

# The importance of measurements of online video audiences to determine communication policy

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## Abstract

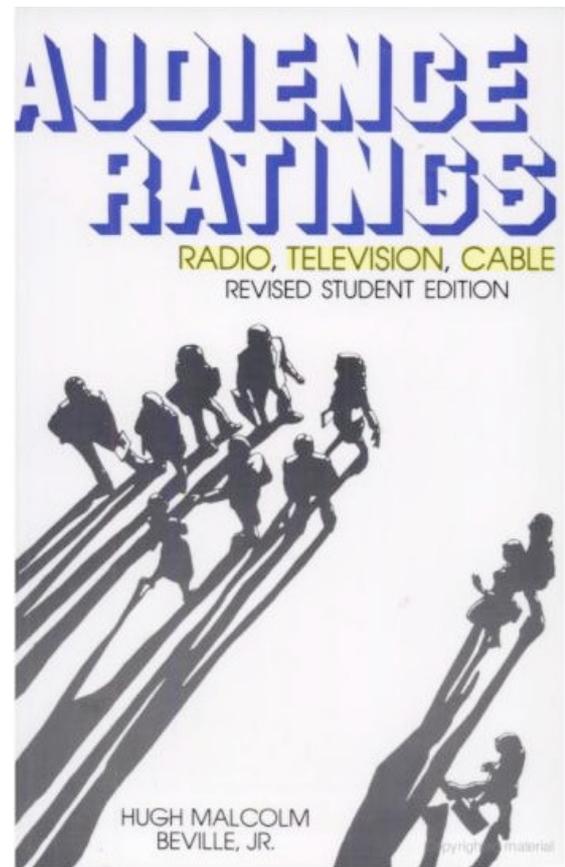
In the digital age, in a time where increasing amounts of video are being published and distributed online, we need more quantitative information on user needs and user consumption of online video to determine a sensible broadcast and communications policy. This talk outlines what types of video communication we now encounter online, what approaches to quantitative measurement exist, and how far we have to go to reach the level of maturity in online video audience metrics that traditional media has achieved over the years.

## Introduction

H.M. Beville JR[1] writes in his 1988 book on audience measurement: “It is difficult to imagine a successful system of free commercial broadcasting without audience rating as feedback. The ratings report the size and composition of the audience that is reached by a given program, station, or schedule of commercial announcements. These data are crucial to the activities of broadcasting management, sales representatives, program producers, advertisers and their agencies, writers, performers, and their agents.”

It is interesting to read this paragraph with today’s online video landscape in mind. The public now consumes enormous amounts of video online. A new electronic economy is beginning to emerge, where consumers are starting to accept that advertising or subscriptions need to be part of the system to make it viable for content producers to distribute their content online. As with TV (or radio before that), it took time for the commercial ecosystem to develop – video online is still in its infancy. As is the case with the free-to-air radio and TV before the digital age, free Internet video will also be primarily based around advertising as the key source of revenue. As with TV and Radio, the advertising ecosystem was not viable until accurate systems of audience measurement were developed.

The rise of free online video began with the rise of YouTube [2], launched in Feb 2005 and sold to Google in Nov 2006 for US\$1.65 billion. At that time, consumers on YouTube had watched more than 2.5 billion videos – by January 2008 this figure rose to more than 3 billion *per month*. The sole reason for the high value of YouTube is the high number of eyeballs – an



audience that must surely be easy to monetise... Since the purchase of YouTube, Google has begun to put in place different means of advertising alongside and within videos. The recent release of a video analytics product for publishers called “YouTube Insight” [3] is an important component of Google’s way towards monetising YouTube.

What we can learn from history: quantitative measurements of audience are the key to the creation of a survivable ecosystem around free audio-visual infotainment. Yet, such systems are only at the beginning of their evolution for online video, since the systems of online video communication and distribution are also still in development. Video metrics need to be regarded with a higher value by content owners, distributors, advertisers and generally the telecommunications profession to allow the creation of a viable online media economy.

## Current State of Online Audience Measurements

The current state-of-the-art of audience measurements on the Internet revolves mostly around Web analytics. Web analytics is the study of the behaviour of website visitors. Website owners use them to fulfil different aims, such as to:

- gain an understanding about the percentage of conversions, i.e. the number of people that make a purchase in comparison to the absolute number of visitors.
- compare search engine referrals to advertising referrals and their efficiency.
- understand the quality of Web pages and Website processes by understanding where people leave the site and within which processes.
- understand the composition of the audience such as gender (if possible), geographic origin and various other demographics.

The results are used to improve advertising campaigns, search engine adverts, Web page metadata, Web page designs, or Website processes.

Data collection centres on Web traffic measurements. Different approaches to measurement are being used. Where there is direct access to the Website (on-site analytics), data can be collected through:

- Web server log files (examples: Webalizer or AWStats), or
- javascript hooks into the Web pages, also called page tagging (examples: Google Analytics, Omniture SiteCatalyst, Yahoo IndexTools)

Without access to the Website, analytics can still be undertaken (off-site analytics). These are usually used for Internet marketing research – the analysis of markets and competitors.

Different methods in use are:

- Panels – groups of people that function as a representative sample of all Web users share their activities log with the company (user-centric analytics). An example is the toolbar that collects Web traffic by Amazon’s Alexa service, or the consumer panels in use by AC Nielsen.
- Internet Service Providers provide network logs on Web activities that go through their sites (network-centric analytics). Hitwise is using this approach.

All of these approaches have their advantages and disadvantages and a complete picture is difficult to collect.

