



Growing Cable Operators' Revenue **WITH VIDEO ON DEMAND**



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Growing Cable Operators' Revenue with Video on Demand

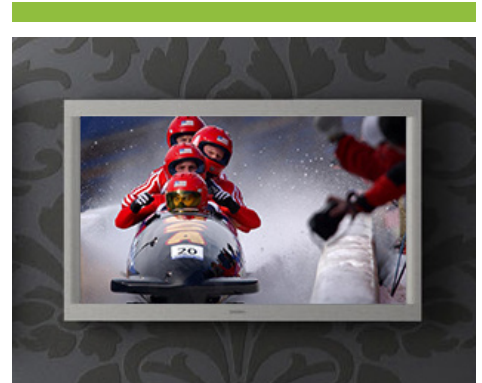
Now, more than ever, consumers are trending away from appointment viewing and moving toward viewing trends that allow customers to watch TV on their own time. In the coming 2018 Winter Olympics, [NBCUniversal is scrambling to make the games available to watch at viewers' convenience](#), as a 14-hour time difference between South Korea and United States' East Coast means that some sports will be scheduled to air live at inconvenient early or late hours.

Serving this market of "convenience viewing" is an emerging competitive challenge for cable and telecommunications operators nationwide who are looking to find new ways to entice new subscribers, while stemming the loss of current subscribers. Convenience viewing is best served through an on-demand functionality, commonly known as Video on Demand (VOD).

VOD is a feature provided by cable and telecommunications operators and provides customer access to a catalog of free or Pay-Per-View video programming. Users can select and watch traditional broadcast and cable programs at the time they choose to, as opposed to tuning in at a specific broadcasting time slot. VOD doesn't just refer to movies you can rent or buy; it also refers to television series, which can be consumed as a binge watching feature - a trend often attributed to streaming over-the-top (OTT) services like Netflix.

Despite the popularity of new streaming services, studies show that cable operators are still the leaders of on-demand consumption, as they deliver 54 percent of total VOD in the U.S., [according to a 2016 survey from the Video Advertising Bureau \(VAB\)](#).

The VAB 2016 survey shows that streaming providers only account for 35 percent of all on-demand viewing, so while new emerging services are taking up the space, they still represent only a fraction of total on-demand viewing and cable operators should try to take advantage of this competitive edge. While new streaming OTT and virtual MVPD streaming services can easily deliver their content



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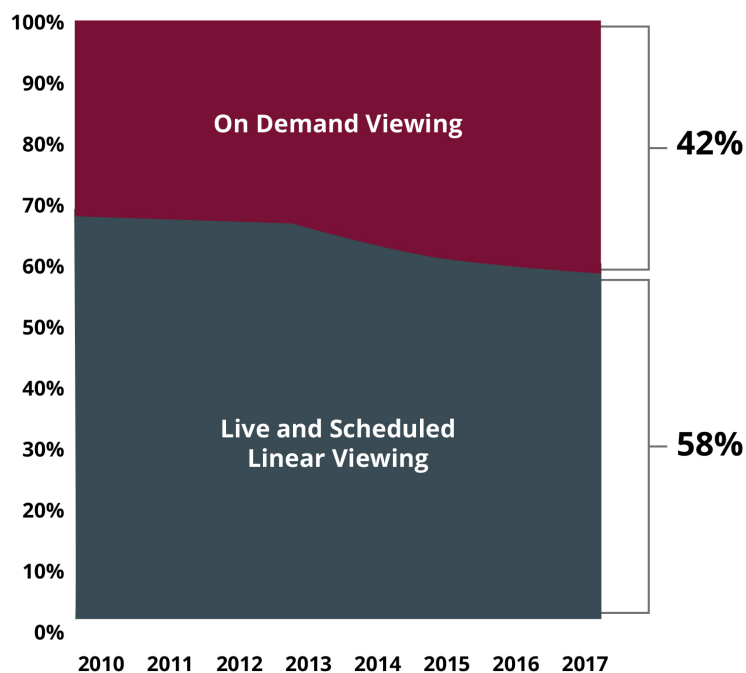
on-demand to their subscribers, operators must find ways to capitalize on their leadership position and deliver an innovative IP-delivered VOD offering.

