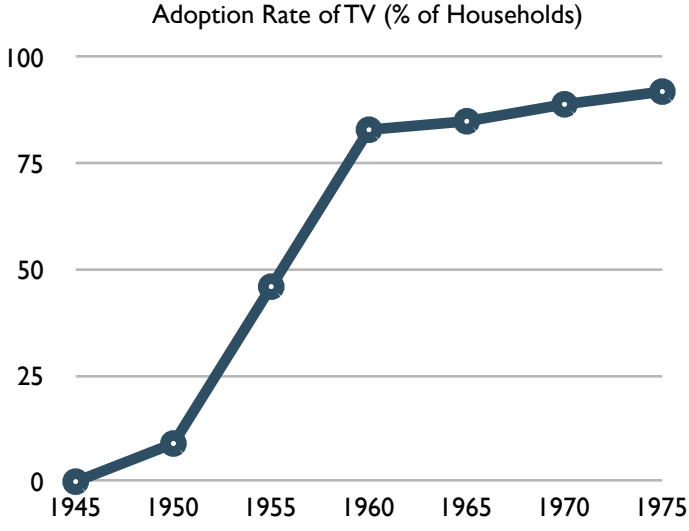
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between generations, it takes some time to assess what the eventual impact will be. Remember, the second generation has a different set of environmental coping mechanisms that will remain with them throughout their lives. These mechanisms will determine their behaviors, beliefs and attitudes for several decades. But the impact of this shift won't be fully felt until this generation inherits the mantle of power from the previous generation. As the individuals of this generation become parents, bosses, leaders, educators and administrators, their decisions and judgments will be guided by the pathways laid down during their formative years. Social shifts play out over decades, not months or even years.

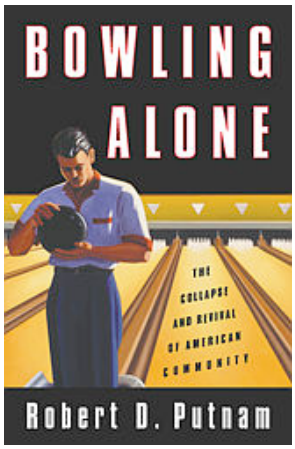
An Historical Perspective: The TV Generation



In the 20th century, perhaps the best example of technology impacting a generation was the adoption of television. Television's adoption curve started in the US in 1945. The following chart shows that 10 years later, by 1955, TV had achieved a 45% penetration rate and within 15 years, by 1960, over 80% of the homes in America had a TV set. In many households, the first generation that grew up with TV would have started coming of age in the sixties. These children grew up spending a significant period of their childhoods in front of a TV, including the highly plastic years of infancy and adolescence. But, it would take a while to learn what the impact on society would be.



Bowling Alone in America



In 2005, political scientist Robert Putnam made an important observation in his book *Bowling Alone*. He noticed a trend in the erosion of social capital. In fact, he found that during the sixties, Americans underwent a complete reversal in how we participated in society. We spent less time contributing. We voted less. We volunteered less. We participated less and we went to church less. These trends also showed up in our social habits. We hosted fewer dinner parties, had fewer card games with neighbors and joined fewer bowling leagues (hence the title of the book). Something fundamental had happened to American society. Our social bonds seemed to be breaking down.

"Americans are right that the bonds of our communities have withered, and we are right to fear that this transformation has very real costs"

— Robert Putnam

The trends weren't all negative however. Putnam also noticed an increase in ideological tolerance. We became less bigoted and more open-minded. Mentally, we were more accepting, but physically, we were spending less time with each other. And all these trends seemed to track back to roughly the same period of time. Putnam set out to discover what happened in the sixties that dramatically changed our society.

"Over the course of the last generation or two, a variety of technological, economic and social changes have rendered obsolete the stuff of American social capital."

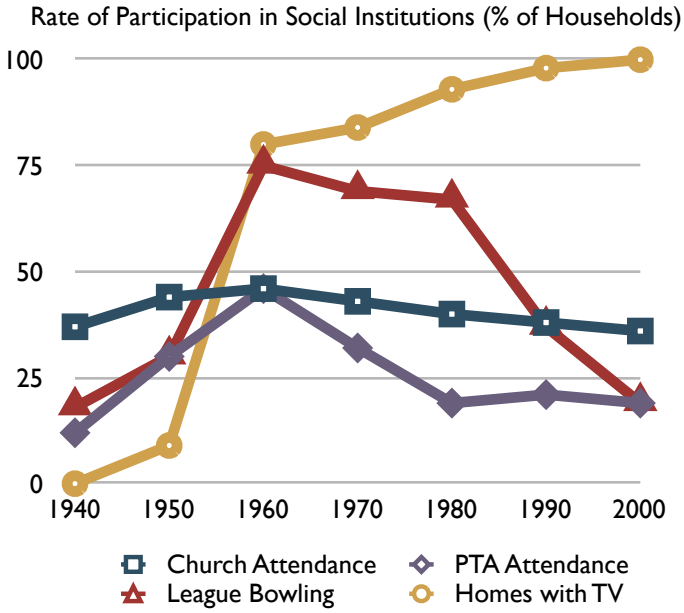
— Robert Putnam

Putnam looked at different possible causes, including the breakdown of the family unit, race, big government and the growth of the welfare state, big business, capitalism and the free



Digital Natives

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Bowling Alone, Robert Putnam

market. But in the end, he settled on four primary causes: pressures of time and money; suburbanization; electronic entertainment, primarily television; and generational change in values. It was the last of these that he said was most important.

But what if television was largely responsible for the generational change? What if, as we've discussed, the TV generation grew up with a substantially different view of the world around, precisely because of exposure to TV during the critical childhood development phases? What if suburbanization and the pressures of financial success were driven by what we were exposed to on TV? If TV was a major part of our environment as we moulded our behaviors and beliefs to fit that environment, it would leave an indelible stamp. And it could be that underlying cause that drove the massive social shift that Putnam explored in his book—a shift that has largely formed our sense of community and society in the last half century. For right or wrong, we could be who we are because of television.

