ENTERTAINMENT unbound

CONSUMERS LEAD THE WAY
With the arrival of fall, two major industry events are upon us: IFA and IBC. Entering the halls of IFA 2013, a global consumer electronics exhibition in Berlin, our focus shifts to the entertainment user. Ultra HD, wireless devices and multi-screen solutions are among the innovations that will take center stage. And, at IBC in Amsterdam, businesses operating in the digital entertainment space will explore HEVC, the coding standard that enables Ultra HD transmission and other consumer technologies more deeply.

Both shows are rightly taking cues from consumers who continue to drive the business forward toward the vision of Entertainment Unbound. With Entertainment Unbound, we aim to work with manufacturers, service providers and content producers to support a hyper-personalized entertainment experience in which consumers are at the center of the personal media experience, and not bound to specific devices or programming.

In this issue of Rovi Insights Series, we cover HEVC and its relationship with Ultra HD plus advanced streaming capabilities that can elevate the end-user experience. In addition, we discuss predictive analytics in the context of hyper-personalization, which enables individual entertainment settings for multiple members of a household – providing a foundation for more targeted ads and relevant recommendations that can drive revenue. As always, you’ll find new data and exclusive research that can help us gain perspective and work together to create a better entertainment experience for consumers.
ACCELERATING THE HEVC ADOPTION CYCLE

Service providers, such as DirecTV, Comcast, Sky and Canal Plus, have already started testing and, in some cases, broadcasting live sporting events in Ultra HD. In addition, major players in the CE industry, such as Samsung, Sony, Toshiba, LG, Sharp and Hisense, are already developing and manufacturing Ultra HD-capable TVs.

However, a primary challenge to mass adoption is the increased bandwidth required to transmit Ultra HD content. With twice the aspect ratio and an increased frame rate to counter higher resolution motion blur, Ultra HD demands vastly increased data rates – ones that current infrastructure and compression methods are inadequately prepared to handle.

Broadcast adoption of Ultra HD is then dependent on the use of High Efficiency Video Coding (HEVC), a new compression standard, to effectively deliver video content. With bandwidth as a limiting factor, HEVC reduces the bitrate and promises to deliver video at file sizes up to 50% smaller at the same quality as H.264.

Still, despite the promise of cost savings and higher quality video, HEVC is currently facing a classic chicken-and-egg dilemma. To date, HEVC adoption has been slowed by the scarcity of content and the lack of players. Content distributors don’t want to invest in a new technology without a significant installed base. And, CE vendors don’t want to support a technology with very limited content available for playback.

HEVC acceptance must be initiated on two fronts: providing solutions directly to consumers, while simultaneously offering a coordinated toolset to professional content creators, service providers and device manufacturers. These advancements will enable consumers to reap the benefits of greater compression during streamlined video sharing and lower storage costs, not only fueling HEVC content availability, but also increasing format awareness and igniting broader market adoption.

Availability of consumer-created HEVC content will place pressure on consumer electronics manufacturers to support the new standard. In turn, professional creation tools and device support will help fuel the development of HEVC-enabled premium content services.

The DivX Ecosystem

The Path to 1 Billion DivX Devices
A foundation for high quality DivX HEVC video playback across multiple screens

The takeaway:
The coming expansion of HEVC content will drive demand for Ultra HD playback on devices.

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Get an in-depth look at HEVC by scanning the QR code on the back page to download the Insights Series App or visiting rovicorp.com/insights.
CONSUMERS SATISFIED WITH STREAMING?

When it comes to streaming TV shows and movies on connected devices, consumers are generally satisfied. In a recent survey, consumers in France, Germany, Italy, Spain, the U.K. and the U.S. rated their current streaming experience as an 8 on a scale of 1 to 10. When we examine the factors driving satisfaction, we see that playback reliability is a key determinant.

However, given that more than half of consumers surveyed report difficulty playing a video more than once a month, we can see that the current satisfaction bar is low. This fact could be based on the relative novelty of IP-delivered video today or the dynamics of an early adopter market, which is historically more forgiving when it comes to bleeding-edge technology – a point exemplified in the chart below illustrating consumers’ willingness to continue to attempt to play a video that initially failed to launch.

