





HSN Shop by Remote is the first live 24/7 shopping service in the U.S. that enables customers to purchase the item that's being shown on air using only their remote control. It's easy, secure and the fastest way to buy HSN products.

### higher revenue, happier customers

- Drive revenue with fast, impulse-driven shopping
- Upgrade HSN customers (83% female) to digital cable
- Cutting-edge technology attracts new users to HSN

### interactive, integrated and inspiring

- Integrated with HSN purchasing, fulfillment and customer service
- Users are almost twice as likely to use other premium services
- Of users with a preference, nearly 60% prefer HSN Shop by Remote to ordering any other way

### customizable platforms

#### Basic Interactive TV (EBIF)

- 1 product
- graphics compatible with Moto 2000 boxes
- <100K bandwidth



#### Expanded Interactive TV (EBIF)

- 4 products
- Higher res graphics (on brand)
- 250K range bandwidth



# The 10 Hottest Tech Trends for '11

## These Innovations Will Enhance and Extend Cable's Video Offerings for Consumers



By Craig Leddy, Interactive TV Works

It's funny how things can change over the span of five years. During the 2006 Consumer Electronics Show, leaders of six major cable multiple system operators (MSOs) appeared at a press conference with TV manufacturers to promote interactive cable-ready HDTVs using the OpenCable Application Platform (OCAP), later branded as tru2way.

The assembled reporters pelted the MSO leaders with questions about why they were not opening their TV environments to the wide-open Internet. The MSOs explained that they had invested significant money in digital cable systems that were better suited for TV delivery than the Internet. There were content rights involved and, besides, Internet TV had been attempted with Microsoft's WebTV and it didn't look so hot.

Fast-forward to this year's CES and it's a different situation. Cable apps by MSOs are appearing on the screens of broadband-connected smart TVs, iPad tablets and Android-fueled devices. On-demand programming, movies and other fare increasingly are available anywhere, anytime, and on any device.

Internet video now provides more of an opportunity for

cable than a threat. In addition to finding ways to extend cable services to connected devices, cable providers are exploring ways to migrate to full delivery of TV channels using IP (Internet protocol) technologies.

For these reasons, IP video is Interactive TV Works' selection as the number 1 Hottest Tech Trend for 2011. Here is a brief look at this and other trends that will shape the development of advanced video services throughout this year and beyond.

### 10 Hottest Tech Trends for '11

1. IP video
2. EBIF and ITV advertising
3. Connected devices
4. Media gateways
5. Cloud-based services
6. Content management
7. Going all-digital
8. Wideband (DOCSIS 3.0)
9. Testing and pipe cleaning
10. 3DTV

#### 1. IP video

Throughout its history, cable has gone through many periods that were shaped by a particular technology. They include the early days of community antenna TV, the advent of amplifiers to boost analog channel capacity, satellite-delivered programming, digital compression, and broadband capability. This decade may well be shaped by cable's migration to IP video delivery.

Cable is embracing IP video in three major ways. First, cable

providers must manage the flow of over-the-top (OTT) video that is flooding through their broadband pipes. At the same time, Comcast, Time Warner Cable, Cablevision Systems and others are seeking to extend content and services through PCs, tablets, smart TVs, smartphones and other

connected devices. These steps will be a prelude to full-scale IP delivery of all cable services.

While there are many technical challenges, the biggest hurdle involves programming rights. The TV Everywhere initiative is designed to enable cable customers to access more programming online without violating the licensing agreements between MSOs and programmers. TV Everywhere-like services are moving forward, though rights deals must be secured on a network-by-network basis.

## 2. EBIF and ITV advertising

Cable operators and programmers currently are embracing interactive TV by using simple point-and-click interactivity offered by EBIF (enhanced binary interchange format), a software for existing digital set-top boxes. As 2011 began, the industry was closing in on a goal of enabling more than 20 million set-tops.

