Second Screen
Revolutionizing the Television Experience

A GCP Thought Leadership Series - Part 1

If you own an iPhone, iPad, Android or laptop computer, then you may be online doing something else even when watching TV. This is true of 80% of those who own smart devices and is somewhat of a phenomenon in terms of its scale and rapid growth.

Entertainment companies have become aware of this behavior and the distractions that the internet creates in a so-called “multi-tasking” crowd. They are putting a lot of resources, thought and emphasis into a social application called Second Screen. The idea behind the app is to redirect the audience’s attention back to the main TV program or movie by creating a social network with the same interest.

The networks and program producers have not lost the additional potential of this app when it comes to this audience, which is added revenue. But, how do you attract this audience, and better yet, how do you retain them after the initial download?

This paper is the first of a 3-part series that will examine the app Second Screen. In subsequent pieces, we will look at the technology and further explore what entertainment gurus in Hollywood think about their experiments with the app, the audience behavior, monetization opportunities and much more.
About the Author

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Russ Stanton is a media veteran, recently joining TCS after more than thirty years in Radio, Television, Publishing and Advertising. He currently serves as the Manager of the Media Practice within GCP (Global Consulting Practice). Russ began his career on-camera, spanning the areas of camerawork, production and direction. For his production work, he has received 13 Addy awards, 4 Tellys and a Gabriel Award. Recently, he has become known for his work in digital asset management, production workflows, digital strategy and development, including social media technologies and practical applications for that medium. He has worked in strategic IT operations for companies such as Simon & Schuster, Golden Books, BBDO and J Walter Thompson, and brings that experience to the consultancy of many TCS clients within that space.
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Overview

To date, there has been somewhere in the neighborhood of 550-thousand apps written for the iPhone, with downloads reported at 5.65-million per day. On the Android side of the business, there are over 300-thousand apps with downloads hitting a total of over 16-billion.

The entry of the iPad and other tablet devices, with greatly enhanced user experiences as a result of screen real estate, 3G or WiFi connectivity, has caused people to abandon their laptops for this all-in-one device. iPad has about 140-thousand apps to date, and it keeps growing daily.

In all cases, new apps are emerging every day, for those who live and breathe by their phones. So much so, that the phrase, “I don't know what I'd do without my phone or my apps,” is a common statement made by those owning smartphones and tablets.

Nearly 1 out of every 2 people in the US owns a smartphone, which roughly translates to 150-million people. Also, it is estimated that over 100-million people use Facebook from their phones in a month, which represents almost 100% growth in 6 months. These are significant numbers and with almost exponential growth. Smartphones are already outselling PCs and it is believed that by 2020, the mobile device or tablet will be the world’s primary connection tool to the internet.

In fact, Cisco reports that mobile devices will outnumber humans this year and by 2016 there will be 10-billion mobile connected devices around the world.

These figures are not lost on the entertainment community as they struggle to select the most appropriate communication channel, whether it is movies, television, advertising or any other media product that needs eyes and ears to create revenue.

These apps have the capability of creating a new revenue channel, adding to traditional models of advertising, product placement and merchandise. Although it is still based on traditional models, the functionality of apps allows developers to be as creative as possible.

Social TV

Television has always been a social media, primarily contained within living rooms for family or friends to hold movie nights. The Super Bowl is a prime example, where parties abound and the TV is the central point for watching the game while socializing with your friends.

However, TV started evolving to a virtual social experience with the advent of the hashtag - that slightly intruding visible element in the lower right hand corner of the screen during a program.

Tweeting while watching TV began this convergence once companies realized that people continued to us smartphones even when doing other things. This also involved going to other Internet channels like

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1 http://blog.facebook.com/blog.php?post=297879717130
2 http://www.pewinternet.org/Reports/2008/The-Future-of-the-Internet-III.aspx
3 http://www.bbc.co.uk/news/technology-17047406
YouTube to continue the experience they had on the first screen – the TV. Here are some interesting statistics about this evolution¹:

- According to Carri Bugbee, the #TrumpRoast hashtag was used more than 27,000 times on Twitter during the March 2011 telecast of the Comedy Central Roast of Donald Trump. Apparently that was the most-watched Tuesday night show in the history of the network.

- Fox's The X factor is the most popular new series, with an average of 94,000 social comments per episode as recorded by Bluefin.