Increasing Popularity of On-Demand Viewing

According to an October 2017 video viewing habits survey [conducted by Ericsson ConsumerLab](#), close to 6 in 10 consumers already prefer VOD and catch-up programming over scheduled live broadcast TV, and that ratio is expected to grow to 7 in 10 by 2020. There is also growth in consumers paying for VOD services, as 40 percent pay for VOD at this time, an increase of 26 percent since 2012. That number is also expected to rise as we approach 2020 and beyond.

6 IN 10
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Active Viewing Hours of On Demand vs. Live and Scheduled Linear TV*



*Source: Ericsson ConsumerLab, TV and Media, 2017

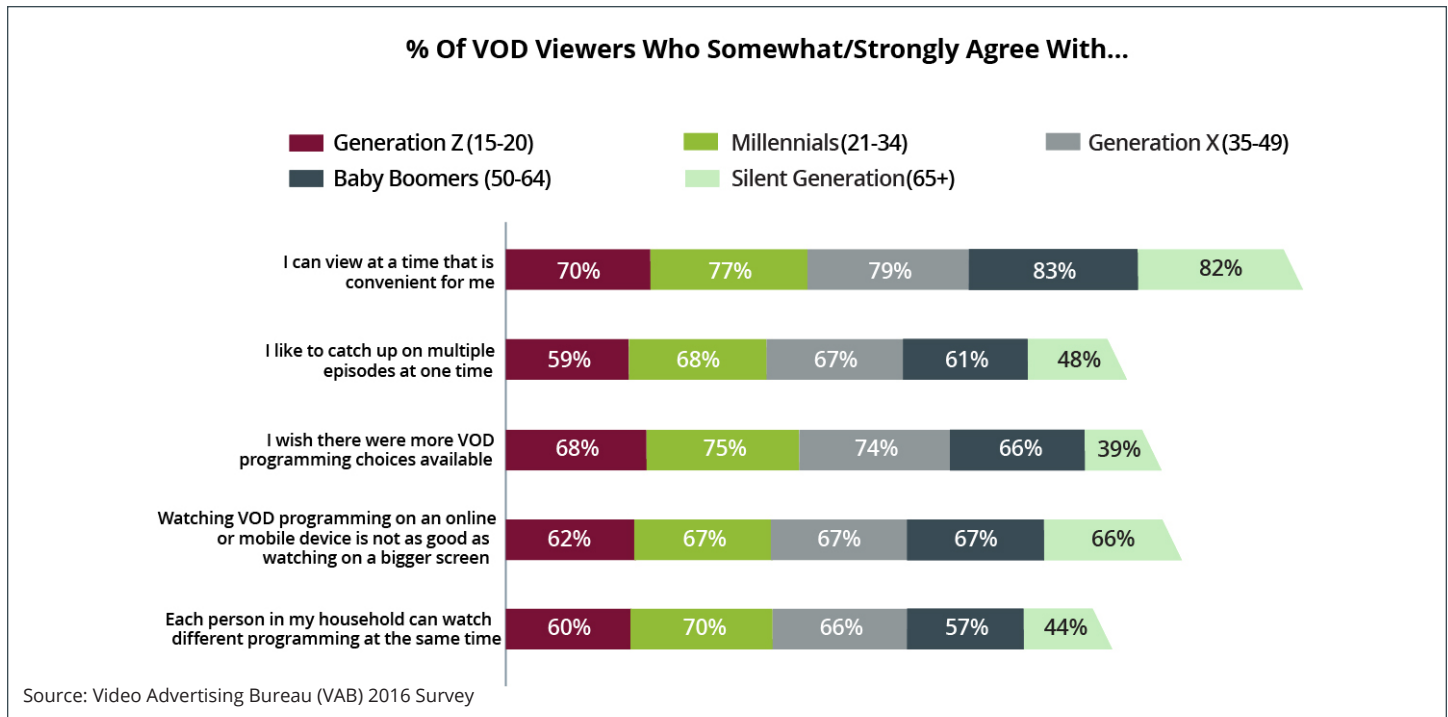
Base: Population aged 16-69 that watched TV/video at least weekly and has broadband at home, in Brazil, Canada, China, Germany, India, Italy, Russia, South Korea, Spain, Sweden, Taiwan, the UK and the US.