The EBIF set-top base provides a foundation for interactive advertising, which in turn provides a revenue model for additional ITV apps deployment. Through the efforts of the MSO-backed Canoe Ventures, many programmers will offer the ability to click on live commercials to get free samples, coupons, or other requests for information (RFIs).

Polling and other enhancements are to come.

EBIF's technical potential has grown, too. Comcast and other MSOs are utilizing EBIF as a backchannel communications tool for iPads and other connected devices. Time Warner Cable, Cox Communications, and Bright House Networks are deploying interactive program guides on set-tops that use tru2way middleware, which also supports EBIF apps.

## 3. Connected devices

It's funny to think that the Apple iPad has been available only since April 2010. It quickly became a fixture in consumer electronics and a product that has had far-reaching effects. For cable and other service providers, it marked an opportunity to extend cable services to broadband-connected devices.

Comcast created an iPad app that transforms the tablet computer into an ITV remote and brings portability to the company's Xfinity services. Other MSOs are following suit with iPad apps, with apps for Android platforms soon afterward.

Meanwhile, cable is becoming an app on connected smart



# Get Your Apps Here!

During a lively CTAM Summit session in fall 2010, cable marketers viewed demos of interactive TV applications and then voted for their favorite. The winner of the first ITV Idol contest was an app called Watch Now from Starz that makes it easier for viewers to find and watch on-demand programming.

But the real winners were members of the audience, who were treated to a broad selection of interactive TV apps. Most of the offerings were based upon the easily deployable EBIF (enhanced binary interchange format) software platform.

Recent ITV apps from (from top) Starz, Rogers Communications, and icueTV

**...there is a lot more talk about drawing services from the cloud, that amorphous blob of content and services that exists in the nether regions of the Internet.**

TVs. At the 2011 CES, Comcast and Time Warner Cable's TV Everywhere-like services appeared on Samsung smart TVs. Sony Bravia TVs displayed an icon for Time Warner Cable on-demand content.

Cable companies also are extending their reach through mobile broadband services using Wi-Fi and WiMax, so that consumers can use laptops or smartphones to program their DVR remotely and watch TV Everywhere programming.

**4. Media gateways**

In a similar vein, cable is exploring the use of devices inside the home that serve as a central distribution point for content. One souped-up box could spin out content to TVs, tablets, smartphones, and other players.

The question is whether the media gateway takes the form of a high-end, tru2way-enabled multi-room DVR set-top, or

a DOCSIS 3.0 cable modem with home networking capability, or a newfangled, hybrid device. Look for all three options to emerge.

**5. Cloud-based services**

At cable conferences, there is a lot more talk about drawing services from the cloud, that amorphous blob of content and services that exists in the nether regions of the Internet.

While cable is interested in extracting new services from the network cloud, cable services also are becoming a part of the cloud. Cable's own on-demand services,

DVR platforms, and online programming is becoming part of the cloud of services that consumers can access.

Cablevision Systems is utilizing the cloud concept through its remote-storage DVR service (RS-DVR), in which all DVR functionality and storage is managed at the cable headend rather than through a set-top box inside the home.

The contest was a visible display of what programmers and apps developers are creating these days. Now the challenge is to get their innovations deployed in the marketplace.

With a foundation of more than 20 million set-tops now capable of delivering EBIF apps, the launchpad is getting built. Programmers and MSOs also must work out the business models and rights deals for carriage of the apps.

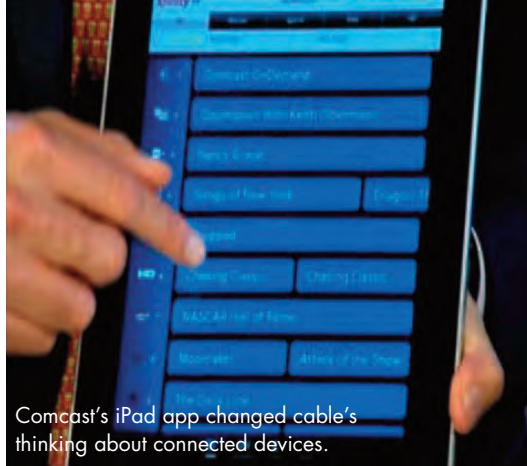
In addition to the apps presented here, apps are being developed in many other quarters. Canoe Ventures and its MSO and programming partners are developing interactive advertising apps with advertisers and agencies. Major programmers have developed ITV apps, including ones by A&E Television Networks, CNN, and ESPN, with many others in the works.



