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I cover the collision of advertising and the Internet

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Apple's Siri: 'The Culmination Of Steve Jobs' Legacy'

Clearly the hottest news about Apple's hot-selling new iPhone 4S is Siri, the "personal assistant" that can understand many natural-language queries and provide answers or even carry out tasks such as reserving a table at a restaurant. It's not a new technology in concept or even practice; Google's Android phones have provided voice-driven search and commands for more than a year now.



But with Siri, which Apple acquired only a little over a year ago and quickly integrated into its mobile operating system iOS, Apple has done what it has done many times before: By nailing the user experience, Apple once has again taken a technology that already existed and made it feel so natural that you wonder how you ever did things any other way.

While Siri is hardly perfect, it suggests the late Apple cofounder Steve Jobs managed to define what may be the next and most amazing era in human interaction with computers. "Siri is the culmination of the Jobs legacy," contends Gary Morgenthaler, a partner at the venture capital firm Morgenthaler Ventures in Menlo Park, Calif. Morgenthaler was the first VC investor in Siri and was a board member until Apple acquired it, as well as an investor and board member of Nuance Communications, the voice recognition software company whose technology also is used by Siri. Both companies were spun out of the research institute SRI International.

In an exclusive interview, Morgenthaler provided a revealing look at how Siri developed and what it could potentially do—including how it could reshape the worlds of e-commerce and advertising.

Morgenthaler makes a good case that Siri represents the third revolution in human-computer interfaces that Jobs perfected and popularized. The first was the graphical user interface, using a mouse as a pointing device, which Jobs adapted (some might say stole) from Xerox PARC and SRI to make the Macintosh. The second came in the iPod and the iPad, using a



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gestural interface—again, not a technology it invented, but anyone who uses Apple's touch technology knows it performs better than anyone else's.

The third, Morgenthaler contends, is a conversational interface epitomized by Siri. "It could create a new paradigm for interacting with computers, a new man-machine interface," he says. "We are at a <u>turning point in history</u> where people can talk to a computer and be understood. It's a watershed moment where people won't go back."

Potentially, at least, Siri isn't just a cool application but a platform on which a lot of other applications can get built. Before Apple bought it, Morgenthaler says, the plans at Siri were to build out a platform of services in e-commerce and access to a wide range of services on the Internet. Of the approximately 3,000 e-commerce application program interfaces, or APIs, that define how to write programs for software and online services, he says, Siri had implemented 45. The implication is that Apple has a huge potential to spread its vision of this style of computing to a large swath of the Net.

Making Siri able to operate with e-commerce services also suggests intriguing possibilities for an advertising business, which so far hasn't been Apple's forte. One of Siri's original plans for making money, in fact, was to pass on highly qualified leads to e-commerce providers, a so-called cost-per-action ad model. If someone asks Siri, "What's the best Cuban restaurant in San Francisco?" for example, providing a range of choices, some of which may be ads, could be just what users want.

That also could prove at least as effective for marketers as Google's search ads. And so Apple, as it did in music and mobile phones, threatens to disrupt an industry once again. Although Google has plenty of its own expertise in speech technologies (including a cofounder of Nuance, Mike Cohen), Apple suddenly looks like it has a wedge to bust open one of the defining technologies and moneymakers of the Internet.

Morgenthaler concedes that it's "very challenging" for Apple to open up Siri's own API to the world's software developers, especially this early on. After all, Siri for now carries a very rare (for Apple) "beta" label. But he thinks letting other software developers run with Siri is critical. "Then," he says, "the revolution really happens."

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