More on Bowling Alone

http://www.bowlingalone.com/
http://www.bettertogether.org/
http://www.hks.harvard.edu/saguaro/
http://www.hks.harvard.edu/saguaro/primer.htm

What About the Internet?

TV has had a huge impact on our culture. But the Internet and the digital revolution threaten to far surpass it in significance. Digital technology touches every aspect of our lives: how we communicate, entertain ourselves, seek information, make a living, connect with family and friends and pursue our life goals. TV offered us addictive entertainment. Digital technology is integral to every part of our lives. Look at the average 14-year-old today and see how technology surrounds every aspect of his or her life every day. If the shadow of TV on our society was long, the digital shadow will be a total eclipse.

Marc Prensky, the originator of the Digital Native/Digital Immigrant theory, puts the digital divide at 1985. That marked the beginning of the digital revolution. Those who were born after this date grew up with a native fluency in digital technology. Those who were born before this date adopted digital technology after the neural pathways were largely laid down. They will always be Digital Immigrants. With that divide, the oldest Digital Natives are just turning 24. They are only beginning to step into their roles as our society shaping successors. If we have learned anything from the TV generation, we have learned that the full impact of the shift is yet to be felt.





Digital Natives

How are They Different?



The Difference between Natives and Immigrants

It's interesting to note how the difference in behaviors, attitudes and beliefs play out between Digital Natives and Digital Immigrants. Enquiro researcher Laura Hanon has written an excellent companion piece (the table below is from Laura's paper) that explores this in much more depth, but I will touch on a few key differences as a precursor to looking at how this digital divide will impact B2B Buying.

Digital Natives	Digital Immigrants
Used to receiving information quickly and randomly (out-of-order)	Like step-by-step instructions
Parallel process and multi-task	
Prefer graphics before text	
Function best when networked	
Thrive on instant gratification and frequent rewards	Read more books and print newspapers
	Plan and focus on long-term goals
Prefer games to "serious" work	View games as a leisure activity and not work
Can process different types of information at the same time (watch TV, listen to music, do homework)	Multi-tasking is not as effective for DI's
Can multi-task easily (3 or more tasks)	
Developed shorthand language for text messaging	Tend to use proper English in correspondence
Created social digital networks	
Move quickly towards new technology	More cautious about using new technology
Will purchase new technology easily even if it replaces a perfectly functional device.	
Will pursue newer, faster, cooler	Will be more cautious when purchasing new technology because they may have to learn a new operating system or fear that the device will become outdated in a few months. Will stay with the familiar.
More likely to place personal information on the Internet	More hesitant to place personal information on the Internet
Not likely to print emails	Print emails
Will not print hard copies as often	Print a hard copy to edit



Digital Natives

How are They Different?

Attitudes towards Technology

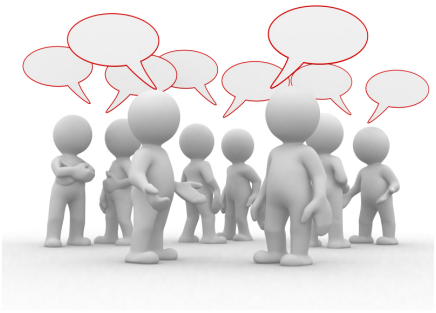


The differences between Natives and Immigrants are not so apparent in how they use technology, but rather how they *feel* about technology. Even the use of the word "technology" is an indication of Immigrant status. Natives don't regard it as technology. It's simply the "stuff" they use everyday.

Immigrants are constantly amazed by technology. We benchmark what we can do today against what we could do in the past. Communication by cell phone or email is astounding simply because it's so much better than before. Just like learning a new language, we tend to translate technology back into a language we're familiar with; the environment we grew up in. We talk about the 400 channel universe (Thousand channel? Million channel?) as something remarkable because it benchmarks so well against the two or three channels we grew up with. We bore our kids with tales of our first cell phone, weighing in at several pounds and requiring a small briefcase to carry around. Comedians do routines about how the wonder of technology is "wasted on the crappiest generation of spoiled idiots" (Louis CK on the Conan O'Brien Show).

Immigrants cut technology a lot of slack simply because we hold it in such awe. If we can't get something to work, it's not the fault of technology, it's because the technology is over our heads. Natives are not nearly so forgiving. If technology doesn't work, it "sucks." It's not their fault. It's the fault of the program, the website or the mobile device. "Technology" can afford to be finicky, but "stuff" is just supposed to work.

Communication



One of the biggest generational differences is in how we communicate. Texting is more common than calling. Much of today's communication is done through a keyboard of one kind or another. And where as much of our communication was (and is) done with one person at a time, Natives often have "crowd conversations" through Internet chats.

Ironically, some digital communication channels are more popular amongst Immigrants than amongst Natives. Email, for instance, has been rapidly adopted by Immigrants and it's cited as a primary channel. Perhaps it's because email offered an easily understood extension from the communication mode we were more familiar with—the written letter. The concept of sending an electronic letter was easily grasped and assimilated.

Face-to-Face/Social Bonding



Perhaps the biggest potential difference between Immigrants and Natives comes in the ways we reach out to connect with others. Digital Immigrants grew up with three options when it came to maintaining these social bonds: face-to-face, letter writing and the telephone. We grew up with these options and are still most comfortable with them. As we said, email has been rapidly adopted by Digital Immigrants, but it's just a quicker and more efficient form of letter writing. The format of an email is virtually the same as a letter. The primary difference, as many a chagrined Immigrant has found, is the instantaneous nature of email. Once you hit send, the time is past for rethinking and re-crafting your message.