CTAM's contest featured apps by (from top) Showtime, HSN, and Zap on Demand

## 6. Content management

As cable serves more screens, content management becomes more important. The major MSOs are developing methods to handle both digital video and Internet content in a seamless fashion.



Comcast's iPad app changed cable's thinking about connected devices.

Along the way, dozens of processes and technologies come into play, including video formatting, encoding, transcoding, policy management, digital rights management, and content protection.

As cable migrates toward a more IP-centric delivery system, a transformation will take place in every step of how content gets managed, from end to end.

## 7. Going all-digital

One of the most important trends of the past couple years will continue throughout 2011. Cable operators are seeking to convert their analog bandwidth to digital in order to increase capacity for more services. (Many cable systems will maintain an analog tier of lifeline services for customers who want it.)

Cable is taking three major approaches to go all-digital:

1. Bandwidth expansion, by upgrading plant to 860 MHz or 1 GHz
2. Switched digital video (SDV), which opens capacity for digital services by passing through only those channels that are being currently viewed
3. Analog reclamation, in which digital terminal adapters (DTAs) are used to maintain TV service on analog TVs, then analog bandwidth is converted to digital

The all-digital agenda also supports IP video convergence. An emerging headend technology platform, the Converged Multiservice Access Platform (CMAP), will help cable systems to manage their MPEG video and IP content in a more efficient and integrated manner.

## 8. Wideband (DOCSIS 3.0)

When it comes to carrying more IP video, nothing helps like a super high-speed broadband pipe. That's where DOCSIS 3.0 (a.k.a. D3 or wideband) comes into play.

More MSOs are deploying wideband D3 service, which can ramp up to about 160 Mbps downstream (a.k.a. really frickin' fast). Although there is a lot of saber rattling between service providers over who can provide the

fastest speed, most MSOs are settling in at the 50 Mbps level, which matches most Verizon FiOS offerings.

This year cable is focusing on D3 enhancements that include faster upstream capability, multicast delivery, and gateway modems. In addition, marketers are focusing on migrating consumers to higher speed tiers.

## 9. Testing and pipe cleaning

This year will see a lot of trials of various apps and capabilities in test labs and field trials.

Part of this test phase includes so-called "pipe cleaning": making sure that all parts of the cable delivery chain work properly so that an interactive app works the way it is supposed to work.

If the pipe is clean, a consumer will see an interactive ad when they are supposed to, click on it, instantly see an offer, and then click and have that offer fulfilled. It may not be the sexiest of trends, but it's vitally important.

## 10. 3DTV

Last – and least – is 3DTV. Following a ton of hype from consumer electronics manufacturers and Hollywood in early 2010, 3DTV became 2010's Dud of the Year.

**Glasses-free  
3DTV is in  
the offing  
but has  
a long way  
to go.**

Consumer interest in 3DTV has been slow to materialize. Research shows that consumers don't like to have to wear 3DTV glasses while watching TV. (What a surprise!) Glasses-free 3DTV is in the offing but has a long way to go.

But 3DTV capability is being embedded into more HDTVs and cable companies have tested the waters with 3D events ranging from The Masters Golf Tournament to the Christmas Yule Log.

Comcast and DirecTV will compete with their own 3D services, while Discovery, ESPN, and HBO are offering 3DTV networks. But unless 3D captures the consumer imagination in a bigger way, it likely will be a feature add-on that is used by some, and neglected by many. **PG**

# Supplier Showcase

**W**hen Interactive TV Works first published its annual Product Guide five years ago, the focus was on companies that provided tru2way interactive TV products. Since then, this guide and those companies have expanded their focus to support a wide range of advanced video technologies.