Regardless of the reasons, with streaming entertainment rapidly moving mainstream, it’s safe to anticipate that consumers won’t remain satisfied for long. In the short term, the industry needs to embrace technological advancements like HEVC and advanced adaptive streaming formats if they are to satisfy the baseline requirement for a mass market audience.

The industry also has to anticipate how consumers’ needs will change once content delivery is no longer a hurdle. When consumers were asked to rank streaming capabilities beyond basic functionality, customization, advanced features (e.g., multiple subtitles and audio tracks, chapters) and transferability became priorities when easy, consistent access was removed from the equation. Consider the mental shift that has occurred in just the past seven months. In January, we asked consumers to rate the importance of specific streaming capabilities; “smooth playback” and “quick to load and play” were most important. When the question was posed to the same group of consumers in July, “Blu-ray-like features,” including chapters, multiple subtitles and audio tracks, rose to the top of the list.

Once content delivery is no longer a barrier, consumers’ entertainment expectations will continue to rise. They are already seeking new personalization and enhancement capabilities including advanced features such as Blu-ray-like functionality and search & recommendations based on individual preferences. Borrowing from noted psychologist Abraham Maslow’s theory on the stages of human development, we’ve created an “entertainment hierarchy of needs” outlining how consumers’ entertainment requirements will evolve over time. From an elementary baseline of functionality and reliability, we believe consumer entertainment needs will progress rapidly toward the top “pleasurable” and “meaningful” tiers of the pyramid. While defining the features that will satisfy these evolved consumers is the industry’s next great challenge, an essential part will be providing a far higher level of empowerment, interactivity and control than currently enjoyed.

While the lower tiers of the pyramid are based on current technological constraints and therefore easy to comprehend, we need to realize the upper tiers by empowering consumers to do things they previously thought impossible. The lower tiers are functional, while the upper tiers are meaningful.

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THE TAKEAWAY:

FOR NOW, CONSUMERS ARE SATISFIED WITH THEIR VIDEO EXPERIENCES.

When you remove basic playback functionality from the discussion, consumers look to more meaningful features that support personalized video experiences.
Consumers are connecting with entertainment in entirely new ways, and the days when one ratings company was able to tap into roughly twenty thousand homes and gain a comprehensive portrait of an audience’s viewing habits have disappeared.

“Audiences are fragmenting across time, across place and even across platforms,” says John Hoctor, Vice President of Analytics, Rovi. “This has been great for the individual consumer, but has been a challenge for the folks who measure television and for folks who buy and sell television advertising.”

With viewers consuming countless movies, television shows and user-generated content on a variety of devices, a flood of raw data has been unleashed. How can advertisers and content providers navigate this increasingly complex ecosystem of platforms and content choices while filtering the information overflow?

Today, companies are turning to predictive analytics for strategic intelligence about not just what people watch – but when and where – to target specific audiences for advertisers, media buyers and content providers. Predictive analytics harnesses advanced data collection – from smartphone and tablet viewing data to market segmentation, socioeconomic statistics and online usage patterns – to illustrate a more comprehensive user profile. These enhanced viewer snapshots can help discern the likelihood of where a highly specialized demographic of viewers will be amidst the ever-expanding broadcast landscape.

Not only will predictive analytics play a key role in the future of ad targeting, it owns the potential to optimize entertainment discovery with increasingly intelligent search and recommendations capabilities.

With future boosts from analytics, search and recommendations could make proactive, predictive suggestions based on your prior viewing habits and similar viewers’ choices, and even incorporate your social networks’ recommendations. Entertainment then becomes more than merely connecting with content; it will also be about connecting with people.

With a more comprehensive understanding of the consumer, analytics benefits networks, providers and advertisers – but it’s the consumer, fueling the predictive analytics engine, who will benefit most of all.

CONSUMER-DRIVEN DATA ANALYTICS – PAST, PRESENT & FUTURE

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Watch a Q&A with John Hoctor, Vice President of Analytics, Rovi.

ON ANALYTICS: A CONVERSATION WITH JOHN HOCTOR
Rovi’s Vice President of Analytics delves into how new data collection sources and analytics methods are enhancing current programming and marketing strategies, and how they will potentially transform viewers’ connection to entertainment tomorrow.

“VIEWING DATA IN AND OF ITSELF IS SIMILAR TO CRUDE OIL. THERE’S VALUE IN IT, BUT YOU NEED TO REFINE IT IN ORDER TO GET TO SOMETHING THAT’S TRULY VALUABLE.”