But Digital Natives have many more social networking options thanks to digital technology. Texting, Internet chat, social networks, blogging and microblogging all create potential channels and, unlike email, change the very form of communication. Messages are truncated to just a few lines. And it seems that the Digital Natives are just as comfortable foregoing face-to-face encounters in favor of digitally mediated



Digital Natives

How are They Different?

communication. Academics have found a correlation. A Stanford study (Nie, Simpser, Stepanikove and Zheng, 2005) showed that for every minute spent on the computer, face-to-face time decreased by a minute.

We are just now becoming aware of the potential trade-offs between digital communications and in-person bonding. As we discussed, the period of time where we build social empathy and the skills we need to relate to others is during the critical teenage years. This is also the time when many Digital Natives tend to be locked away. Their only connection with the outside world is a digital umbilical cord, either connected to a computer or a wireless device of some kind.

Attention Spans



The world is a more stimulating place than it was when Digital Immigrants grew up. Entertainment moves at a much faster pace, bringing a barrage of sights and sounds frenetically stitched together with jump cuts and digital effects. We seek sensation and some of us seek it more than others. For some, sensation seeking can become addictive. Dopamine is released during intense stimulation, literally creating a rush in our brains. Popular entertainment has been feeding our need for sensation, providing stronger and more frequent doses of it. The number of violent or sexually stimulating scenes in all forms of entertainment is dramatically higher than it was just a few decades ago. Even children's programming provides a steady stream of sensation, with quick edits, loud noises and sensationally gratifying content.

What happens to the human brain when it's exposed to this steady stream of stimulation during the highest periods of neuro-plasticity? Early evidence indicates that it has a lasting and largely negative impact on our ability to concentrate. Dr. Carolyn McCarty and her investigation team at the University of Washington found that there is a "significant association between the amount of television watched between ages 1 and 3 and subsequent attentional problems at age 7." McCarty concluded that each hour of television watched per day increases the risk of attention problems, such as attention-deficit/hyperactivity disorder (ADHD) by almost 10% at age 7. This becomes even more troubling when you consider that McCarty didn't differentiate by type of programming. All TV shows were treated the same. One could safely assume the more sensational the programming, the more negatively it would impact attention span.

If we use ADHD as a measure of the possible impact of a digital environment on attention spans, the incidence rate seems to be skyrocketing. Researchers (Robinson, Skaer, Sclar and Galin, 2002) report a tripling in the number of physician office visits where a diagnosis of ADHD resulted, going from under a million in 1990 to over three million in 1998, with a 3.9 fold increase in the number of girls and a 2.2 fold increase in the number of boys diagnosed.

Of course, it's not just TV that's the culprit in the attention span crisis. Links have been drawn between ADHD and video games and the Internet as well. There is troubling evidence showing that virtual gaming, in particular, severely impacts normal brain development. Professor Akio Mori from Tokyo's Nihon University found that video games appear to suppress frontal lobe activity, the area of the brain responsible for judgment and executive function. This effect lasts even after the video game is finished. Also, extensive gaming has been shown to result in a lowering of social empathy and increased aggressiveness, particularly with adolescent males.

Multitasking



Much of the research on Digital Natives and Digital Immigrants indicates that Natives are better at multitasking. They often are interacting with PDAs, computers and TVs all at the same time, a feat that boggles the mind of the average Immigrant. It appears that the Native brain is wired for parallel processing, while the Immigrant brain is stuck in a serial world. Is this the case?



Digital Natives

How are They Different?

The answer appears to be both a qualified yes and no. For the same reason that Natives tend to have shrinking attention spans, it also appears that they're better at juggling multiple tasks. Their brains are shaped in a more frenetic environment, so they adapt to it.

But does this make them more efficient? Many researchers say no. One of those researchers is David E. Meyer, director of the Brain, Cognition and Action Laboratory at the University of Michigan. "The bottom line is that you can't simultaneously be thinking about your tax return and reading an essay, just as you can't talk to yourself about two things at once. If a teenager is trying to have a conversation on an e-mail chat line while doing algebra, she'll suffer a decrease in efficiency, compared to if she just thought about algebra until she was done. People may think otherwise, but it's a myth. With such complicated tasks [you] will never, ever be able to overcome the inherent limitations in the brain for processing information during multitasking. It just can't be, any more than the best of all humans will ever be able to run a one-minute mile." (C Wallis, The Multitasking Generation, Time, March 19, 2006)

Digital Natives and Brands



One of the more interesting implications for marketers of the Digital Divide is the impact it has on branding. Both Digital Natives and Digital Immigrants have strong brand relationships, but the way those relationships are built is definitely in flux.

Immigrants are used to having brands master-planned by the marketer and to having a carefully crafted brand message pushed at them through mass media channels. The option is for an Immigrant to accept the advertiser's brand message at face value or not, based on his or her own feelings towards the brand. Natives are used to participating in the creation of a brand. They will adopt a brand enthusiastically—indeed become cult-like in their devotion—but that loyalty comes at a price. **The marketer better be prepared to make branding a participatory experience.**

Natives are used to having a strong voice in the making of a brand and that voice is heard through online channels. They don't hesitate to make their opinions known, whether those opinions are negative or positive. For them, branding is all about their personal experience with the brand, not exposure to packaged marketing and often that experience largely plays out online.



Digital Natives And B2B Buying

The Digital Native/Digital Immigrant divide has fundamental implications for virtually every aspect of our society and B2B buying is no exception. As I said at the beginning of this white paper, the differences in behavior between Digital Natives and Digital Immigrants became apparent even in the first round of interviews we did as part of the BuyerSphere project.

For the remainder of this white paper, we'll explore some of the differences that emerged through the research; speculate on what that means for B2B buying today; and more importantly, what it might mean in the future.

