THE MEDIA INDUSTRY’S “UPC CODE” FOR TRACKING VIDEO ACROSS PLATFORMS
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THE VEX OF TRACKING VIDEO

Everyday video content and advertising are being served up to consumers across a complex array of video platforms, including linear/live TV, Digital Video Recorder (DVR), Video on Demand (VOD), Over the Top (OTT) and digital media like YouTube and Facebook. The proliferation of video outlets beyond the first screen has been a boon to consumers who can watch burgeoning content options available on myriad platforms at times convenient to their schedules.

However, the video media explosion presents both opportunity and challenges for advertisers and purveyors of content. On the plus side, expanding video environments provide the potential to pave the way for innovative approaches to showcasing video content, creative advertising and targeting. On the downside, keeping track of how and where video content and advertising reaches consumers grows ever more complicated, compromised by executing video across so many outlets that may differ from both a technological and business entity perspective. For example, when political skits from Saturday Night Live are replayed on YouTube via smartphone, there are no common means to confirm that the same content ran on both screens. Alternatively, if a media agency places an ad buy for one brand with three Demand-Side Platforms (DSPs), managing ad frequency across all three platforms becomes a challenge if the DSPs assign three different tracking codes to the same creative. The list of gaps in tracking content and advertising extends well beyond these examples and doesn’t even begin to describe future challenges of dynamic ad insertion, cross-screen interactivity and automated buying of cross-platform ad inventory. This situation fueled the Coalition for Innovative Media Measurement (CIMM) to reach out to the Society of Motion Picture and Television Engineers (SMPTE) to develop an industry standard to embed unique IDs into each distinct piece of content or advertising creative. When this initiative was launched in 2010, it was dubbed TAXI for Trackable Cross-Platform Identification.
TAXI COMPLETE: ACCELERATING CONTENT AND AD PERFORMANCE

Two schemas for standardizing identifiers in content and advertising stand ready to help the media and advertising industry achieve sizable gains in content management, advertising impact and operational efficiency: Ad-ID and EIDR. Ad-ID (www.ad-id.org) is the organization that registers unique IDs for ad creative while EIDR (Entertainment Identifier Registry) (www.eidr.org) performs the same function for content assets. The first step in the development of TAXI Complete was to establish a method for binding these standardized identifiers into video assets so that they can persist across media distribution platforms. CIMM (www.cimm-us.org) requested that SMPTE (www.smpte.org) form a study group (SG) to advise on the best binding method, and the SG recommended an audio watermark. The standardization of this watermark using Kantar Media’s (www.kantarmedia.com) audio watermarking technology has just been completed and published two new sets of standards and recommended practices: ST 2112-10 and RP 2112-11 for the Open Binding of Content Identifiers (OBID) and ST 2112-20 and RP 2112-21 for the Open Binding of Distribution Channel IDs and Timestamps.

The word “Complete” in the TAXI moniker refers to the completion of the watermark to make the two identifiers persist across distribution platforms. Now fully activated with watermark tracking technology, TAXI Complete holds enormous potential to add speed, accuracy and universal reporting of video content and ad events across myriad devices and screens. Expected key benefits of unified IDs to the advertising and media industry include:

- **Advertisers/media agencies**
  - Cross-screen measurement – track video ad exposure across screens and devices to more easily optimize ad placement
  - Accelerate ad optimization – enable real-time, in-campaign TV optimization in sync with future advances in TV ad distribution technology and targeting capabilities
  - Dynamic Ad Insertion – ensures that intended creative executions are correctly placed in real time for "on-demand" platforms.
  - Rapid, uniform ad placement confirmation – quickly verify where and when ads have run to meet audience delivery requirements
  - Brand safety – provide a more efficient reference for ad servers to keep creative assets from appearing in inappropriate locations or contexts
  - Enhance ad performance models – greatly reduce data prep time for market mix and attribution models
  - Second screen synching – allow advertisers to make additional content or e-commerce opportunities available when a TV ad is running

- **TV Networks**
  - Content monetization – track lifetime monetization value of a piece of content from advertising to distribution to electronic sell-through
  - Creative/Ad inventory management – speed up schedule planning by eliminating the task of distinguishing among different creative versions with the same or similar name
  - Second Screen Synching – enables content creators to send additional content to other devices in real time when a program is airing
**Digital Advertising/Media Ecosystem**

- **Cornucopia of ad tracking IDs** – Advertiser/media agencies, ad verification firms, DSPs, publishers, re-targeters, etc. are all applying different tracking IDs to the same creative, creating a quagmire for analyzing campaign audience and creative delivery.

