How an iPhone can Change the Weather (Business)

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The combination of growing cellular coverage, dropping data pricing rates, and ever-improving smartphones has created a "perfect storm" to fuel a rise in mobile computing.

Mobile phones have quickly joined the list of products that are considered essential consumer goods, and their track to adoption in US households has outpaced the median rate for others in this group. In the 20 years since the mobile phone was first available in the marketplace, it has reached 90% of American families.[1] Many have even abandoned traditional home phone service, since these new phones are more powerful and portable.

Smartphones were an even more recent introduction to the choices consumers have, yet had already grown to a 15% share of new cellular phone sales by early 2009. By the end of 2009, their share of new service sales is forecast to jump to nearly 20%, and reach 38% of all phones by 2013.[2,3]

Today's smartphones are routinely laden with features, including video-capable color screens, and high-speed data connections to the Internet. The phone makers and data carriers have also opened the system enough to allow independent developers to design unique applications to increase the phone's utility.

Perhaps the more important matter is not what these phones can do, but where they reside. The typical place one would find a smartphone is in the consumer's pocket or purse, if not already in one's hand. Because the technology has advanced to the point where a smartphone is the equivalent to a miniature computer, consumers consider it a constant companion. They are used for everything from voice, text, and email communication, to sources for news, games, audio, and even streaming video.

Smartphones give unparalleled access to people wherever they are, and the technology is rapidly evolving to strengthen this connection. Rates for voice and data have also fallen significantly over time, which has driven an even wider adoption of these devices beyond technophiles.

Because of their adoption and their proximity to their owner at all times, smartphones also provide a prime opportunity for data providers, advertisers, and others to connect with their target audiences. Among all of the various media sources, no other has the default condition of being "always on" and often joined literally at the hip of consumers.

In applying these trends to the weather information market, it is important to consider the basic mission. The goal of a weather data provider is to deliver accurate, relevant, local data in a timely manner. This information will assist in a person's decisions and actions, ranging from what to wear, to when to run.

Any private-sector weather information provider is looking to take in enough revenue to

cover the costs of acquiring, producing, and delivering this information, plus enough net profit to make it economically interesting. Essentially, it comes down to capturing a consumer's attention long enough to deliver the information and the advertising that accompanies it. With the emergence of the smartphone as a communications conduit (and an increasing draw on a typical consumer's attention), it is imperative that existing channels consider this as a competitive threat to their profit model.

Of most relevance is the smartphone's design and location, which makes it very well-suited to the mission of timely and relevant data delivery. In the same way the Internet has allowed people to access information according to their schedule and their interests, the rise of smartphones has now pushed this same data to within an arm's reach at all times. It is not surprising that every major source of weather information has developed one or more mobile versions of their web sites to try and capture part of this emerging market.

According to a recent report on smartphone usage by online market research firm *Compete*, 39% of iPhone users cited weather-related apps as one of the three kinds of applications they use most frequently. Weather access outpaced social networking and game applications by a factor of two[4].

These new weather interfaces are designed to take advantage of the various mobile platforms, and provide the exact data customers want, when they want it, often for no additional fee. The well-established weather data providers' approaches are different, and usually reflect their traditional web site strategies. As this technology continues to evolve, these providers will likely need to continually adjust their approach to stay competitive in the race for weather consumers.

The drive to build tailored weather information applications has gone quickly beyond the traditional competitors. As of October 2009, there were over 1,000 separate apps listed in the weather category of iPhone's catalog. These range from mobile versions of popular weather websites, to specific apps for wind tracking, satellite viewing, snow reports, and many others. The apps usually allow for a consumer to set favorite cities, and also to pinpoint his location (using the built-in GPS function of the phone) to deliver the weather where he is at the moment.

Some smartphone weather sources even add a "local" video stream, which employs a standard template, and adds regional radar and other local data to tune it for the area. In one case, a single meteorologist covers half of the U.S. market simply by running through the regions with the prepared text relevant to each. Only if users shift their phone app from one market to another would they realize that their "local weatherman" was shared by other regions.

Traditional delivery methods do have some advantages over a smartphone. Television and radio are hands-free and can deliver information passively, while a smartphone requires a user's full attention. Television also provides a video presentation and resolution that a small streaming screen cannot match. Broadcast media also hold an

advantage for the human factor, where a viewer or listener can build trust in the local knowledge of their hometown meteorologist over time.

Broadcast channels for weather information would be well-served to research the ways they can incorporate a smartphone user base into their overall strategy. For a local network weather station to succeed with this channel, it needs to capture the eyes of the smartphone user, and keep pulling them back to their other sources. Adding fan pages for the stations and their meteorologists on social networking sites (such as Facebook and Twitter) can help connect them with their followers. Feeding the local video in a smartphone-friendly format and pushing weather updates to consumers could also reinforce the station as their primary source of relevant and timely data.

The rise of the smartphone cannot be ignored. Looking at the overall weather data marketplace, all companies engaged in the business of delivering current, historical, and forecasted data need to be aware that the smartphone is swiftly becoming a consumer's default communications option. Over time, all other sources of information will seem less convenient (and thus less important) by comparison.

References:

1. *The New York Times* (W. Michael Cox and Richard Alm), February 10, 2008.
2. 2009 Informa Telecoms & Media market research report, reported by *Cnet.com*, March 9, 2009.
3. Yankee Group research, June 10, 2009.
4. Cited from *Online Media Daily*, April 13, 2009.