Importantly, on-demand viewing is expected to soar among young people. The 16-19 year-old age group spends more than half of their time watching VOD content, an increase of almost 10 hours a week since 2010. Further, The 2016 VAB Study asserts the VOD users tend to be young, educated and affluent with 19 percent of those surveyed attending some college, 19 percent holding an associate's degree, 25 percent having achieved a bachelor's degree and 14 percent earning a post-graduate degree. Additionally, 43 percent of respondents who watch movies or TV shows on-demand have an annual income greater than \$100,000. In order for cable providers to keep the younger demographic interested in a pay-TV option, offering VOD is one way to appeal to a generation that has grown up in an on-demand world.



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In The 2016 VAB Survey, depicted below, age demographics across the board demand convenience viewing. Younger generations continue to be the top driving force in wanting access to VOD content.



We've discussed a few behaviors that drive consumers to VOD TV shows, movies and events, but let's delve into a few of the key benefits that VOD offers to operators as a deployment strategy:

➔ **Recapturing and enticing viewers with convenience**

viewing: Without a subscription to a VOD service, or access to DVR functionalities, device or cloud-hosted, a consumer had to plan out any given day or evening to be able to tune into his or her particular program. To make himself or herself available at a specific time frame has become increasingly "inconvenient" for the consumer. The rise of Netflix and other streaming video has given way to appointment viewing, catch-up TV and binge watching by giving the consumer power and choice over content accessibility. Cord cutters and cord shavers are leaning towards these services but, with a VOD offering, operators can stem that loss of subscribers, as well as grow new revenue streams for both video and broadband services.

➔ **Technological advancement:** As video services increasingly offer product and network upgrades, the cable industry must acknowledge the need to address mobile viewing, binge watching, device choice and high-speed video consumption. These can best be addressed through an IP video offering. Cord cutting is affecting the cable TV industry but, however big or small, can be up to the operators depending on how they choose to compete. Offering an IP VOD service is the first step towards technological innovation by gracefully and cost-effectively beginning the migration to IP video delivery, which can fully cater to those consumer wants and trends by offering appointment viewing with VOD, video streaming to connected devices, including smart phones, cloud recording capabilities and access to high-speed broadband and video delivery.



➔ **MPEG-2 bandwidth reclamation:** Currently, there is a limited total bandwidth from the cable operator to the consumer's home. Older MPEG-2 signals take up too much of that allocated bandwidth compared to newer MP compressed signals. Therefore, older cable devices in the home that can only consume MPEG-2 need to be removed in order to take back that MPEG-2 bandwidth space. This reclaimed bandwidth allows for an operator to operate a larger IP signal into the customer's home. Already in the past several months, Comcast began calling in old set-top boxes as it completes its' move to full MPEG-4 HD channels. Operators are continuing the move to the more efficient MPEG-4 channel offering, and the Tier 2 and 3 market would be wise to keep up with cable behemoths, like Comcast, as they report rising customer satisfaction scores and sustained pay-TV growth. In the case of Comcast, growth can be attributed to its X1 platform, which now functions fully on MPEG-4.

MPEG-2 Bandwidth Reclamation



MPEG-2 signals require a significant amount of bandwidth. By converting to IP delivery and MPEG-4, operators will improve bandwidth efficiency, creating opportunities to add more channels and deliver new IP video, audio and data services.

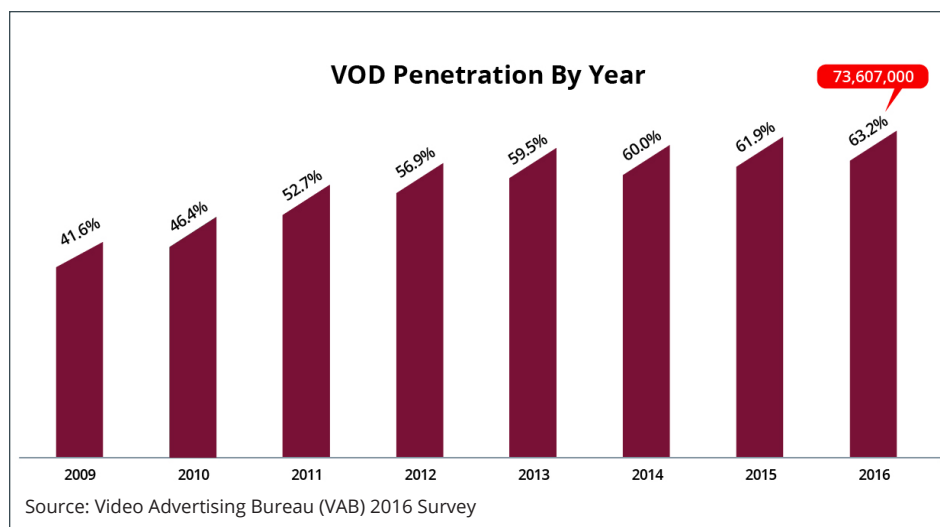
(Bandwidth reclamation savings calculation based on an 850 MHz cable plant delivering 200 SD channels and 100 HD channels. Results may vary by operator.)