## Video Audience Measurements

Video is even more complicated to measure than Web sites. We are only seeing the start of what is in development.

The types of video communications on the Internet can be classified into the following:

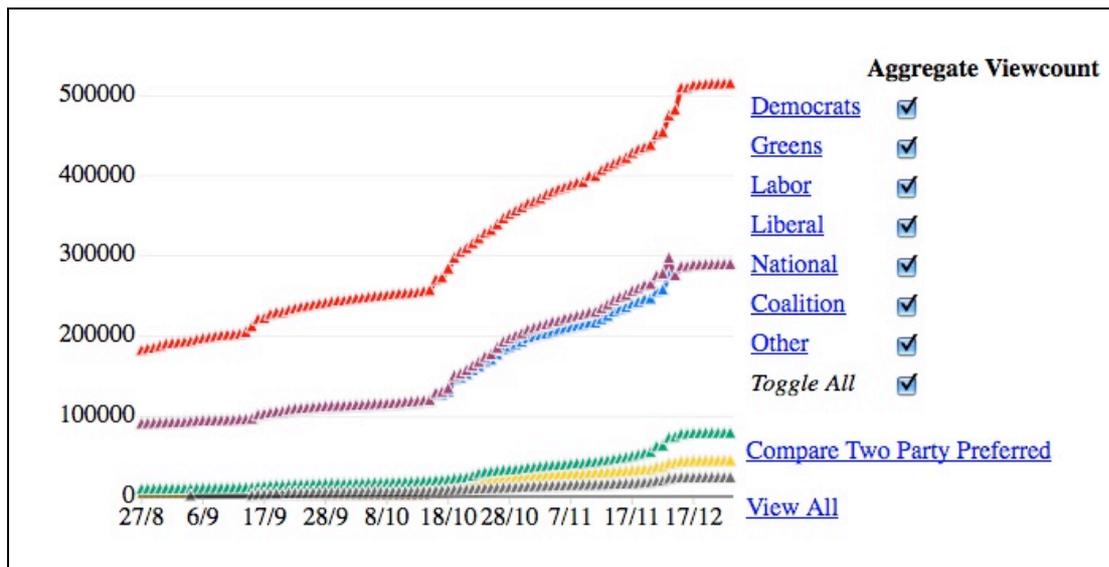
- live interactive video, e.g. skype
- video streaming as a one-to-many distribution, e.g. streaming of conferences
- peer-to-peer video distribution, e.g. bittorrent
- social video publication sites with embedding functionality, e.g. YouTube, Revver, BlipTV, Dailymotion
- native video publication by owners on their own websites, e.g. news.com

Unfortunately, most tracking on videos is nowadays focused on identifying copyright infringements. However, we are slowly moving to an increasing use of online video for marketing and PR purposes as well as the distribution of information and entertainment. Tracking of videos should therefore move to quantitative measurements for constructive purposes such as the identification of the value of content in specific contexts.

The main types of companies that we are seeing evolve in video metrics centre around the following measurements:

- video use on controlled sites; this relies on the measurement of user interaction within each video – how long do they watch it, where do they stop watching, what points do they typically jump to. An example company in this space is VisibleMeasures and the new Omniture video measurement service in SiteCatalyst.
- video use on social video sites; this relies on the collection of statistics that are shared by the social video sites – YouTube for example shares view counts, rating counts, comment counts and further interesting quantitative measurements. An example company in this space is TubeMogul and my company, Vquence.
- video embeddings in forums, blogs and other social networking sites; this measures the distribution of video into communities and the type of communities that are interested in these videos as a type of market analysis. An example company in this space is Vidmetrix.

Seeing as online video is still such a young mass phenomenon on the Internet, we expect a large amount of development and innovation in the video metrics space over the next few years. For example, Vquence is working on automatically identifying video duplicates on the Internet and aggregate audience measurements across these duplicates. An example measurement that we did is the below graph of view counts of the videos of political parties during last year's federal election.



## A Need for Standards

As much as there is a fundamental need for the development of new technologies in video analytics, there is also a need to standardize certain measurements.

An example problem is what is regarded as a view count on a video clip on social video sites. One site measures a view count at the instant that somebody clicks on the playback button. Even if that person immediately surfs to a different Web page or clicks on stop, a view count is registered. Another site may measure a view count only at the moment that the full video was played back. And a third company may wait until a user has watched more than 50% of a clip before registering a view count. This does not provide for comparable statistics.[4,5]

Fortunately we are seeing some standardization happening in the online video space. The Interactive Advertising Bureau released their latest In-stream Ad Format Guidelines and Best Practices standard in May 2008 [6] and the more recent Digital Video In-Stream Ad Metrics Definition [7]. Before that, every video publisher defined their own format and then found publishers that would produce ads that suited their format. Formats would not be compatible across sites.

This standard instead provides guidelines to video publishers and advertisers on the types of video ads to provide and produce, which will make it easier to plan and produce a campaign that can run on multiple sites. It will also make it easier to create comparable measurements across sites and find out which is more successful. In Australia, AIMIA is looking after this kind of standardisation – a very important and commendable effort.[8]

## Summary and Outlook

A core requirement towards creating a successful online economy around video is the creation of video metrics services that can compare the effectiveness of video content on different Web sites and communities. In no way shape or form have we yet reached a similar understanding of measurement on the audience of online video as we have in the traditional broadcast and video distribution space. The communication strategy of public-good, political and commercial organizations that have to decide whether to invest their money into PR and marketing to be run on traditional media real estates or on the Internet is highly depended on such quantitative measurements.

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