Notes about Segmentation



Most of the data we'll share in this section comes from the survey portion of the BuyerSphere research project. We took all the responses to the survey and divided them by age into the Digital Immigrant and Digital Native categories. We certainly saw some interesting differences, which we'll show later in this paper, but the differences shown in the data may not tell the full story. There are some qualifying comments that have to be made about the data.

Size of Sample

The dividing line for Digital Natives seems to be commonly accepted as those born after 1985, but there is some leeway here, with some researchers pushing the date back to 1980. As you can imagine, in a survey of B2B buyers, it's relatively rare to have 24-years-olds well represented in the sample. It order to get enough respondents to have some meaningful comparisons to work with, we had to go with the 1980 dividing line, so the behavioral differences might not be a distinct as if we used 1985 as a dividing line.

Role of Digital Natives

Much of an individual's influence over the buying process in an organization is dependent on the role he or she is in. Most of our Digital Natives were in junior roles within their organizations, so their influences might not be as great as they will be later in their careers. In short, they're still playing by the rules established by Digital Immigrants and they haven't had a chance to change the rules to better suit themselves. We suspect this also lessened the degree of difference shown in the following data.

With these two qualifications, we'll look at two primary areas:

1. How do Digital Natives and Immigrants interact with technology on a day-to-day basis?
2. How influential were various online factors in their decision making processes?

We'll then speculate on how this could influence B2B purchase decisions within organizations today and, more importantly, tomorrow—as Digital Natives move into positions of power.

Differences in Daily Activities

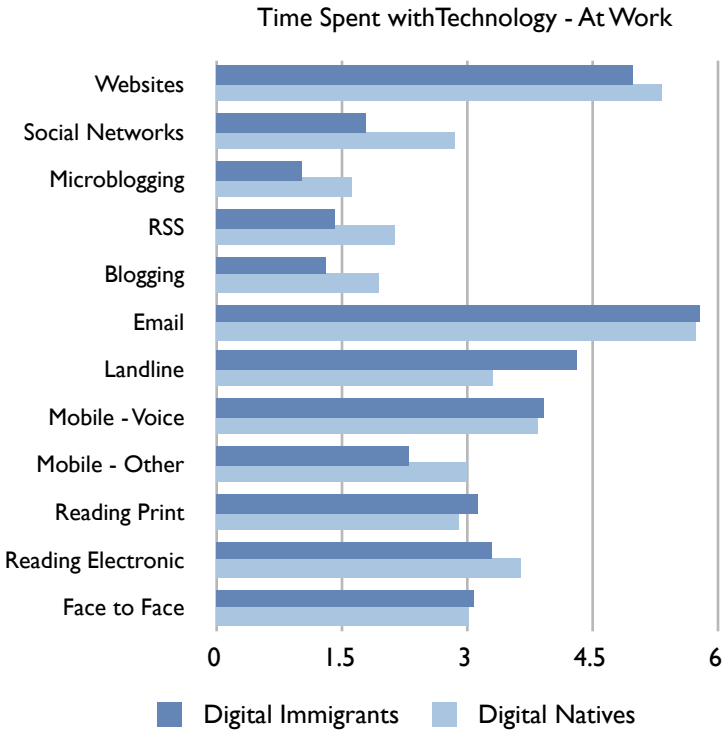


We asked both Digital Natives and Digital Immigrants to indicate how much time they spent interacting with technology on a weekly basis, both at home and at work.

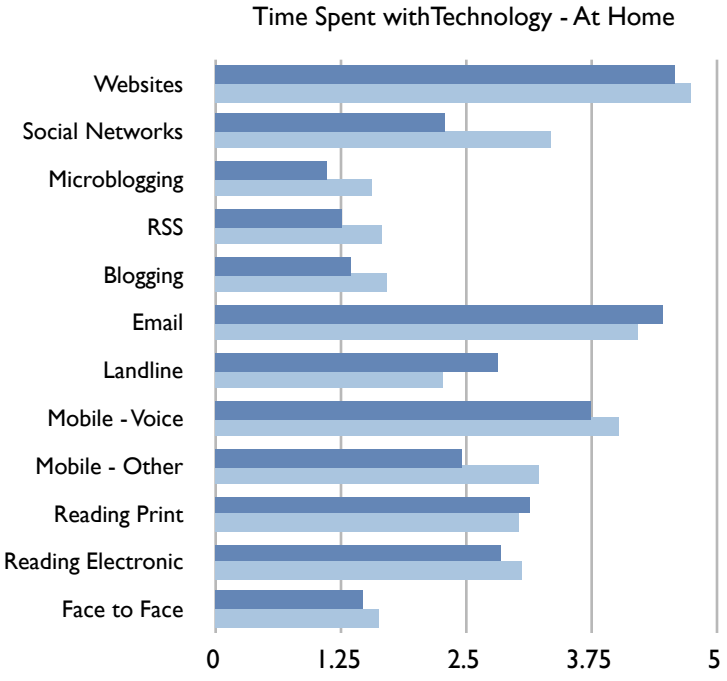
The chart on the next page shows time spent at work. Some areas, like interacting with websites and emails, are almost even. Digital Natives spend significantly more time on social networks, microblogging (Twitter), blogging and managing RSS feeds. Digital Immigrants spend more time on landlines and marginally more time making calls on mobile devices, but Natives use their mobile devices more for other activities, including texting.