The Interactive TV Ecosystem chart in this year's guide includes dozens of companies that provide products and services for ITV and related services. Nearly 30 of those companies participated in the Supplier Showcase to provide additional information. Sponsorships by those companies make this guide possible.

This guide is available online in a PDF format through Interactive TV Works ([www.interactivetvworks.com](http://www.interactivetvworks.com)) and other industry sites. The links and email addresses are active so that they can be easily accessed online.

To help guide readers, companies categorized themselves based upon whether they provide:

- Infrastructure Support  
(headend, transport equipment, related solutions)
- Devices  
(set-top boxes, HDTVs, DVRs, others)
- Content Management  
(application playout, carousels, delivery)
- Software & Tools  
(middleware, authoring tools, testing)
- Applications Development  
(content creation, production)
- Content  
(programming, guides, applications)
- Advanced Advertising  
(solutions, tools, measurement, services)
- Professional Services  
(network support, apps design, integration, consulting)

**To update your Product Guide listing, or to add your company, contact us at [info@interactivetvworks.com](mailto:info@interactivetvworks.com)**

©Copyright 2011 Interactive TV Works, Inc. All rights reserved.

## Alticast

---

11001 W 120th Ave., Suite 300  
Broomfield, CO 80021  
720-887-1700  
[www.alticast.com](http://www.alticast.com)

Content Management  
Software & Tools  
Applications Development  
Content  
Professional Services



## ARRIS

---

3871 Lakefield Dr.  
Suwanee, GA 30024  
678-473-2000  
[www.arris.com](http://www.arris.com)

Infrastructure Support  
Devices  
Content Management  
Software & Tools  
Advanced Advertising  
Professional Services

Key Products:

- DOCSIS 3.0 C4 CMTS
- Compact C4cCMTS
- D5 Universal Edge QAM
- Touchstone E-MTAs and Cable Modems
- ServAssure Network Monitoring System
- WorkAssure Workforce Automation Suite
- Advanced Video Processing Encoding/  
Transcoding Solutions
- Telephony and Digital Set TopSelf Install,  
Direct to Subscriber kits
- ConvergeMedia Management back office software  
and streaming servers
- Ad Insertion Solutions
- Whole Home Solution IP Media Players/Gateways
- CHP Max5000 Converged Headend Platform
- Opti Max Optical Nodes

- Flex Max Flexible Amplifiers
- CORWave CWDM Transmitter
- FTTMax Fiber to the Premises - RFoG/EPON
- Regal Taps & Passives
- Digicon Connectors
- Monarch Accessories
- Wireless Solutions
- Fixed Mobile Convergence
- ServAssure and WorkAssure Solutions

Tom Williams  
VP, Marketing and Business Development  
tom.williams@arrisi.com

Dan Whalen  
SVP, Sales  
dan.whelen@arrisi.com

Tim Gropp  
SVP, Sales  
tim.gropp@arrisi.com



### **Avail-TVN**

---

15301 Ventura Blvd., Building E  
Sherman Oaks, CA 91503  
818-526-5000  
www.avail-tvn.com

Infrastructure Support  
Content Management  
Software & Tools  
Content  
Advanced Advertising  
Professional Services

Avail-TVN is the largest digital media services company in North America. Working with every major studio and television network, the company offers multichannel video providers a full line-up of live programming and VOD content in multiple formats, including MPEG-2, MPEG-4 and 3D. Avail-TVN's services include advanced pay-per-view, out-of-market sports packages and a full suite of services for content

**8 PG**

providers, including its Content Prep Solution that allows content providers to easily create, manage and syndicate metadata. In 2011, the company will also be introducing its multi-platform solution for service providers and content owners.

