How the Subconscious Drives Buying Decisions

Human Brain Poses Challenges for PC Design as Researchers Discover that the "Flow" of User Experience Trumps Pure Performance.

Buyers, it turns out, are complex and we are just beginning to scratch the surface of what they really want. To better understand that elusive consumer, researchers are digging deep into the recesses of the human psyche to learn how technology can be created that connects the emotional and rational parts of the human brain.

At Intel, researchers have gone a step further and are employing neuroscience to understand what consumers want. David Ginsberg leads the Insights and Market Research Group that is seeking to better understand buyers' conscious and subconscious preferences. Ginsberg, who left a career in politics to join Intel, speaks here about vectors that are prompting researchers to rethink the fundamentals of their business.

At the Intel Developer Forum, Ginsberg discussed the essential human need to create and share and to lose ourselves in the "flow" of the creative experience.

You have an untraditional background for Silicon Valley. How did you shift from politics to technology?
I spent my career before coming to Intel mostly working in the White House and on presidential campaigns. I was involved in the Clinton, Gore and Kerry campaigns. I wanted to try something different. So I joined a market research firm in D.C. that was most known for its work in politics, but really made most of its finances from corporate work. While I was there, Intel came in the door as a client. I've always been kind of a technology geek at heart, and even though I planned to stay in politics, I started doing more and more work with Intel.

Friends of mine who are still in politics -- many of whom work in the White House now -- say things to me like, "Aren't you bored working at a company compared to the big issues we dealt with in politics?" And my response is lots of times in politics you feel like you're dealing with big issues, but you're really just dealing with a bunch of name-callers back and forth. Whereas here at Intel, what we do really makes a difference in the world. Every single day. And that inspires me.

How do you explain what you do as leader of Intel's Insights and Market Research Group?

Our mission is to passionately represent the voice of the end user in all of Intel's business strategy, product innovation and marketing decisions. It means that our company is paying attention to what consumers are saying more than we ever have in the past.

I think once upon a time, market research at Intel was viewed as a marketing-only activity. And this group has really made an effort to say, "You know what? All of us need to be paying attention to what our end users are saying whether you're making business strategic decisions or you're a product planner or a marketer."

What counts as an "insight"?

The best definition that I've heard it's, "A statement that is retroactively self-evident." The most profound insight – when you actually hear it – makes you have the "well duh, yeah, that's obvious" moment, but it's only obvious once you've heard it. It's like a gestalt shift; it reframes how you see everything. If you're coming up with those every week, you're probably doing something wrong.

What are your biggest challenges right now?

We're in a time of rapid change in the industry and there are two main vectors that are causing us to rethink basically how we do everything.

The first is the proliferation of data. For a long time, market research based on surveys or qualitative focus groups was the only game in town to understand how consumers think. Today there are so many sources of data – like search, social and Web analytics – that you can almost get lost in it, or worse, draw the wrong conclusions. How do you use this stream of information to supplement traditional research?

The second big change is that for the last 50 or 60 years, market research as an industry has relied on an understanding that people make decisions based on rational conscious thought processes. The learnings happening now in both the hard and social sciences are turning that fundamental belief on its head, and are telling us that really, most decision making happens at the non-conscious level. So lots of times we're asking consumers questions that they can't answer because they themselves don't know the real reason of why they made a decision.

So you can't be sure people are telling you the truth?

Well, they aren't aware that they aren't telling the truth! There's a pretty famous study around jams. These scientists asked a big sample of consumers to rank jams on taste, ordering them from top to bottom. The results were remarkably similar to what the experts at Consumer Reports put together. Then the scientists re-did the study with a different, but still statistically representative, group except this time they asked the sample to put the jams in order of taste and write down why. The result when they did that was that the order literally flipped, so the ones that were best tasting in the previous group, these consumers were ranking worst, and the ones that were worst, they were ranking best. The reason was because you were asking the conscious brain to suddenly get involved in something that it really doesn't know, and suddenly there are all these sort of social pressures and other things coming into play that really just created a haywire situation.

How have the two vectors you mentioned influenced your research approach?

For nearly 400 years, the thought has been that our conscious, rational brain is president and CEO of all of our decisions, and that the emotional and non-conscious part of our brain is this deep, dark, kind of secretive, Freudian place that needs to be controlled. Also, there was an assumption that the conscious brain can explain why it made the decision it made.

The reality is these basic tenets are simply not true. Many decisions are made at the non-conscious part of our brain. But the conscious part of your brain still wants to think that it's in charge. So it will come up with a reason why it made a decision. For example, you will tell me I bought this laptop because it's got 2.6 gigahertz and it's the fastest thing in the world. In reality, you bought it because you liked the rounded edges and it was red. But you don't know that. It's not that you're suppressing it; you literally don't know that.

All of this raises pretty profound questions for a market researcher. How do we really get close to our end users to understand their needs and wants and desires?

And what have you come up with?

We're really pushing the envelope about what market research is. We're literally hooking people up to EEG machines and monitoring what parts of their brains are lighting up as they're watching certain ads.

Now when we do certain types of product development research, we'll use approaches that are based in psychology and psychotherapy to understand early memories and memory structure that people have around a certain topic so we know what it is that they're actually craving. Why do they love desktops? What is it about certain super-thin designs that attract people?

What's the most surprising thing you've learned?

When you ask people what matters most when they buy a computer, they'll say "performance." And then you'll say what do you mean by performance? And they'll tell you speed. And then you say what delivers the speed? A good chunk of them will have no idea, but a good chunk of them will say the microprocessor.

Based on that, you'd think we're golden. We don't need a marketing department; everybody believes in the processor. But the reality is that's not how people often buy. People often go down the aisle at a store and say, "Oh, I like that red one."

There was something else happening. We realized that maybe we don't really understand what people mean when they're saying performance. Using these new feelings, we dived into the non-conscious and emotional feelings around when a person's computer is working best. What we uncovered – from both mature and emerging markets – was really surprising to us.

You never once heard, "I was sitting at my desk downloading something off the Internet while ripping a CD while crunching on some Excel spreadsheet, and the processor was just humming." Nobody actually thinks that way.

What we did hear were a lot of stories that went something like this: "It was a rainy Saturday morning. I had my laptop on my lap, and I just got lost. I was flipping from site to site; there were no interruptions. And hours went by and I didn't even realize it."

In many ways, it was the opposite of speed, right? It was the ability to get lost in your technology, to have a seamless, immersive experience. And you notice the computer is slow when that experience is interrupted. So when suddenly an hourglass comes up, or the video gets jittery you come out of that experience and remind yourself, oh, I should be mowing the lawn.

So how does this market research translate to product design?

Well, the key word that came out of the research was that what end users are looking for is they're in a state of "flow." And flow is a critical notion because it crosses that border between your human experience of performance and your technology experience of performance.

And so this notion of flow – we use the word "responsiveness" with engineers – is a key part of the Ultrabook decision. One of the four vectors that Ultrabooks has to deliver is flow. That's why it has the fastest startup time and some of the other responsiveness features in it.