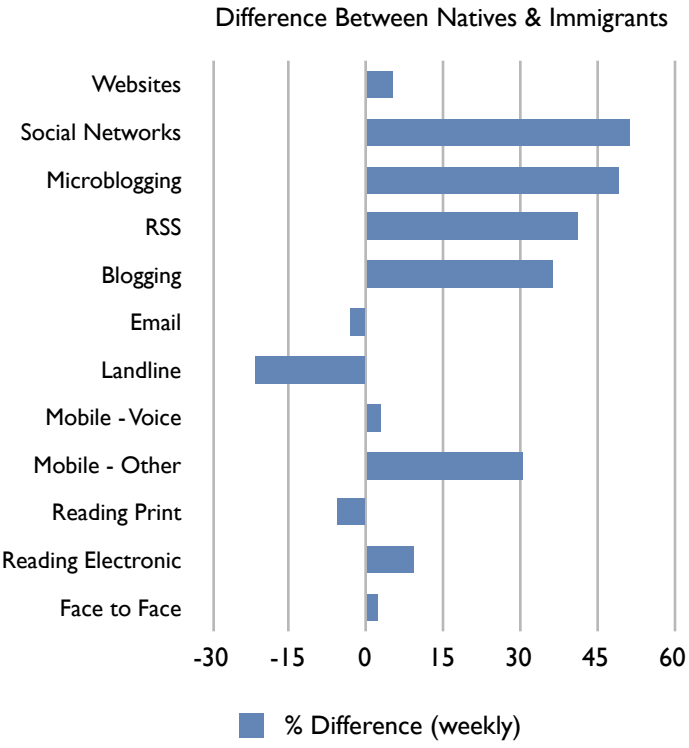
Digital Natives And B2B Buying



The same holds true when Natives and Immigrants go home. Most of the trends remain the same, with Natives this time edging out Immigrants for mobile voice usage. Again, Natives tend to socialize more using digital channels.



But the interesting view comes when we combine the two and shows differences in terms of a percentage of total time spent with technology. In the chart below, positive values indicate Natives spend more time, negative values that Immigrants spend more. Where are the areas where there is the biggest discrepancies between Immigrants and Natives?



Here we see the differences quite clearly. Natives spend almost 50% more time than Immigrants participating in social networks and microblogging on Twitter. They spend over 30% more time blogging, reading RSS feeds and using their mobile phones for something other than talking. They spend slightly less time reading emails and substantially less (20%) speaking on an old fashioned landline.

If you look at the areas of difference, an interesting picture emerges. The things that Natives use technology for are more fully woven into their lives. They use technology to communicate, to state and seek opinions, to socialize, to remain informed and to live from day-to-day. Technology is just part of the world they live in. But Immigrants use technology differently. They use it to do the things they're used to doing more effectively. They organize communications through their email inbox. They use websites to seek information. Anecdotally, Natives are more apt to use online to be entertained; Immigrants use it primarily as an information source.



Digital Natives And B2B Buying

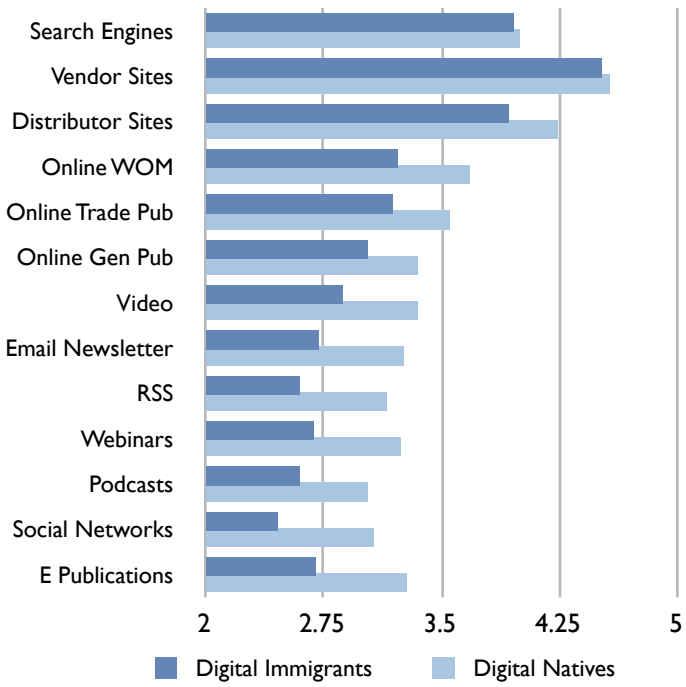
Finally, we noticed one other important difference between Digital Natives and Digital Immigrants. Immigrants keep a distinct divide between their professional and personal lives, particularly when it comes to using technology. With Natives, the lines between their lives are much blurrier. The online paths an Immigrant takes are much different in the workplace. They adopt technology and adapt it to the task at hand. They're more likely to have distinct emails for at home and at work. They visit one set of websites (generally information sources) while on the job and another away from the workplace.

Natives don't draw as distinct a dividing line. Because technology is more seamlessly woven into their lives, it naturally flows from the workplace to home. They use their social networks in both places. They use mobile devices to stay connected digitally, whether at work or after hours. And they navigate the online space differently, looking at it as an environment rather than a destination. Immigrants tend to go online with a specific objective in mind. Natives go online simply to kill time. Again, the differences aren't absolute (many a 50-year-old kills many hours online) but they do speak to a difference in attitudes.

Differences in Influences

In looking at how Natives and Immigrants interact with technology, it's not surprising that digital touch points will be weighted a bit differently in terms of influence on the buying process.

The chart to the right shows the importance (on a scale of 1 to 6) of different online content in connection with the purchase process. The priorities remain similar, but Natives have a much more diverse view of online than do Immigrants. Websites and search engines are important for both, but Natives place more importance on things like online word-of-mouth, online publications and richer media experiences, including webinars, video and podcasts. Again, we come back to the overarching theme: for Natives, online is a familiar environment; for Immigrants, it's an efficient tool to meet task-based objectives. The quantitative differences in this chart are much less significant than the qualitative attitudes that underlie them.



What this Means for B2B Buying

The Digital Divide is approaching quickly. Increasingly, marketers are going to be talking more to Natives and less to Immigrants. What will that mean for our marketing strategies?