John R. Smith  
SVP, Affiliate Sales  
jsmith@avail-tvn.com

Matt Cohen  
SVP, Content Services  
mcohen@avail-tvn.com

### **BCM**

---

86 Summit Ave., 4th Floor  
Summit NJ, 07901  
908-608-4798  
www.backchannelmedia.com

Content Management  
Software & Tools  
Applications Development  
Advanced Advertising

### **BigBand Networks**

---

475 Broadway St.  
Redwood City, CA 94063  
650-995-5000  
www.bigbandnet.com

Infrastructure Support  
Advanced Advertising  
Professional Services

### **BluFocus**

---

10911 Riverside Dr.  
Toluca Lake, CA 91602  
818-294-7605  
www.blufocus.com

Software & Tools  
Professional Services

### Clearleap

---

3090 Premiere Pkwy., Suite 400  
Duluth, GA 30097  
770-418-2800  
www.clearleap.com

Infrastructure Support  
Content Management  
Software & Tools

### Comcast Media Center

---

4100 East Dry Creek Rd.  
Centennial, CO 80122  
866-275-4487  
www.comcastmediacenter.com

Infrastructure Support  
Content Management  
Software & Tools  
Professional Services

### EchoStar Technologies

---

100 Inverness Terrace East  
Englewood, CO 80112  
303-834-7407  
www.echostar.com

Devices  
Content Management  
Software & Tools  
Content



### enable TV

---

10901 W 120th Ave., Suite 120  
Broomfield, CO 80021  
303-301-1500  
www.enableTV.com

Software & Tools  
Applications Development

enableTV, Inc. is a leading provider of technology and

professional services solutions to network operators, consumer electronics manufacturers and content providers in interactive technologies. Our experienced staff allows us to accelerate the time to deployment within budget parameters. The company has an extensive services offering for design, development, testing, and integration of interactive technology within legacy, ETV/EBIF, and OCAP/tru2way environments. Products include a headend simulation tool as well as EBIF and OCAP application templates.

Lenny Melamedas  
VP  
lenny@enableTV.com  
303-301-1516



### Ensequence

---

420 Lexington Ave., Suite 408  
New York, NY 10170  
212-358-8995  
www.ensequence.com

Content Management  
Software & Tools  
Applications Development  
Advanced Advertising  
Professional Services

The Ensequence iTV Manager interactive platform enables you to broadly deploy interactive television experiences to increase advertising revenue and programming ratings through measurable, higher engagement levels with your content. iTV Manager lets you create, manage, update and deploy interactivity across as much programming and advertising inventory as you wish – easily, affordably and dependably.

A lifecycle and workflow management platform, iTV Manager significantly reduces the complexity of iTV development and deployment, making it possible to implement interactive experiences at the velocity and quality required by your viewers and your advertisers.

Michael Kelley  
SVP, Business Development - Programming and Advertising  
mkelley@ensequence.com  
212-358-8912

Andy Addis  
SVP, Business Development - Service Providers  
aaddis@ensequence.com  
240-506-4786

Kevin Hurst  
VP, Marketing and Product Management  
khurst@ensequence.com  
503-416-3866



### **Ericsson**

---

4500 River Green Pkwy.  
Duluth, GA 30096  
678-812-6300  
www.ericsson.com/television

Infrastructure Support  
Content Management  
Software & Tools  
Applications Development  
Advanced Advertising

Ericsson provides award-winning TV solutions and services that enable global media companies, broadcasters and operators (cable, satellite, telco and terrestrial) to deliver TV content, either directly to consumers or for professional digital video content exchange. With a broad suite of open, standards-based products, Ericsson offers the highest quality solutions for Digital TV, HDTV, VOD, IPTV, Mobile TV, connected home, content management and advanced advertising, based on industry-leading technology and a strong heritage in television.

Ericsson offers a comprehensive suite of solutions, including:

- WatchPoint Content Management System (CMS)

10 **PG**

- OpenStream Digital Services Platform (DSP)
- Xport Time-Shifted TV
- AdPoint Advanced Advertising Platform
- MediaPath Secure Content Delivery System (SCDS)

Contact sales desk at [tvsalesamericas@ericsson.com](mailto:tvsalesamericas@ericsson.com).

