Profiting From OTT Video

Service providers have several possible success strategies for online video.

Is over-the-top (OTT) video a threat or an opportunity? Most service providers now recognize it as an opportunity, but the best way to take advantage of it is still disputed.
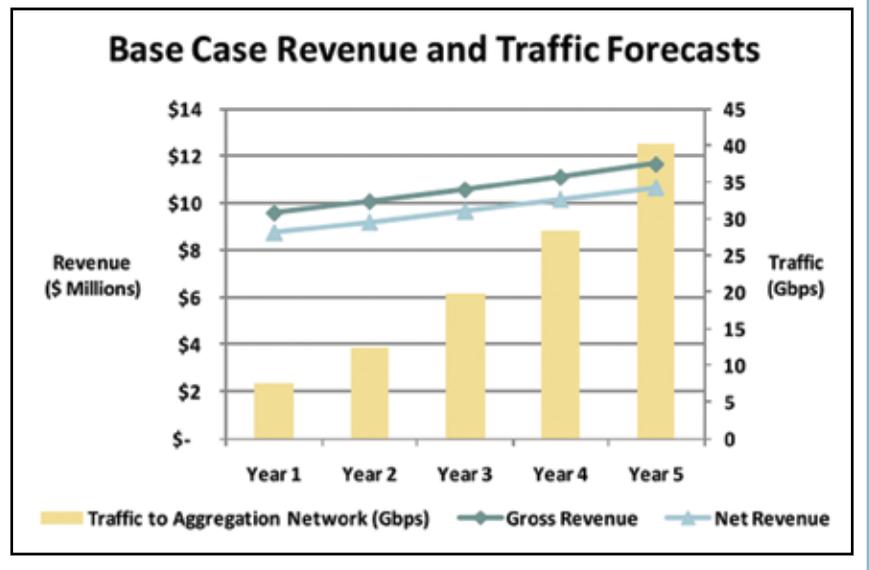
To compare the available options, Ericsson, a leading vendor of Internet access equipment, commissioned the management consulting company Network Strategy Partners (NSP) to develop five business cases. Each case represents a strategy that a provider could adopt to offer managed services for OTT video.

The base case is similar to today's situation, in which consumers access Internet video using a provider's best-efforts service. In all five alternative scenarios, the service provider guarantees a specific quality of experience for OTT video, using deep packet inspection and policy management.

All cases assume the use of Ericsson solutions for active electronics (FTTH or VDSL2), passive fiber, policy management and deep packet inspection, and display of Internet video on subscribers' televisions. The full NSP white paper is available on the **Broadband Communities** home page, bbcmag.com. (NSP has since been acquired by ACG Research, acgresearch.net.)

All five strategies that NSP identified – surprisingly, one of them involves boosting OTT video quality at no extra charge to subscribers – show large returns on investment. By far the most profitable strategy is to offer subscribers a Web-based version of a VoD offering.

Item	Year 1	Year 2	Year 3	Year 4	Year 5
HSI Penetration	40%	42%	44%	46%	49%
Monthly Hours Online per Household	32.3	34.2	36.1	38.0	39.9
Percent Time Downloading if Online	40%	50%	60%	65%	70%
Actual Download Rate (Mbps)	6.0	7.2	8.6	10.4	12.4

Base Case Revenue and Traffic Forecasts

Legend: Traffic to Aggregation Network (Gbps) · Gross Revenue · Net Revenue

The baseline from which NSP assumes a typical service provider starts includes no special support for OTT video.

This differs from the TV Everywhere strategy that many providers are implementing today. TV Everywhere essentially brings traditional VoD offerings to computers and mobile devices; NSP's scenario brings the infinite variety of Internet video – the "long tail" – to subscribers' televisions.

By prioritizing online video streams, service providers can develop new revenue sources and reduce customer churn.

SMART NETWORKING SCENARIOS FOR WEB VIDEO
SCENARIO 1:
NO ADDITIONAL FEES
The service provider deploys smart networking to improve the quality of experience for Internet video. Deep packet

inspection identifies streaming Internet video sessions and adjusts quality-of-service parameters to maximize the quality of experience for each session. This optimizing capability is added to the basic high-speed Internet service offering without any increases to the base price or any extra charges for improving the QoE of Internet video.

SCENARIO 2:
SUBSCRIBERS PAY FOR DELIVERY OF INTERNET VIDEO WITH HIGH QOS
The service provider deploys the same smart networking systems as in Scenario 1 and charges subscribers $0.75 for each video session with high quality of service.

