

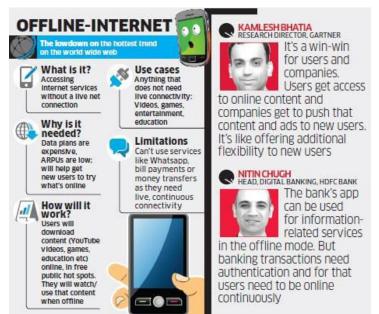
## How offline internet could make the web more accessible to India's telecom user base

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http://articles.economictimes.indiatimes.com/2015-02-03/news/58751914\_1\_google-india-rajan-anandan-offline

Last December, when Google started offering YouTube videos in the offline mode — downloaded online, but watched offline — it opened up a whole new and perhaps even strange way to experience the internet offline.

Some parts of banking — like account balance updates — don't require a user to be on a live connection. And the recent buyout of ZipDial by Twitter will give more people access to Tweets — like updates on World Cup matches — without users having



to get online. A missed call to ZipDial will offer users updates on matches or Tweets by public figures, Bollywood stars and so on.

The 'offline internet' may sound like an oxymoron, but new experiments along these lines could make the web more accessible to large chunks of India's telecom user base.

"India will be the world's largest offline internet market," says Rajan Anandan, managing director, Google India. "Users will download videos at, say, public hotspots, without paying for net access and watch them offline.

The offline internet addresses the big problem of cost of internet access. A 1 GB data plan on 3G network costs Rs 250 per month, but the average revenue generated per telecom user in India is only Rs 150 per month. Many of the 700 million pre-paid users do top-ups of as low as Rs 50 per month and there's no way they will get access, unless they can pay more for data plans.

Adds Kamlesh Bhatia, research director, Gartner: "It's a win-win for users and companies. Users get access to online content and companies get to push that content and ads to new users. It's like offering additional flexibility for new users to get a flavour of what's online."

As of December, India had 302 million internet users, according to Internet & Mobile Association of India and by 2018 it's expected that 500 million people will use the internet.



"Cost of data plans is already very low in India and may not fall further. Innovations like offlineinternet is the way internet have-nots will access content, to begin with." says Alpesh Shah, senior partner and director, Boston Consulting Group.

Users will still need to access internet online, before they can see content offline. This, says Sanjeev Sarin, founder and CEO, Ozone Networks, "will happen in public hotspots."

Ozone Networks has set up 6,500 hotspots across the country, about 20% of which are public, like at McDonald's, KFC outlets and Mumbai Airport. Ozone believes that the government's focus on expanding digital services reach could lead to more than 1 million hotspots by 2020.

In public hotspots, access is free for the first 30 minutes and users pay thereafter. However, downloading a Bollywood film can take one hour and make it expensive for users.

To overcome the glacial pace of downloads, Ozone has partnered with a start-up, Speed Fetch. A Speed Fetch box installed in a hotspot has one terabyte of stored content and can help download a Bollywood flick in 10 minutes — this will be rolled out within the next two months.

"It works on micro-caching — popular content is stored, making it easy and quick for users to download what they might like in a Wi-Fi hot spot," says Sarin.

However, users will have to pay for downloading content via Speed Fetch — about c20 per movie.

"It's much cheaper than paying Rs 300 at PVR," he adds.

According to Ozone, average usage in public hot spots has jumped from 10 minutes a year back to 40 minutes now, with about 45 million people accessing internet from such public places.

"Traditionally, India has been a shared economy — shared homes, shared TV, shared PC and shared Wi-Fi," says Google's Anandan. "In the face of affordability challenges, shared public WiFi is the answer to internet access."

However, not all services can be accessed or used in an off line mode. For instance, for Whatsapp or online bill payments people need live connections. Says Nitin Chugh, head, digital banking, HDFC Bank: "The bank's app can be used for information related services in off line mode. But banking transactions need authentication and for that users need to be online continuously."

Adds Sandeep Ladda, technology lead, PricewaterhouseCoopers: "Even YouTube in the offline mode has a 48-hour window after which user needs to re-load via the internet. Besides, users will be able to browse and watch content within time limits specified but won't be able to complete transactions in offline mode."

But users don't need live connectivity for at least 50-55% of internet content like entertainment, education, gaming, music, but need just enough connectivity to download content, believes Anandan. "That's why offline-internet will work. As an ecosystem we need to make this happen to bring access to the masses."