From FarmVille to Bangladesh: Mobile Apps Try to Fulfill Their Potential

March 11, 2011

In a remote corner of northern Bangladesh, a newborn girl contracted malaria and pneumonia, two big killers of children in the developing world. With the nearest hospital six hours from their island by boat, the child's parents prayed for healing and hoped for a miracle. It came in the guise of a community health worker, who used a special cell phone to collect and transmit the baby's health data to a doctor. She also administered antibiotics on the spot. As a result of a mobile phone application developed by Lexington, Mass.-based Click Diagnostics, help was dispatched and a life was spared.

"Mobile phones can be the way that almost half of the world will access health care for the first time," said Rubayat Khan, founding country director for Click Bangladesh who spoke as a member of a keynote panel on mobile health and banking at the recent BizTech@Wharton Conference. "Two billion people, or almost a third of the world's population, have never seen a doctor in their lives. Almost four billion do not have affordable access to health care."

Mobile technology is upending the traditional business delivery models in health care and a host of other industries. The increasing sophistication of cell phones gives companies an opportunity to tap into the device's mobility to reach people for a host of applications. Banking is another big user of mobile technology as more people use phones to pay bills, access account information and transfer money. "Everyone is going to start tapping [on a smartphone touch screen] to pay," predicted panelist Iqram Magdon-Ismail, co-founder of Venmo. His company offers mobile payment services with social features, such as letting people use their phones to pay back loans from friends.

While mobile technology has been around for years, special circumstances are coming together now to make it particularly viable. "The devices themselves have become much more capable," said panelist Vishy Gopalakrishnan, director of industry solutions at AT&T Mobility. "If you go back to the Palm Pilot [in the late 1990s], it was great at that time, but it was not necessarily compelling in terms of user experience." Developing applications has become easier, and prices for devices have come down. People also have become more comfortable using their phones for many applications, Gopalakrishnan noted. "When the dot-com boom happened, remember all the apprehension people had with putting out their credit card information on the web? Nobody thinks about that anymore. I use my mobile device for all kinds of transactions."

Panelist Omar Green, director of strategic mobile initiatives at Intuit Inc., credited two companies for changing the way people view mobile applications: Apple and Facebook. With the introduction of the iPhone, Apple turned the cell phone into a more user-friendly, multi-purpose device, while Facebook made people comfortable with sharing personal information online. Consumers rushed to buy smartphones and tapped social network apps for activities such as finding restaurants rated highly by other diners, leveraging the power of the American consumer to drive changes worldwide in the process. "When people in America start caring about something, and start spending their money on something, things change," Green said.

Mobile technology also has the power to make costly systems more efficient, panelists noted. Consider how Welldoc, a Baltimore company that uses cell phones and the web to manage the health of diabetic patients, is changing chronic disease management. Welldoc uses a mobile phone to give patients real-time coaching about their ailments, offering advice on matters such as how to bring down a glucose level that is too high, or raise it when it is too low. A summary of patients' habits and health data is sent to their doctors and caregivers. The program was so successful in improving patient health -- with broader implications of reducing the nation's burgeoning health care spending -- that Welldoc recently was asked

to meet with the Food and Drug Administration and the Federal Communications Commission, said panelist Anand Iyer, Welldoc's president and chief operating officer.

Privacy, Compatibility and Monetization

But while the promise of mobile technology seems boundless, its execution can be more problematic. For one, there is the issue of protecting consumer privacy, which has become especially critical in the face of the Federal Trade Commission's "Do Not Track" proposal that would allow Internet users to block websites from collecting information about them. Companies that rely on ad-supported mobile apps, or websites designed for the phone, need to track consumers in order to target ads to them. That is how the firms make money. Without targeted ads, growth of mobile apps would dry up, panelists stated, because the cost would then be transferred to customers who are used to downloading the programs for free. "I would argue that 60% of the innovations coming out of [medical] startups would go to zero if there weren't ways of monetizing through targeting," Green stated.

The challenge for companies is finding the fine line between providing helpful information and preserving privacy. For instance, if a patient searches for articles on depression, would it be appropriate to target him or her with ads about depression medication? Gopalakrishnan argued that it can be done tastefully. Facebook has shown that people are comfortable with revealing things about their personal lives to a certain extent, he pointed out. The trick is for the company to use that information in a helpful and subtle way and to "give some assurance -- formal or informal -- that you're not going to share [personal data] with the whole wide world."

Another challenge is the issue of compatibility. Mobile app developers have to write different versions of their programs for different platforms, such as the iPhone, Android and the BlackBerry. Consequently, the programs take longer to implement and are more cumbersome to update, according to speakers at another BizTech panel, which focused on mobile applications. "If you want to win at mobile, you can't just pick one. You can't just say, 'I need an iPhone app,'" according to panelist Eric Blumberg, founder of Smarter Agent, a Camden, N.J., mobile technology development company for real estate agents. "You have to do all of them."

Making money from mobile technology also requires creativity, panelists said. Zagat, a well-known provider of restaurant reviews, charges a subscription fee to users, noted panelist Ryan Charles, who leads the company's mobile efforts. But when Zagat tried to put ads into its mobile app, paying users protested. "People said, 'Why do you have advertising on this app when you're charging me for it?'" he said. "People don't want double-dipping. There's a lot of resistance to that from users." Now, Zagat tries to find ways to boost its revenue by offering deals and other promotions.

Blumberg said Smarter Agent charges real estate agents and institutions, but is free to consumers. The app, which can be customized by individual real estate brokers, provides consumers with real estate listings. Along with a subscription fee, Smarter Agent also makes money through ads. The ads are not intrusive to people who find them helpful, Blumberg suggested. For example, if a home buyer is searching for a house with hardwood floors but comes across a property that does not have them, the app can serve up an ad from Ikea offering a deal on hardwood flooring. Such a targeted ad is much more effective than blanket TV commercials, Blumberg added.

The key, panelists noted, is to make ads part of the mobile user's experience instead of a disruption. "Advertising on TV is not advertising on the web. Advertising on the web is not advertising on mobile. [Placing ad] banners on mobile [is] probably going to drive most people away because your screen is only so big and you're putting a banner on it," Blumberg pointed out. So he tries to find a way to insert an ad where people will not mind as much. For instance, his company puts an ad on the blank screen that comes up when the phone is loading information. That ad replaces the spinner on the screen as data is downloaded. "Figure out how to put [ads into apps] so they're not [intrusive]," he advised, "so they're part of the user experience."

Some companies offer free apps, but charge customers for access to internal features, Charles said. For example, FarmVille is a game that lets users manage a virtual farm by planting and harvesting virtual crops, and raising virtual livestock. Players earn virtual money to pay for plants and animals as they gain experience, rise in game levels or by paying actual money. Another app, Smurf Village, is free to download but there is a charge for additional in-app content. For example, adding a wagon of "Smurfberries" can cost as much as $100. Charles called it a "free model with an in-app purchase." This strategy of monetizing mobile apps will not work with everything because consumers "might not be addicted to a certain section of The New York Times as much as they are to upgrading their Smurf Village."

The bottom line is that companies have to find methods of making money from mobile, and they are experimenting with ways to do it creatively. Without monetization, all the innovation will be wasted because the app will not be sustainable. The trick is to make the ad fill a customer's needs. "If ads really help you do things ... then they're not really ads, they're things that help you," Blumberg said. "If I'm moving and Home Depot is giving me 20% off my next purchase, is that an ad or is that a benefit for using the app? Advertising isn't a dirty word, but how you implement it can be."