SCENARIO 3:
CONTENT PROVIDERS PAY TO HAVE CONTENT DELIVERED WITH HIGH QOS
The service provider deploys the same smart networking systems as in Scenario 1 and charges content providers $0.50 per session to deliver their content with high QoS. The per-view fee for content providers is lower than the per-view fee for subscribers in Scenario 2 because content providers require volume discounts. However, service take rates are higher because costs to subscribers are unchanged. Though consumers expect to pay for content, they are averse to additional Internet service fees because they are accustomed to flat-rate pricing plans.

SCENARIO 4:
### SERVICE PROVIDER OFFERS A PROPRIETARY BUNDLE OF WEB VIDEO SERVICES THROUGH A PORTAL
This service is similar to cable TV VoD offerings. It is branded by the service provider and accessed through a portal that offers viewers a very broad range of video offerings – the "long tail." As in previous scenarios, the smart networking infrastructure manages the quality of experience. Incremental revenue is derived from increased take rates (due to increased customer satisfaction) and per-view fees of $1 per session paid by either content providers or subscribers. Cur-

rent VoD services bundle this cost with the content fee; another approach would be to bundle the cost with the monthly subscription price. The service provider can also sell advertising, which is modeled at $25 per thousand impressions.

The most profitable scenario involves offering a portal to a wide range of online video content that is delivered with high quality of service.

SCENARIO 5:
SERVICE PROVIDER OFFERS 3D TV FOR A PER-VIEW FEE
This scenario assumes that subscribers will pay $1.50 for delivery of each 3D video.

Increase in Subscriber Penetration Rate above the Base Case
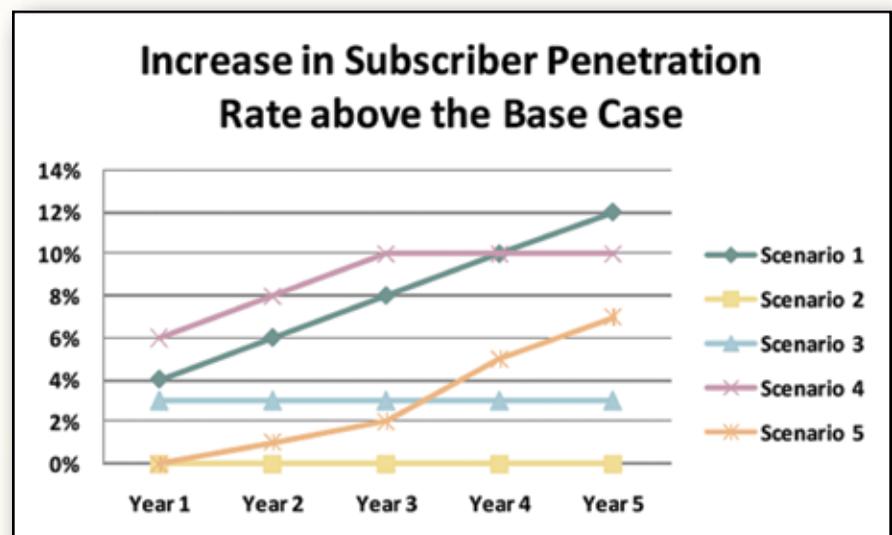
Subscriber take rates are highest when there is no additional charge for increased quality of service.

| Scenario	ROI	Payback (Years)
1 - No fees are charged to add enhanced QoS for video to the basic HSI service offering	241%	<1
2 - Subscriber pays BSP on a per view basis to deliver Internet video with high QoS	177%	<1
3 - Content provider pays BSP to deliver its content with high QoS	326%	<1
4 - BSP offers a proprietary bundle of web video services through a portal	1033%	<1
5 - BSP offers 3D TV to subscribers for a per view fee	161%	1

According to NSP's models, all five scenarios are profitable, and Scenario 4 – the VoD-like service – is by far the most advantageous for broadband service providers.