### **FourthWall Media**

---

5800 Granite Pkwy., Suite 480  
Plano, TX 75024  
972-464-5880  
www.fourthwallmedia.tv

Software & Tools  
Applications Development  
Content  
Advanced Advertising

### **Harmonic**

---

4300 North First St.  
San Jose, CA 95134  
408-542-2500  
www.harmonicinc.com

Infrastructure Support  
Content Management  
Software & Tools  
Applications Development  
Advanced Advertising



### **HSN**

---

1 HSN Drive  
St. Petersburg, FL 33729  
<http://affiliate.hsn.com>

Content

HSN Shop by Remote is the only live 24/7 shopping service in the U.S. that enables customers to purchase

the item that's being shown on air using only their remote control. It's easy, secure and the fastest way to buy HSN products. HSN Shop by Remote is currently available nationwide in millions of homes.

Peter Ruben  
EVP, Affiliate Relations  
Peter.ruben@hsn.net  
212-223-6554

John McDevitt  
VP, Advanced Services  
John.mcdevitt@hsn.net  
727-872-7628

Sean Bunner  
Operating VP, Advanced Services  
Sean.bunner@hsn.net  
727-872-7035



### **iN DEMAND**

---

345 Hudson St., 17th Floor  
New York, NY 10014  
646-638-8200  
<http://business.indemand.com>

Content Management  
Applications Development  
Content

### **itaas**

---

11695 John's Creek Pkwy., Suite 300  
Duluth, GA 30097  
770-368-4024  
[www.itaas.com](http://www.itaas.com)

Infrastructure Support  
Devices  
Software & Tools  
Applications Development  
Content  
Professional Services



### **Ligos**

---

6001 Chatham Center Dr., Suite 300  
Savannah, GA 31405  
912-236-8993  
[www.ligos.com](http://www.ligos.com)

Content Management  
Software & Tools  
Applications Development  
Content  
Professional Services

Ligos provides ETV Suite, an integrated set of software tools for EBIF application authoring, SD/HD video stream input and output, external data connectivity and layout. This suite of tools reduces the complexity of ETV development for operators, programmers and ITV application developers. ETV Suite provides a visual design environment to create enhanced channel layouts and highly optimized applications compatible with the industry's leading EBIF user agents. The optionally integrated ETV carousel allows the suite to function in a standalone capacity as a playout system, reducing the overall cost for getting applications into distribution and into subscriber homes.

Richard Cowart  
President & CEO  
[rcowart@ligos.com](mailto:rcowart@ligos.com)

Robert Saint John  
Director of Sales & Marketing  
[rsaintjohn@ligos.com](mailto:rsaintjohn@ligos.com)



### **Motorola Mobility**

---

600 North US Highway 45  
Libertyville, IL 60048  
[motosales@motorola.com](mailto:motosales@motorola.com)  
[www.motorola.com/mobility](http://www.motorola.com/mobility)

Infrastructure Support  
Devices  
Content Management  
Software & Tools  
Applications Development  
Advanced Advertising  
Professional Services

Motorola Mobility, Inc. fuses innovative technology with human insights to create experiences that simplify, connect and enrich people's lives. Our portfolio includes converged mobile devices such as smartphones and tablets; wireless accessories; end-to-end video and data delivery; software and security; and management solutions, including set-tops and data-access devices.

### **NDS Americas**

---

1185 Avenue of the Americas  
New York, NY 10036  
714-434-2100  
www.nds.com

Infrastructure Support  
Content Management  
Software & Tools  
Applications Development  
Advanced Advertising  
Professional Services



### **Rovi**

---

2830 De La Cruz Blvd.  
Santa Clara, CA 95050  
408-562-8400  
www.rovicorp.com

Content  
Software & Tools  
Advanced Advertising

Rovi Corporation's technologies and solutions are aimed at simplifying the discovery of new entertainment content for consumers. The company provides industry leading interactive media guides; a robust catalog of deep entertainment metadata as well as access to 10,000 pieces of content; advanced media

recognition solutions; and the ability to acquire and playback content on multiple consumer devices. These technologies enable Rovi customers to integrate new interactive capabilities, such as advertising, media recognition, recommendations, data, search, and profile management through APIs from the Rovi Media Cloud or as embedded technologies in their devices. These solutions enable businesses to create a more cohesive and seamless entertainment experience for consumers.