A More Holistic Online View

Natives will be using online in different ways. If they're "Doers," the ones who will be using the product, they'll likely first be introduced to it online somewhere. This means they may have more familiarity with the product earlier in the process, having done more exploration than an Immigrant would. They are more likely to view videos and engage with multimedia presentations, which may give them a better feel for how the product will be implemented in their particular situation. They will also typically go further down the road online before they initiate contact with a vendor. Being more comfortable in the online environment, they don't feel the same need as an Immigrant to have an actual conversation with a sales representative.

Speak the Right Language to the Right Prospect

One of the things you have to learn when you map your BuyerSphere is whether you're talking to Digital Natives or Digital Immigrants. In addition to knowing whether you're speaking to Doers or Buyers, you also need to know what side of the Digital Divide they fall on. The following table (next two pages) shows some of the anecdotal differences we found between Natives and Immigrants in our first interviews.



Digital Natives And B2B Buying

Differences Between Buying Behaviors - Digital Natives and Digital Immigrants

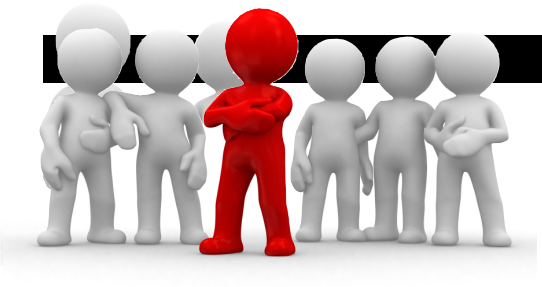
Aspect of Buying Process	Digital Natives	Digital Immigrants
Accessing Information Online	Are more apt to explore the online environment, not always taking the shortest path from A to B. They're also more comfortable with multimedia and richer delivery formats.	Are objective oriented. They like to take the shortest path possible to the information they seek. They often use search to get there. Also, because they're objective oriented, they prefer information in a straight forward format, choosing text over multimedia presentations.
Advanced Functionality	Natives not only use advanced functionality, they expect it. They set the bar higher, looking for sites on which they can "do" something. If the functionality doesn't perform as expected, they have little patience for it. Sites and applications are just supposed to work.	Immigrants are more tentative about using advanced functionality on sites. That said, they're also more forgiving of the functionality if it doesn't perform as expected.
Navigating Online	Natives go further afield online than do Immigrants. They are a little less reliant on landmark sites and are more willing to explore "on their own." Also, they will use recommendations from their social networks to help find new sites and resources online.	Immigrants online are like people who have recently moved to a new city. They tend to rely on a handful of "landmark" sites and return to these sites often. They stay to the tried and true paths and are less likely to leave them. They are heavy users of search engines and stick with their favorites.
Use of Mobile Devices	Natives look at mobile devices and see the potential for 24/7 connectivity to their online environment, a totally different perspective than the Immigrant. For this reason, mobile will play a much bigger role in marketing to Natives. They will be eager to "do things" through a mobile device. And because their device is such an important link for them, they are more likely to use the same one for work and personal use. It becomes too complicated using two devices.	Immigrants still use mobile devices primarily to talk and to receive email. It's a communication tool. And often, they have one for work and one for personal use.
Seeking the Opinion of Others	Natives will seek the opinions of others through social networks and often these networks are a hybrid of professional and personal contacts, such as Facebook. Twitter will also be used for "crowdsourcing" of opinions. This form of opinion polling is a natural activity for Natives in both the workplace and during their off hours. It's a natural extension of the way they maintain their social bonds. For the Immigrant, collecting online opinions is a distinct activity tied to a specific objective. For the Native, it's part of their every day routine.	The opinion of others is a critical risk control mechanism for both Natives and Immigrants, but the way those opinions are sought varies significantly. Immigrants tend to gather opinions in the traditional way, through face-to-face encounters or through email. If they do reach out to an online social network, it will tend to be through a dedicated professional network such as LinkedIn.



Digital Natives And B2B Buying

Differences Between Buying Behaviors - Digital Natives and Digital Immigrants

Aspect of Buying Process	Digital Natives	Digital Immigrants
Importance of Face-to-Face	Natives don't tend to place the same importance on face-to-face. Electronic communication is used more frequently to maintain social bonds and so doesn't feel as cold or "impersonal." That said, the effectiveness of face-to-face communication is still greater than electronic communication and the time spent is worth it. It's just that the Native may need a little more persuasion to free up the time for a face-to-face meeting.	For Immigrants, the effectiveness of face-to-face communication still is paramount. If trust needs to be built, face-to-face contact is essential. Given the option, most Immigrants will choose an in-person encounter over an electronic one, time and circumstances permitting. Failing that, phone calls would be the next best option. Digital communication feels "impersonal."
Preferred Communication	While the phone and email are also important to Natives, they are more likely to use multiple communication mediums, including mobile texting, Twitter, Facebook updates and other channels. They are less structured in their email review habits and typically monitor multiple sources at the same time. Also, Natives are more apt to use their mobile devices for voice communication.	Immigrants are fairly predictable in their communication habits: phone and email. The world revolves around their inbox and they often use the phone. They've adopted mobile voice communication readily (again, an easy extension from landline technology) but are less likely to use other forms of mobile communication (texting, Twitter). It's almost a 50/50 split whether you catch them at their landline or their mobile device, and often they'll ask you to call back on a landline.
Eliminating Risk	Natives tend to turn online as the primary resource to eliminate risk. They do extensive online research and look for reviews and comparisons. They also use social networks to "crowdsource" and gather the opinions of others.	Risk elimination is still the primary goal for both Natives and Immigrants, but there are important differences in how they do so. Immigrants are more traditional in their risk control mechanisms, including gathering word-of-mouth conversationally, and relying on standardized procurement procedures such as approved vendor lists. Industry status is also important to the Immigrant.