3D TV is an emerging, bandwidth-intensive service. Recent special programming events have used a 6 MHz channel slot (38 Mbps) – enough bandwidth to handle several HDTV signals. Delivery of 3D TV over the Internet requires, in addition to an expensive television, a very-high-speed access link, quality-of-service capabilities and a service to connect a 3D TV to the Internet. However, rapid progress in consumer electronics is likely to bring down the cost of the TV and lower the bandwidth requirement. ❖
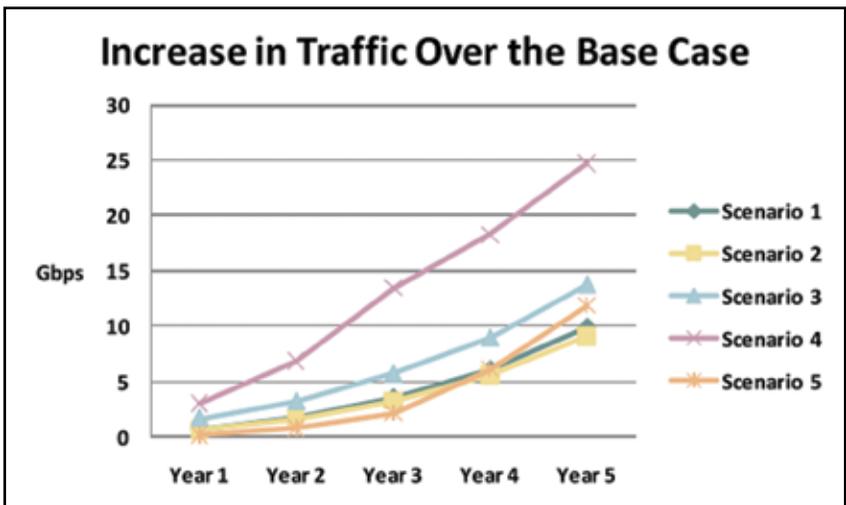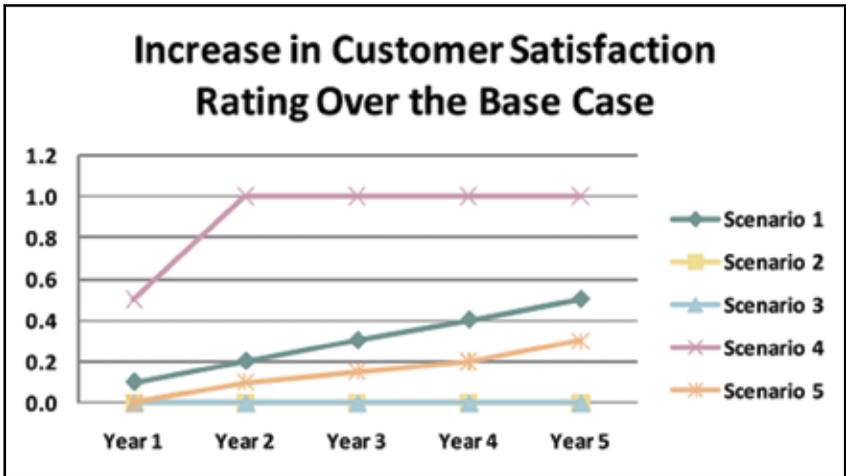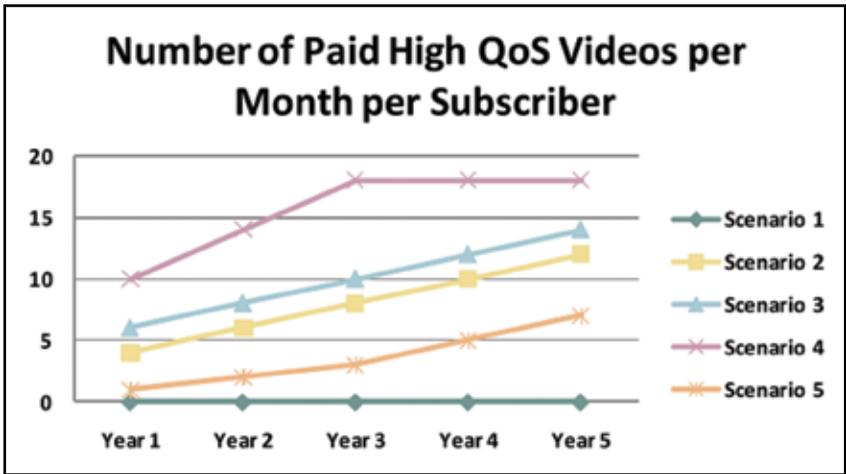
Subscribers watch the most videos per month, have the highest satisfaction and generate the most traffic with the VoD-like service because it is easy to use and offers a wide range of choices.