Bob Shallow,  
SVP, Worldwide Sales, Service Providers  
bob.shallow@rovicorp.com  
610-293-8714

Bill Thomas  
SVP, Product Management Vendor Relations  
william.thomas@rovicorp.com  
610-293-8590,

Thierry Lehartel  
VP, Product Management, Service Providers  
thierry.lehartel@rovicorp.com  
415-247-5092

### **S&T**

---

357 McCaslin Blvd., 2nd Floor  
Louisville, CO 80027  
303-926-4933  
americas.s-and-t.com

Content Management  
Software & Tools  
Advanced Advertising

### **Technicolor**

---

101 W 103rd St.  
Indianapolis, IN 46290-1102  
www.technicolor.com  
317-587-3000

Devices  
Content Management  
Software & Tools  
Applications Development  
Content  
Advanced Advertising  
Professional Services

### UniSoft

---

10 Rollins Rd., Suite 118  
Millbrae, CA 94030-3128  
650-259-1290  
www.unisoft.com

Infrastructure Support  
Content Management  
Software & Tools  
Applications Development  
Advanced Advertising

### Visible World

---

460 W 34th St., 14 Floor  
New York, NY 10001  
212-739-1900  
www.visibleworld.com

Advanced Advertising

### Zap on Demand

---

100 Park Ave.  
New York, NY 10017  
212-880-2699  
http://zapondemand.com

Applications Development  
Content  
Advanced Advertising



### Zodiac

---

108 B New South Rd.  
Hicksville, NY 11580  
516-619-3170  
www.zodiac.tv

Software & Tools  
Applications Development  
Content  
Professional Services

Zodiac Interactive provides an industry-leading, comprehensive suite of ITV products and services, including set-top box client solutions and server-based network solutions for both legacy and next-generation platforms. Zodiac's PowerUp solutions, running on over 12 million set-top boxes and growing, provide significantly improved ROI due to rapid application development and significant improvement in STB efficiency and reliability. The PowerUp Product Suite features a complete set of solutions that span today's EBIF set-tops to tomorrow's multi-screen platforms. Our new PowerUp Advanced Messaging Solution (PowerUp AMS) provides a server-based platform to integrate cloud services across TV, PCs, tablets, smartphones or any other connected devices.

Brandon Brown  
CEO  
brandon@zodiac.tv

Jim McLoughlin  
SVP, Sales  
jim@zodiac.tv

Paul Fedorys  
VP, Business Development  
paulf@zodiac.tv

#### About Interactive TV Works

Interactive TV Works, the publisher of this annual guide, promotes understanding and deployment of advanced video services. Founded by cable and interactive media expert Craig Leddy, ITV Works provides professional writing, industry education, marketing & communications, website development, and strategic consulting. Leddy teaches the popular How Cable Goes to Market courses, serves as editor of CTAM's Advanced Video Guide website, and is a contributing analyst for Heavy Reading. Contact info@interactivetv-works.com.

# INTERACTIVE

As the old adage goes, you can't tell the players without a scorecard. Here is an at-a-glance guide to technology suppliers that comprise the community of ITV

