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Viewpoint: Content & services at tipping point?

Are we finally approaching the point where the content and services that consumers use on their mobile devices are the most compelling factor and hence the new revenue opportunity for network operators? Dr. Graham Carey, marketing director for Europe, Middle East and Africa at Bytemobile, Inc., examines the case. (www.bytemobile.com)

Content is King!

Analysts and operators alike are reporting the start of the "hockey stick" increase in data traffic for mobile handsets. At the same time, we are seeing an erosion in price and margin for traditional voice services, with many operators introducing "all you can eat" tariffs for data and Internet services. There is a revolution afoot. The industry is at a tipping point. How will the consumer react? How will operators deliver these services, whom will their partners be and how can they remain in the driver's seat?

What Mobile Consumers Want

Toward the end of 2007, Bytemobile commissioned a research study to better understand the issues presented by the above-mentioned changes. Where better to start than with the mobile consumer? What does he want? Does she see a difference between the fixed and the mobile Internet and the various online experiences at home, at work or on the move?

The Bytemobile study focused on consumers in the United Kingdom and the United States and was predicated on an important distinction: mobile usage of the open Internet. By "open Internet," we mean the off-portal Web as it is experienced on the desktop or laptop and content adapted and optimised to mobile devices, rather than websites and Web-based applications designed specifically for such devices. The results of the study were interesting:

- Ninety-six percent of the participants expected the quality of their mobile browsing experience to be comparable to that of the browsing experience on their personal computers.

- Seventy-five percent indicated their willingness to pay for content adaptation technology that would deliver the PC-browsing experience to their mobile devices.

- Less than half of the participants accessed video from their mobile devices because of screen size, battery life and memory capacity limitations.

- They expressed wariness of videos longer than five minutes for fear of excessive download time and the possibility of losing their connection during download or playback.

- Virtually all stated that they would accept mobile advertising preceding a video in exchange for a free download or streaming experience, especially if the ads were relevant to their interests. The same preference could logically be applied to adapted Web content.

Barriers to Carriers

Today, virtually all tier-one and many tier-two network operators provide branded Web and multimedia content on their own portals. However, increasing numbers of mobile consumers demand open Internet access and usability beyond that "closed" portal. Many of them cannot afford smartphones, yet have browsers and media players, and they expect content to be no more than 10 seconds or 3 clicks away. Mobile-optimised websites, which initially appeared to be a feasible option, are difficult to maintain and are a luxury which only the top content providers can afford. As a result, leading European carriers have extended their portals with mobile Internet services. These services will work on subscribers' existing feature phones and are readily available at a flat monthly rate.

Data traffic on many of the high-speed tier-one networks in Europe is increasing by 10 to 15 percent per month. The mobile Internet revolution is most definitely upon us, and opportunities for new business models and revenue streams cannot be ignored. In addition to these opportunities, the challenges for operators are equally clear:

- Increased competition is coming from leading Internet brands and telecommunications service providers alike.

- Data plans with unlimited usage provide open Internet and multimedia extensions to portal content or alternatives to WAP sites.

- Carriers who stick purely to mobile-optimised content risk gradual extinction.

- Consumer adoption of data plans could be inhibited by the necessity of client downloads for an improved user experience.

- The time-to-market window is rapidly shrinking.

- Networks of all speeds require peak performance, efficiency and capacity to maximise bandwidth utilisation, minimise latency and contain operating and capital costs as traffic rises – it's a perpetual issue!

- Now more than ever before, there is no substitute for a superior user experience on the mobile device.

Surmounting the Barriers

Carriers must leverage their unparalleled access and relationship with mobile consumers to maintain customer ownership continuously by enhancing their data service offerings and of course strengthening their networks. The operators' ability to see users' IP and content traffic – which cannot be replicated even by Internet giants such as Google, Apple, Microsoft and Yahoo!– poses a unique commercial advantage.

A central element of the operator effort consists of accelerating data plan adoption by delivering the PC Internet and all associated media to virtually any mobile device -- without any special user intervention, including client downloads, complex configuration settings or other changes to existing handsets. The resulting subscriber services must be packaged as flexibly and conveniently, and priced as aggressively and competitively as practicable.

Transparency across different network technologies and generations, a comprehensive range of device makes and models, and a full spectrum of mobile browsers is another critical requirement for operators. Whether on a 2.5G GSM or a 3.5G CDMA pipe, on a Samsung Katana or an iPhone, or on Windows Mobile or Safari, the mobile Web experience should be of consistently high quality, such that the user is largely, if not wholly oblivious to the delivery technology.

Dynamic transcoding and adaptation of Web pages and video codecs from PC to handset in real time, coupled with traffic optimisation techniques, achieves this level of high performance and user transparency. For video delivery on the handset, dynamic bandwidth shaping optimises streaming by controlling effective bandwidth utilisation within availability constraints at any given second. The result is minimal buffering, pausing or other latency effects which in the past have adversely impacted the user experience.

Crossing the Chasm

Seamless integration of service deployment on a single node in the core data path of the network minimises network overhead and speeds time to market for new applications. The consolidation of Web and multimedia content adaptation, network and device optimisation, content filtering for parental controls, and other interoperable services on a common platform is key to operators' agility and competitive advantage in a fast-moving market.

The foundational benefits of dynamic optimisation apply to all data services as well as the economics of the carrier's business model. Data reduction of 40 to 60 percent dramatically reduces network operating expenses and capital expenditures for network equipment. Traffic acceleration speeds user downloads of content-adapted off-portal pages and embedded media, as well as optimised portal pages, by anywhere from 2x to 8x, depending on network conditions and other variables. This enables operators to make the best use of their network assets.

The Next Horizon

The bonus in all of this is mobile advertising, which enables operators to monetise adapted off-portal Web and video content and build new partner-based revenue streams with the insertion of sponsored display ads. This additional source of revenue enhances the positive financial impact of optimisation by subsidising data delivery costs. Targeting based on subscriber usage data increases the value and ROI to both brand advertisers and content publishers.

Consumers will gladly accept relevant advertising in exchange for free or inexpensive data services and a compelling user experience which includes the content they want. With more than two billion websites and three billion devices, each growing by thousands per day, the opportunity for network operators is both vast and immediate.