

## INTERACTIVE SESSION: TECHNOLOGY

### IS THE IPAD A DISRUPTIVE TECHNOLOGY?

Tablet computers have come and gone several times before, but the iPad looks like it will be different. It has a gorgeous 10-inch color display, a persistent Wi-Fi Internet connection, potential use of high-speed cellular networks, functionality from over 250,000 applications available on Apple's App Store, and the ability to deliver video, music, text, social networking applications, and video games. Its entry-level price is just \$499. The challenge for Apple is to convince potential users that they need a new, expensive gadget with the functionality that the iPad provides. This is the same challenge faced by the iPhone when it was first announced. As it turned out, the iPhone was a smashing success that decimated the sales of traditional cell phones throughout the world. Will the iPad do likewise as a disruptive technology for the media and content industries? It looks like it is on its way.

The iPad has some appeal to mobile business users, but most experts believe it will not supplant laptops or netbooks. It is in the publishing and media industries where its disruptive impact will first be felt.

The iPad and similar devices (including the Kindle Reader) will force many existing media businesses to change their business models significantly. These companies may need to stop investing in their traditional delivery platforms (like newsprint) and increase their investments in the new digital platform. The iPad will spur people to watch TV on the go, rather than their television set at home, and to read their books, newspapers, and magazines online rather than in print.

Publishers are increasingly interested in e-books as a way to revitalize stagnant sales and attract new readers. The success of Amazon's Kindle has spurred growth in e-book sales to over \$91 million wholesale in the first quarter of 2010. Eventually, e-books could account for 25 to 50 percent of all books sold. Amazon, the technology platform provider and the largest distributor of books in the world, has exercised its new power by forcing publishers to sell e-books at \$9.95, a price too low for publishers to profit. Publishers are now refusing to supply new books to Amazon unless it raises prices, and Amazon is starting to comply.

The iPad enters this marketplace ready to compete with Amazon over e-book pricing and

distribution. Amazon has committed itself to offering the lowest possible prices, but Apple has appealed to publishers by announcing its intention to offer a tiered pricing system, giving publishers the opportunity to participate more actively in the pricing of their books. Apple has agreed with publishers to charge \$12 to \$14 for e-books, and to act as an agent selling books (with a 30% fee on all e-book sales) rather than a book distributor. Publishers like this arrangement, but worry about long-term pricing expectations, hoping to avoid a scenario where readers come to expect \$9.99 e-books as the standard.

Textbook publishers are also eager to establish themselves on the iPad. Many of the largest textbook publishers have struck deals with software firms like ScrollMotion, Inc. to adapt their books for e-book readers. In fact, Apple CEO Steve Jobs designed the iPad with use in schools in mind, and interest on the part of schools in technology like the iPad has been strong. ScrollMotion already has experience using the Apple application platform for the iPhone, so the company is uniquely qualified to convert existing files provided by publishers into a format readable by the iPad and to add additional features, like a dictionary, glossary, quizzes, page numbers, a search function, and high-quality images.

Newspapers are also excited about the iPad, which represents a way for them to continue charging for all of the content that they have been forced to make available online. If the iPad becomes as popular as other hit products from Apple, consumers are more likely to pay for content using that device. The successes of the App Store on the iPhone and of the iTunes music store attest to this. But the experience of the music industry with iTunes also gives all print media reason to worry. The iTunes music store changed the consumer perception of albums and music bundles. Music labels used to make more money selling 12 songs on an album than they did selling popular singles. Now consumers have drastically reduced their consumption of albums, preferring to purchase and download one song at a time. A similar fate may await print newspapers, which are bundles of news articles, many of which are unread.

Apple has also approached TV networks and movie studios about offering access to some of their top shows and movies for a monthly fee, but as of yet the

bigger media companies have not responded to Apple's overture. Of course, if the iPad becomes sufficiently popular, that will change, but currently media networks would prefer not to endanger their strong and lucrative partnerships with cable and satellite TV providers. (See the chapter-ending case study.)

And what about Apple's own business model? Apple previously believed content was less important than the popularity of its devices. Now, Apple understands that it needs high-quality content from all the types of media it offers on its devices to be truly successful. The company's new goal is to make deals with each media industry to distribute the content that users want to watch at a price agreed to by the content owners and the platform owners (Apple). The old attitudes of Apple ("Rip, burn,

distribute"), which were designed to sell devices are a thing of the past. In this case of disruptive technology, even the disruptors have been forced to change their behaviors.

**Sources:** Ken Auletta, "Publish or Perish," *The New Yorker*, April 26, 2010; Yukari Iwatani Kane and Sam Schechner, "Apple Races to Strike Content Deals Ahead of iPad Release," *The Wall Street Journal*, March 18, 2010; Motoko Rich, "Books on iPad Offer Publishers a Pricing Edge," *The New York Times*, January 28, 2010; Jeffrey A. Trachtenberg and Yukari Iwatani Kane, "Textbook Firms Ink Deals for iPad," *The Wall Street Journal*, February 2, 2010; Nick Bilton, "Three Reasons Why the iPad Will Kill Amazon's Kindle," *The New York Times*, January 27, 2010; Jeffrey A. Trachtenberg, "Apple Tablet Portends Rewrite for Publishers," *The Wall Street Journal*, January 26, 2010; Brad Stone and Stephanie Clifford, "With Apple Tablet, Print Media Hope for a Payday," *The New York Times*, January 26, 2010; Yukari Iwatani Kane, "Apple Takes Big Gamble on New iPad," *The Wall Street Journal*, January 25, 2010; and Anne Eisenberg, "Devices to Take Textbooks Beyond Text," *The New York Times*, December 6, 2009.

## CASE STUDY QUESTIONS

1. Evaluate the impact of the iPad using Porter's competitive forces model.
2. What makes the iPad a disruptive technology? Who are likely to be the winners and losers if the iPad becomes a hit? Why?
3. Describe the effects that the iPad is likely to have on the business models of Apple, content creators, and distributors.

## MIS IN ACTION

Visit Apple's site for the iPad and the Amazon.com site for the Kindle. Review the features and specifications of each device. Then answer the following questions:

1. How powerful is the iPad? How useful is it for reading books, newspapers or magazines, for surfing the Web, and for watching video? Can you identify any shortcomings of the device?
2. Compare the capabilities of the Kindle to the iPad. Which is a better device for reading books? Explain your answer.
3. Would you like to use an iPad or Kindle for the books you use in your college courses or read for pleasure instead of traditional print publications? Why or why not?

**Support activities** make the delivery of the primary activities possible and consist of organization infrastructure (administration and management), human resources (employee recruiting, hiring, and training), technology (improving products and the production process), and procurement (purchasing input).

Now you can ask at each stage of the value chain, "How can we use information systems to improve operational efficiency, and improve customer and supplier intimacy?" This will force you to critically examine how you perform value-adding activities at each stage and how the business processes might be improved. You can also begin to ask how information systems can be used to improve the relationship with customers and with suppliers who lie outside the firm's value chain but belong to the firm's extended value chain where they are absolutely critical to your success. Here, supply chain management systems