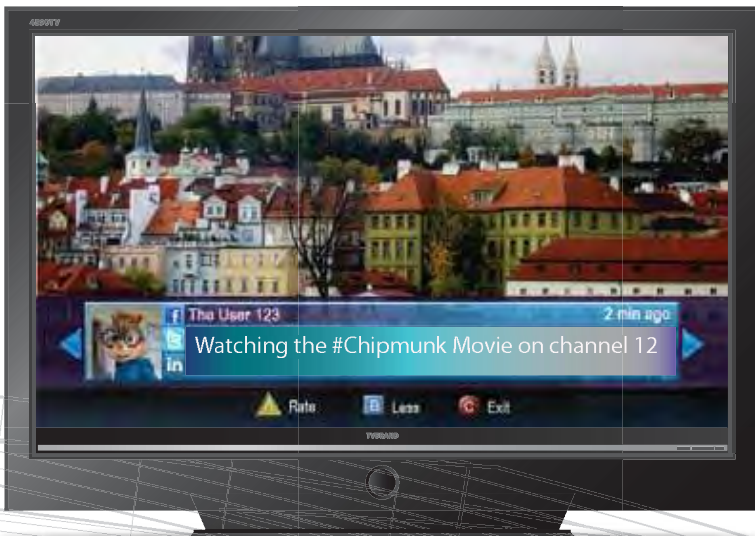
COMPANY	PRODUCT LINES							
	Infrastructure Support	Devices	Content Management	Software & Tools	Apps Development	Content	Advanced Advertising	Professional Services
ActiveVideo			✓	✓	✓	✓	✓	
ADB		✓						
Alcatel-Lucent				✓				
Alticast			✓	✓	✓	✓		✓
ARRIS	✓	✓	✓	✓			✓	✓
Avail-TVN	✓		✓	✓		✓	✓	✓
BCM			✓	✓	✓		✓	
BigBand	✓						✓	✓
BlackArrow			✓				✓	
BluFocus				✓				✓
Cisco	✓	✓	✓		✓			
Clearleap	✓		✓	✓				
Comcast Media Center	✓		✓	✓				✓
Concurrent	✓			✓			✓	✓
Delivery Agent					✓		✓	
DigitalSmiths			✓	✓				
EchoStar Technologies		✓	✓	✓		✓		
enableTV				✓	✓			
Ensequence			✓	✓	✓		✓	✓
Ericsson	✓		✓	✓	✓		✓	
Flashlight Engineering					✓			✓
FourthWall Media				✓	✓	✓	✓	
Harmonic	✓		✓	✓	✓		✓	
iBox Systems								✓
icueTV			✓	✓	✓		✓	
iN DEMAND			✓		✓	✓		

# TV ECOSYSTEM

and related advanced video services. For product line definitions, see the Supplier Showcase introduction (PG 7). For a PDF version, go to [www.interactivetvworks.com](http://www.interactivetvworks.com).

COMPANY	PRODUCT LINES							
	Infrastructure Support	Devices	Content Management	Software & Tools	Apps Development	Content	Advanced Advertising	Professional Services
INVIDI							✓	
itaas	✓	✓		✓	✓	✓		✓
Ligos			✓	✓	✓	✓		✓
MediaFriends			✓		✓	✓	✓	
Microsoft Advertising/Navic				✓			✓	
Mixed Signals				✓				
Motorola Mobility	✓	✓	✓	✓	✓		✓	✓
NDS	✓		✓	✓	✓		✓	✓
OpenTV			✓	✓	✓		✓	
Pace		✓						
Panasonic		✓		✓				
PVI				✓				
RCDb			✓		✓		✓	
Rovi				✓		✓	✓	
Samsung		✓						
SeaChange	✓		✓	✓		✓	✓	✓
Sigma Systems				✓			✓	
Softel-USA			✓	✓			✓	
S&T			✓	✓			✓	
Technicolor		✓	✓	✓	✓	✓	✓	✓
TVWorks				✓				✓
UniSoft	✓		✓	✓	✓		✓	
Visible World							✓	
Zap on Demand					✓	✓	✓	
Zodiac Interactive				✓	✓	✓		✓

Sources: Interactive TV Works, EBIF.tv, company statements and web sites.



Social Media



VOD Client



Next Gen UI

- Professional Services
- Technology
- Products



Enhanced Sports

## Enabling technologies to interact with your customers

Zodiac's products and experience provide the flexible infrastructure and technology that allow you the flexibility and comfort to deploy broadly with one platform.