When the Natives Rule
Implications for B2B Buying

Timing of the Shift

I hope I've pointed out some of the significant differences between Digital Immigrants and Digital Natives and how these may impact behaviors during the purchase process. In particular, this has profound implications for online marketing strategies, because this is a familiar environment for the Digital Native. Just a few of the considerations will be content and functionality on websites, building a presence in online communities, looking at alternative communication strategies and embracing mobile marketing. The shift will be significant, particularly for those companies that are more reactive than proactive with their move to online.

A word of caution here for marketers. This is not likely to be a gradual trend. We've already seen the first signs of the transition and we believe things will move quickly, but will progress through three distinct phases. The speed with which we move through the phases depends on the size and culture of the organization. Flatter, more nimble companies will move much faster than older, more traditional ones.

Natives in Junior Positions, Immigrants in Middle and Senior Positions



This is the phase we're in currently. Natives are moving into the workplace and are assuming junior roles, typically as "Doers." Immigrants will remain in the "Buyer" positions as these are generally higher up in the corporate hierarchy. In these roles, Natives are being introduced to solutions earlier, gain more familiarity with them through online resources and may have already qualified their decision by reaching out to the social network. Because there is traditionally a gap between Doers and Buyers, the fact that Natives will be on one side of the gap and Immigrants will be on the other side will just make this gap wider to cross. However, it's important for marketers to understand that Natives will be more fluent with online resources and will expect more functionality.

Another factor for vendors to consider is how technology is seamlessly integrated into the lives of Natives. Natives will expect technology to work and to make their jobs easier. They will not only be more willing to adopt technical innovation, they will grow frustrated when vendors don't provide it. Because they are not awed by technology, they will cut vendors little slack when they don't keep up with their competitors. This gives vendors the opportunity to explore digital channels to put prospects closer to their products, and ultimately the order. Real-time inventory management, automated ordering and mobile connectivity will be the price of entry for Natives. Differentiators will be workflow management, seamless support integration and robust digital education and information resources.

Natives Moving into Middle Positions, Immigrants in Senior Positions



This is the next phase, which we'll be entering into in the next five years and will remain in for the next decade or more. Natives will move into more senior "Doer" roles, where they'll have more influence over the buying process. They'll also begin moving into "Buyer" roles, so there will be people speaking the same digital language on both sides of the Risk Gap. During this phase, the transition to online marketing will largely be complete. There will be little place for traditional marketing, especially that which is not fully integrated with its digital counterpart.

This will put extreme pressure on vendors to fully embrace the digital environment. Many will fall by the wayside as their cultures and traditional views prevent them from moving fast enough. There will by an odd dynamic forming on both sides of the buying process, caused by this same upwards migration of Digital Natives. The day-to-day work, both of buying and selling, will largely be in the hands of Natives but the supervision of that work will be in the hands of Immigrants. This will create significant tension within organizations, as the attitudinal and behavioral gap between the two generations is likely the widest we've seen in human history. As Natives begin to wield their new power within more senior roles, they will grow frustrated with the



When the Natives Rule
Implications for B2B Buying

traditional way of doing things and will largely rewrite the book. During this transition phase, this will cause a massive shift in attitudes towards the way to do business.

These attitudes will be seen in all areas of business, including the way organizational purchases are made. Expect reliance on digital resources to replace more traditional risk control mechanisms. Through much of the sales process, Digital Natives from vendors will be speaking to Digital Natives as potential buyers, but at some point, executive review of riskier purchases will bring Digital Immigrants into the mix. The result is likely to be an odd clash of approaches to minimizing risk.

Through this process, the rules of procurement will likely be rewritten. Technology will form the base, but the need to reduce risk will still be the primary objective. The friction-free e-procurement environment envisioned during the dotcom boom and bust is unlikely to emerge because of this, but many of the more efficient aspects of an electronic marketplace will be adopted. Vendors will simply be expected to adapt.

Natives Taking Over Control



Finally, Natives will take over executive control and a new type of organization will emerge, with the rules of business rewritten in a digitally native language. Traditional control structures will be replaced by technical ones. Organizations will become more virtual in nature. Communication will be electronically mediated.

We can already see the beginnings of this in the successful Internet-based companies that were founded by Digital Natives, such as Facebook's Mark Zuckerberg. And although Sergey Brin and Larry Page from Google are both a decade too old to be true Digital Natives, they share many of the characteristics, due to their fascination with technology at an early age and the environments they grew up in. Therefore, Google could also be looked at as a sign of what a Digital Native controlled organization could look like.

In the Digital Native controlled organization, technology will be woven into every aspect of business. The world will have largely shifted online and this will be accepted as "business-as-usual" by Natives. It's difficult to forecast how attitudes will shift, but we will have plenty of examples to watch as more Native-founded companies emerge into the marketplace. The pace of evolution in the business world will pick up dramatically.

The Rise of the Digital Native promises to have profound implications for B2B buying, and these implications are not far away. The transition of Natives gaining positions of influence is already happening. New companies are being formed by Natives with new rule books already in place. And, increasingly, traditional organizations are finding themselves hopelessly out of pace with the rate of change.

Research in this White Paper

The charts and research shown in this paper come from an extensive research project conducted by Enquiro, including over 100 face-to-face interviews, dozens of lab based eye tracking sessions and two separate surveys, together reaching over 2000 B2B decision makers. We've also included findings from past research we've conducted.



The Rise of the Digital Native

The Rise of the Digital Native is Part IV of a five-part series titled **The BuyerSphere**. All five white papers and six webinars are available for download at www.enquiro.com/b2bresearch

About Enquiro and Enquiro Research

Enquiro is a leading North American search marketing agency, helping B2B companies maximize their presence online. Its strategies are based on a decade of experience managing SEO and sponsored search for some of the world's most respected brands. The agency work is enhanced by the work of Enquiro Research, utilizing technologies such as eye tracking to play a key role in understanding how people use search engines, navigate websites and engage with advertising.