THE TAKEAWAY: REFINEMENT IS NECESSARY TO MAXIMIZE THE VALUE OF RAW DATA.
Understanding consumers’ viewing habits – what, when and where – is the key to enhancing both the monetization of airtime and the effectiveness of search and recommendations, thereby returning value back to the consumer.
HYPER-PERSONALIZATION DONE RIGHT

With predictive analytics giving us the ability to provide better recommendations than ever, new solutions are in development to “hyper-personalize” the entertainment experience for consumers. Hyper-personalization refers to the next generation of personalized entertainment solutions, beyond bookmarks and simple recommendations. With hyper-personalization, the TV and other devices tap into viewing preferences, platform type, user behavior, social networks and context to create a highly relevant, engaging experience for the consumer.

A prototype of a hyper-personalized solution was recently developed and tested in Germany. In collaboration with Fraunhofer Fokus, Rovi conducted a survey to evaluate TV usage and, based on the results, developed a hyper-personalized guidance solution across devices that allows a user to “log in” to the TV and navigate content using a tablet to access a personal home screen.

From the home screen, users can browse and search a personalized guide based on favorite genres and channels, receive tailored program recommendations, create bookmarks, access their recorded and cloud-stored content, get suggestions based on social networks and more. Blurred in the background of the home screen, a user can see a content stream consisting of selected live and on-demand programs and start watching with a single touch.

Consumers were interviewed regarding their experience with the prototype, and the response was overwhelmingly positive. However, users indicated the must-have features and other capabilities that would help ensure success. Among the key findings:

- The user interface and navigation must be intuitive. Relevant recommendations won’t be helpful if it’s unclear how to proceed to the next step.
- Basic functionality and reliability are essential. Screens should load promptly.
- In addition to live programming, the experience should encompass HD, on-demand, time-shifted, Internet and cloud-based content and recommendations.
- A sleek, engaging design filled with imagery is desirable.
- The ability to customize features (i.e., turn them on and off) would be helpful to streamline the experience.
- Consumers are open to paying a monthly fee for hyper-personalized functionality.

As testing continues and technologists continue to explore the possibilities offered by predictive analytics and sophisticated recommendations, it won’t be long before hyper-personalized experiences become more commonplace in households around the globe.

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THE HYPER-PERSONALIZED ENTERTAINMENT EXPERIENCE

Hyper-personalization contributes to a context-based entertainment experience that makes recommendations based on the user or group of users, and when and where he, she or they are consuming content. Hyper-personalized recommendations won’t just suggest what to watch tonight – they’ll suggest what to watch if you’re alone, with your friends or with the family.

HYPER-PERSONALIZATION: TV EVERYWHERE FOR EVERYONE

Depending whether users are on-the-go, alone, or at home together, their viewing habits can vary.

Individual and Group Accounts Bridge the Gap
The hyper-personalization user interface requests log-ins for each platform before a viewing session begins. This creates not only user-relevant recommendations, but ones that are contextually appropriate, as well.

Yet recommendations are merely the primary building blocks in the hyper-personalization revolution. Snapping content between platforms, social networking and customized advertising are a few more of the benefits which will energize the hyper-personalized viewing experience.

THE TAKEAWAY:
CONSUMERS WANT A MORE PERSONAL ENTERTAINMENT EXPERIENCE – BUT IT NEEDS TO BE EASY.

Understanding consumers’ viewing habits – what, when and where – is the key to enhancing both the monetization of airtime and the effectiveness of search and recommendations, thereby returning value back to the consumer.
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ROVI IS

Rovi powers the discovery, delivery, display and monetization of digital entertainment with technology solutions for consumer electronics manufacturers, service providers, content producers, advertisers and websites. A global company with more than 1,500 employees in nearly 30 offices in North America, Europe and Asia, Rovi connects people to the entertainment they love.

Visit us at rovicorp.com.

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SOURCES

1. DivX Streaming Survey, August 2013 n= 4,232 (France, Germany, Italy, Spain, the U.K., U.S.)
2. DivX Player Survey, March 2013, n=2,723 (China, Japan, Brazil, Mexico, the U.S., Canada, France, Germany and the U.K.)
3. DivX Streaming Survey, January 2013 n= 6,382 (France, Germany, Italy, Spain, the U.K., U.S.)


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