➔ **Cost savings:** Operators must realize that the transition to IP is where their maximum profits exist. In order to be a profitable cable provider today, operators must create a robust network capable of supporting large amounts of IP data and high speeds to the end user. IP revenues have already overtaken video revenues for many providers. And, as the demand for new devices in the home grows, operators must be capable of supporting newer devices that can consume both IP and MPEG-4 streams to allow customers to watch video on their terms, like VOD. And, while transitioning from MPEG-2 to MPEG-4 requires upfront investment from the operator plant, the investment is crucial in becoming profitable in the future with MPEG-4 reclamation, which will facilitate new viewing trends and on-demand viewing.

In The 2016 VAB survey, more than 70 million consumers had access to MVPD VOD. In addition, almost 8 out of 10 Comcast subscribers reported watching VOD content through their provider. Operators lagging in the VOD space without a sufficient service will lose out to these competitive offerings. Every mid-sized operator needs to address how the business is lacking in certain areas, and IP VOD should be a top priority in enhancing overall services not only because it must be immediately addressed as a way to keep up in a competitive space, but also because it can be the first step towards an all-IP video offering.



More than
70
MILLION
CONSUMERS
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MVPD VOD



Movie Rentals: A Hidden Source of Revenue

Cable operators often overlook the revenue potential of on-demand movie rentals. Unlike typical OTT streaming services that have a limited number of new release titles, most cable on-demand movie services get all the hit movies as soon as they enter the on-demand window. This business continues to thrive. The [Digital Entertainment Groups' 2017 year-end report](#) noted that total home entertainment spending rose 5% to \$20.5 billion, which included growth in electronic sell-through and interactive VOD.

Cable customers will find that cable operators are actually the best source for new release movies available in the market, as the leading OTT services focus the majority of their investments on original content and not on paying new release movie licensing fees. Importantly, the data suggests that families are willing to pay for an on-demand movie to watch in the comfort of their homes to avoid shelling out money for the high-cost in-theatre movie experience. Further, customers are inclined to pay for subscription VOD in order to watch their favorite TV shows on premium networks such as HBO and SHOWTIME. This influx of revenue from purchased VOD fattens cable providers' wallets by capitalizing on the inherent consumer need to watch the "latest and greatest" programming available in the marketplace.

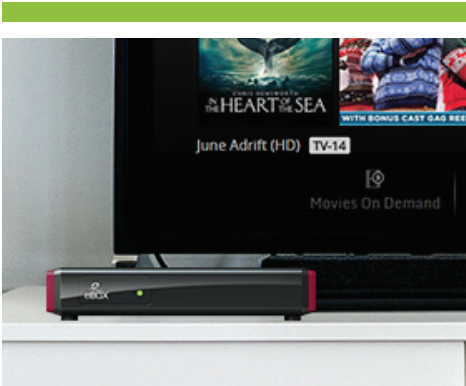
With newer IP VOD services that deploy a graphic-rich user interface and vibrant poster art, movie rental buy rates have actually increased by up to 30% compared to legacy cable on-demand systems. For cable operators, the key is to have an easy-to-use, intuitive experience that will keep their systems competitive with the popular streaming services. The only way to do this is to replace legacy on-demand systems with newer IP-based solutions.