About the B2B Expert Series

To address current questions facing business-to-business marketers, Enquiro has launched a package of online seminars titled the B2B Expert Series. The webinar series brings together industry researchers, analysts and practitioners and covers topics such as web analytics, sponsored search marketing, and website user experience. www.b2bexpertseries.com

A Word from Gord Hotchkiss, CEO of Enquiro

I would like to thank Google, Business.com, Marketo, Covario and Demandbase for their contribution to this extensive B2B study and the help and guidance they provided in helping me prepare this white paper.

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www.enquiroresearch.com

Also available from Enquiro's library of white papers:

Business Building Online

June 2009 - In Part IV of the BuyerSphere series, Gord Hotchkiss looks at how to use your portfolio of digital assets, including your website, as a long term business building platform for your organization. How do you support both Doers and Buyers throughout the purchase process? How do you build lifetime value through an effective online presence? And how do you provide clear and compelling paths for visitors, aligned with their intent?

Maximizing Online

June 2009 - In Part III of the BuyerSphere series, Gord Hotchkiss looks at how to effectively use all your persuasion assets across online channels. Questions explored include: How does search "connect the dots?" What is the best placement and format for display ads? What are "Landmark" sites and how do you find them? And how do you align your messages to provide a consistent and persuasive path for prospects?

Integrated Persuasion

May 2009 - Author Gord Hotchkiss explores how to integrate your online and offline efforts to maximize your opportunities for "persuasion." The paper looks at the foundations of persuasion, the role of marketing to build trust, the importance of face-to-face and how to leverage online assets to lay the groundwork of trust and maximize face time.

Mapping the BuyerSphere

April 2009 - In the 18-page paper, author Gord Hotchkiss examines differing buyer roles, the identified risk control mechanisms and the relative effect of a vendor's credibility and positioning. The paper also presents a mapping process for marketers to gain the necessary external perspective on their products, marketplace and business buyers in order to more effectively reach and engage their potential customers.

Barriers on a Search Results Page

July 2008 – Enquiro Research continues to explore visual barriers on web pages, this time specifically on search engine results pages (SERPs). Can white space divide a page? Do local listings enable vertical scanning of the page? How do Wikipedia listings affect the way we search a page? Find the answers in the newest Enquiro Research white paper.



The Rise of the Digital Native

Display Advertising - Does Contextual Relevancy Make a Difference?
August 2008 - Business-to-business (B2B) advertisements which are relevant to their context can lift purchasing intent amongst viewers by up to 36% above a non-relevant placement. This finding comes from a new study commissioned by Google which examines high-level B2B purchasers and effectiveness of Internet advertising as it relates to brand, messaging and recall.

Barriers on a Website
March 2008 – With the use of heat maps, Enquiro Research shows how web page graphics can act as either a barrier or a gateway to essential information. Can graphics prevent user navigation? Do graphics coax users towards essential website information? Does multimedia coax users into a website or trap them? Find the answers in this Enquiro Research white paper.

Chinese Search Engine Engagement
January 2008 - Comparing the two dominant search engines in China—Baidu and Google.cn—Enquiro conducted an eye tracking study with Chinese students to answer how Search user interaction can differ between cultures, languages and reading patterns. How do Google and Baidu compare? And how do Chinese searchers use organic vs. paid listings?

The Brand Lift of Search
December 2007 - Using Honda as a test brand, this first-of-its-kind online study conducted by Enquiro and commissioned by Google sought to quantify the branding impact of differing brand listing placements on the search results page. The research discovered a significant correlation between companies in the top organic and sponsored ad placements and consumer brand affinity, brand recall and purchase intent.

Marketing to a B2B Technical Buyer
October 2007 - Based on Enquiro's B2B Survey 2007, this 60-page report identifies one of the major players in business-to-business purchase decisions: the technical buyer. Distributors' websites, microsites, trade shows and vertical search are all measured and assessed as it relates to the B2B marketer.

Search Engine Results: 2010
August 2007 - This white paper explores what search engines may look like in the future, including personalization, universal search, eye tracking and interviews with leading industry experts. What do the next three years hold for the world of search? Will the search results page in 2010 looks similar to what we use today?

B2B Survey 2007
May 2007 - This white paper is an overview of how business-to-business search behavior is influenced by role of the buyer and phase of the buying cycle. Data was collected online in March 2007 and included over 1000 business-to-business respondents.

Enquiro Eye Tracking Report II: Google, MSN and Yahoo! Compared
November 2006 - This white paper from Enquiro examines the question of whether Yahoo and MSN users interact with search results in the same way as Google users. It attempts to explain some of the differences in search behavior noticed on Yahoo and MSN and delves into the factors that appear to influence the way in which users interact with search results.

Enquiro Eye Tracking Report I: Google
July 2005 - In this paper, you'll learn about the complex interplay between page elements such as top sponsored links, OneBox results, organic results and side sponsored ads. You'll learn how our eyes move around the page in excruciating detail; how we scan listings; what catches our eye; and what motivates us to click on one listing over another.

B2B Survey Summary
October 2004 - The purpose of this survey was to provide insight into how search might be used on business-to-business transactions and to determine the similarities and differences with consumer search behavior.

Search Engine Usage In North America
April 2004 - Complementary research to the previously released *Inside the Mind of the Searcher*. This 59-page detailed research paper, conducted in January and February of 2004, surveyed respondents on search engine usage.

Inside the Mind of the Searcher
March 2004 - This white paper reveals the results of an intensive focus group research project held in February, 2004. It's been recognized as ground-breaking research by many industry experts, including Danny Sullivan, editor of Searchenginewatch.com and Anne Holland, editor of MarketingSherpa. The 30-page report has discovered some startling findings about the way consumers search.

www.enquiroresearch.com/whitepapers