- **Ad tracking harmony** – Ad-ID would improve workflow across all digital ecosystem constituents while simplifying and accelerating media delivery reporting.

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**WATERMARKING MAKES TAXI COMPLETE**

TAXI Complete deploys two audio watermarks, one for ad and content identification and another for identifying the media distribution outlet on which the ad or content appeared. The first watermark contains an EIDR or Ad-ID identifier that also allows linkage to additional metadata or descriptive information about the assets such as ad creative titles, ad length, TV program episode title and duration, etc. It can be inserted immediately after creating an ad or video content and registering the ID. The watermark is inserted every 5 seconds for content and every 2 seconds for ads. The second identifier is a distribution watermark that contains a time stamp and up to four IDs to assure that viewing credit is being assigned to the correct TV networks and affiliate stations, multichannel video programmer distributors (MVPDs), digital publishers and digital ad serving firms. The distribution ID is repeatedly inserted into the broadcast or digital stream every 28 seconds. Both TAXI IDs can be detected in hardware such as set-top boxes, Smart TVs, or meters attached to the TV. Detection can also occur acoustically via apps on portable devices, such as smartphones or tablets.

In the example below, a 15-second Dove ad appearing on WNBC in New York, the WNBC website and YouTube is watermarked by the media agency and trafficked to the media. The media then run the ad and provide time-stamped playback reports properly credited to the TV, laptop and smartphone on which the ad appeared. In this case, all three media decode the Ad-ID watermark and include it in their audience delivery reports. For content, watermark embedding may occur dynamically, as the content is being served or distributed through content management systems.

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**THE TAXI DRIVE: GAINING INDUSTRY SUPPORT**

Industry support for this initiative has been impressive. Since 2012, nearly 3 million unique Ad-ID codes have been served, representing more than 4,000 advertisers and 800 ad agencies. On the content side, all major motion picture studios and TV network groups are EIDR-encoding their video assets. More than 2
While adoption of TAXI has been moving in a positive direction, there must be a stronger confluence of industry participation for TAXI to deliver full benefits to the advertising and media ecosystem. The Universal Product Code (UPC), for example, is a standard that achieved widespread utilization in gradual fashion. The tipping point for UPC adoption occurred once large retailers like Walmart and Kmart required manufacturers to apply UPC codes to all products carried in their store locations. The manufacturers encoded their products while retailers equipped themselves with technology to read the codes. The UPC Code is now squarely embedded in nearly every U.S. retail and digital transaction and has made an enormous contribution to speed up the organization and feedback of key product consumption data as well as streamlining workflow across many industries.

CATCH THE TAXI DRIVE: REGISTER YOUR ASSETS!

TAXI Complete presents an opportunity for the advertising and media industry to replace discordant noises in the system with a harmonious hum that can only be achieved with the use of standardized, universal identifiers for both content and ads. TAXI Complete’s open standard ID structure makes it possible to achieve the extraordinary success experienced with UPC codes by creating integrative links across multiple industries. The TAXI “family” includes content producers, studios, advertisers, media agencies, TV networks, MVPD’s, digital publishers and digital ad serving technology firms. A wide spectrum of benefits is now within grasp for all, highlighted by improved cross-platform measurement, increased speed, transparency and accountability and more effective ad and content inventory optimization.

GETTING STARTED WITH TAXI COMPLETE

Joining the TAXI initiative requires registering content assets with EIDR (www.eidr.org) or advertising creative with Ad-ID (www.ad-id.org). Applications for embedding and detecting the content or ad IDs can be licensed from Kantar Media (https://www.kantarmedia.com/us/campaigns/taxi-complete). The entire process is designed to require minimum effort and modest cost to achieve value on so many levels in the content, advertising and media industries.

Connect directly:
- Learn more about registering content with EIDR – info@eidr.org
- Learn more about embedding ads with Ad-ID – cs@ad-id.org
- Discuss workshops & pilot tests with Kantar Media – stephen.davis@kantarmedia.com
- For additional information contact CIMM – jane.clarke@cimm-us.org
- Visit www.cimm-us.org/initiatives-2/taxi/ for more information on TAXI Complete.