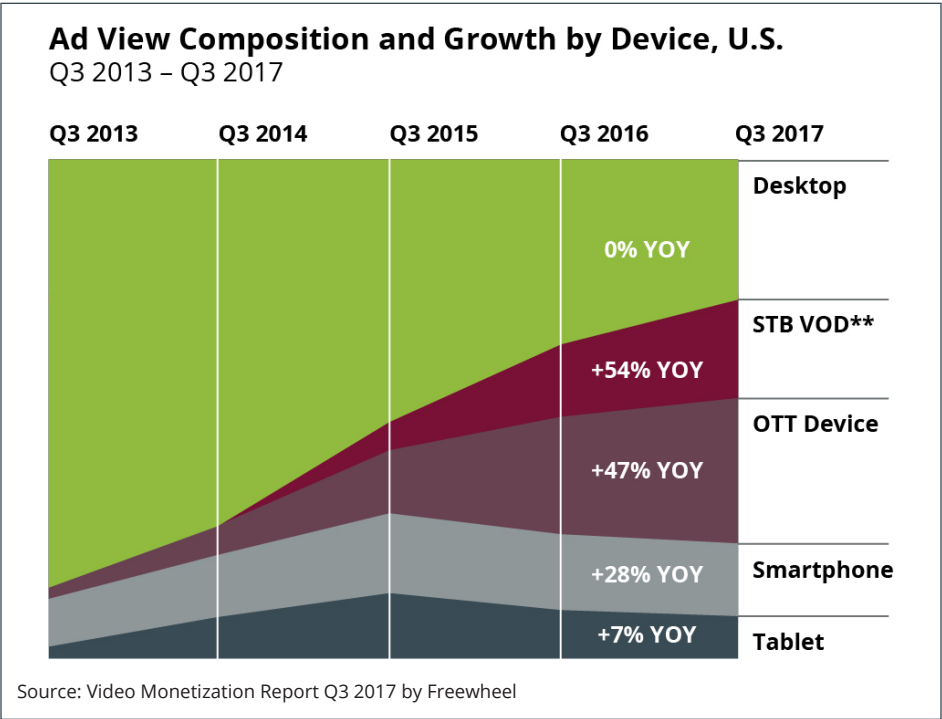
Total home
entertainment spending
**ROSE 5% TO
\$20.5 BILLION,**
which included growth
IN ELECTRONIC
SELL-THROUGH &
INTERACTIVE VOD

How Ads Increase Monetization in VOD Programming

Ads are an additional factor in driving revenue that VOD brings in for a cable operator. According to [FreeWheel's Video Monetization Report for third-quarter 2017](#), set-top box VOD took the top growth spot, as ad views on set-top boxes jumped 54% year-over-year. This statistic shows that, while the consumption of ad-supported video continues to grow among connected devices, MVPD set-top boxes remain critical in this area of revenue growth. The below graphic by Freewheel indicates that advertising on set-top boxes is increasing faster than other devices at a dramatic rate in the last four years.



Set-top box VOD took the top growth spot, as AD VIEWS on set-top boxes **JUMPED 54%** year-over-year



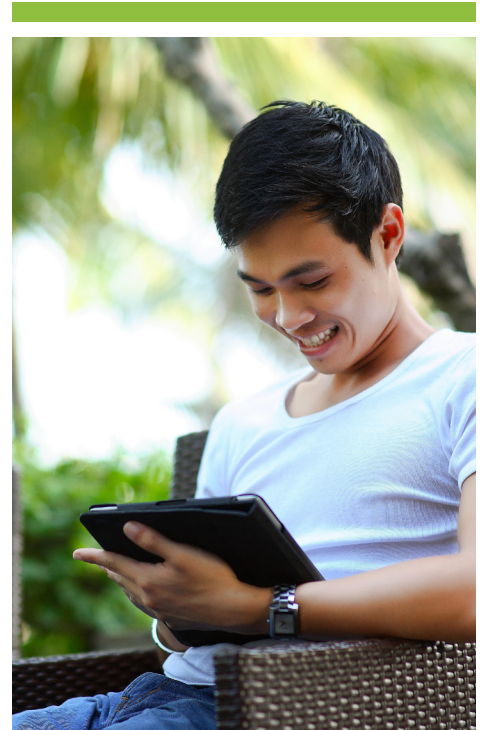
An additional way that operators can increase revenue from Video on Demand is the use of dynamic ad insertion (DAI) in VOD programming. With DAI, pay-TV operators can insert new, targeted commercials in a pre-roll, mid-roll and post-roll positions in VOD content. As a proof point, just in the last five years DAI for VOD content has been gained acceptance and usage by advertisers. Canoe, one of the largest providers of interactive ads for cable TV households, has cited having served more than 100 billion ads through its platform, demonstrating that the leading TV providers are already using new tools in on-demand programming to increase income.

At CES 2018, Joel Hassell, CEO of Canoe Ventures, cited that VOD DAI now has a 20 percent share of overall premium ad views. He further asserted that Canoe also sees consumer video consumption trending towards on-demand viewing in the living room, and cable VOD plays a big role. This trend is likely to continue because, according to a recent report by the Video Advertising Bureau, consumers that view VOD content are more educated and affluent than average TV households. Combined with the ability to target viewers in addressable set-top box households, advertisers are increasing the share of total ad dollars toward video content.

How Operators Can Begin To Deliver VOD: Evolution Digital's eVUE-TV® and eBOX® Solutions

For cable providers to deliver on the trend of convenience viewing and capitalize on new revenue opportunities, operators need to start the migration to IP. That is, start delivering some of its programming in IP, as a QAM linear stream cannot alone cater to VOD trends capturing the video space.

Evolution Digital's eVUE-TV is the easiest and most cost-effective way to add IPTV VOD and video content to an operator's system. eVUE-TV delivers thousands of hours of IP VOD content including new release movies, linear network VOD and premium channel subscription VOD.



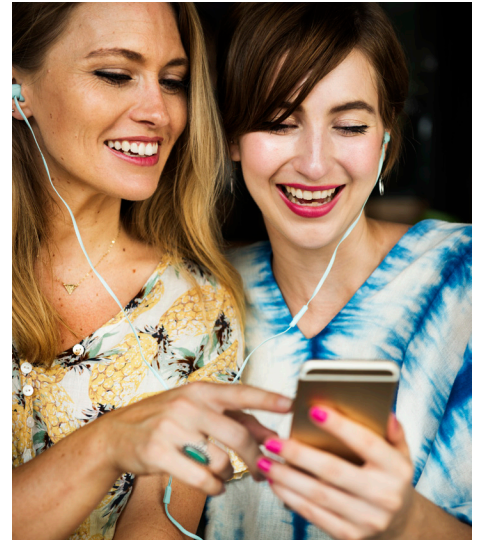
As a fully-managed service, **the eVUE-TV platform** provides a low-cost solution for operators to deploy VOD content through servers installed within the operator's network. eVUE-TV is a first-step solution to operators that want to gracefully begin the transition to all-IP delivery and, through its' VOD service, allows cable providers to capitalize on new programming offerings to grow revenue streams.

Evolution Digital's eVUE-TV platform prescribes to a "pay-as-you-grow" model, allowing operators to limit CAPEX with a per-subscriber business model. eVUE-TV further facilitates direct integration with an MSO's billing system for ease of transition.

For operators beginning the migration to IP video delivery using VOD as a first step, Evolution Digital's eBOX, powered by TiVo®, delivers QAM live linear television with IP services such as network DVR, Pay-Per-View and VOD. Operators can combine traditional live television with VOD on eBOX through a unified catalog that features universal search and browse to lure back cord cutters with products that are superior to today's virtual MVPD offerings.

Evolution Digital's services, products and resources are enabling the pay-TV industry to improve viewers' overall experience, recapturing cord cutters and take advantage of new revenue opportunities. Providers can enhance their IP video experience with a fully managed end-to-end offering with eVUE-TV on eBOX. By delivering traditional QAM content with IP VOD, Evolution Digital is the cable operator's one stop shop for providing an unmatched entertainment experience to the consumer. With an affordable box and a cost-effective, managed back-office, Evolution Digital solves the app-based television paradigm by addressing and combating the challenges with new and innovative solutions.

As operators begin to recognize the need to bridge the gap between legacy set-top boxes and IP-connected devices, Video on Demand is becoming the first step towards next-generation video delivery. Evolution Digital is here to help.



For more
information on
Evolution Digital's
**eBOX and
eVUE-TV**, visit
evolutiondigital.com