- The Old Spice The Man Your Man Can Smell Like campaign generated:
  - 5.9 million views on YouTube.com in the first 24 hours
  - 20 million views 3 days after the launch
  - 1.4 billion impressions over 6 months
  - Sales increase by 107% over 6 months

According to a recent study by Microsoft and Wunderman, 69% of multi-screen consumers feel that accessing similar content across different screens makes content more useful, relevant and informative.

Social TV provides greater viewer interaction both in real-time and on a grand scale around popular TV programs. This also gives networks insight into how people are watching and consuming media that were inaccessible previously. As a result, networks such as The Discovery Channel are engaging in conversations with viewers and building a growing network of fans.

With its vast assortment of networks, including the Animal Channel, the company manages 70 Facebook fan pages with 40-million fans, and 20 Twitter accounts with 2.4 million followers. Their philosophy on social media is “to use it as a platform that enhances the viewing experience and relationship with the viewers.”

Their philosophy is simple that includes 4 easy steps:

- Building relationships and engaging with fans
- Personalizing the brand
- Strengthening fan-talent relations
- Driving tune-in

By far, the most successful social media campaign on Discovery’s lineup is the Shark Week promotion. During a week in July 2011, there were more than 750,000 tweets mentioning Shark Week -- an increase of 8 times the number over 2010 – and the handle @SharkWeek grew close to 60,000 followers.

This was just the preamble to the user experience as viewers usually want greater interactivity without the effort of going to an external source. Thus, the emergence of the Second Screen.

¹ http://socialmediatoday.com/node/445515
What is Second Screen?

To fully answer that question, we first need to address the behavior of audiences who own smart devices. 80% of those who own an iPhone, iPad, Android, or even a laptop are both simultaneously online and watching television. Most are checking email, texting, chatting, updating their Facebook status or Tweeting; nothing really to do with the show playing on TV.

The idea of Second Screen is to create an app that captures, or redirects the audience attention to add an extra dimension to the movie or TV program. The ultimate goal is to bring the audience focus back to the program they are watching, rather than an unrelated distraction like Facebook.

Most Second Screen apps require registration, thus capturing crucial user data and allowing viewers to chat with others that are watching the same program. Marketers can then analyze consumer behavior within these networks and engineer compelling advertising targeted to this audience based on what they are saying. This is an opportunity for Social Listening analytics that goes beyond traditional metrics, and is a core competency area within TCS.

Ads can be added by the app content producers using click-through to purchase, providing that additional advertising and merchandise revenue. Thus, a Second Screen Social Network is born for the broadcaster, advertiser, content provider or production company, and the viewer is given a value-added experience that enhances their normal TV viewing. And the viewer doesn’t even have to take the additional step of going to a website; it’s provided in a seamless, effortless experience.

Some of the most popular apps include Miso http://gomiso.com/ and GetGlue, http://getglue.com/. These sites provide an app that allows the viewer to select the show of their choice, and join the conversation with others in their network even if the show is not being aired currently. Both apps also have the ability to link into a viewer’s Facebook or Twitter community and allow users the opportunity to interact with others who share a similar interest.

Some cable providers are getting into the mix by offering their own app that solidifies the traditional lineup with the viewer’s community.

Miso partnered with DirecTV and AT&T U-verse to offer a completely synchronized experience as you’re watching a program. The viewer can actually create their own Second Screen experience in what Miso terms sideshows. Synchronization is provided through listening technologies using audio watermarking or time code marking within the show.

GetGlue goes a step further by adding music, movie trailers and books, so that those in the social networks can exchange thoughts, likes, dislikes and feelings about any particular channel or show in their online communities.

It can be an extremely powerful marketing tool for music, film and TV producers, publishers or any company operating in the commercial media space. Marketing workflow and social listening platforms, such as those offered by TCS, can provide a wealth of important strategy communication back to the media companies.
Comcast has an app called Tunerfish, which does just that, along with linking-in Facebook, Twitter, YouTube, Google Plus and many other established social networks. The app is positioned on the belief that, in the future, viewers would switch to purely online streaming video, completely abandoning their DVR.

This is especially valuable as television becomes ever more integrated with the Internet, offering viewers an experience that has not succeeded up to now because of the lack of integration with the online media. But with embeddable Second Screen apps true convergence is possible and TV can stream program content from the Internet alongside the app.

**What are broadcasters doing?**

**NBCLive**[^nbc-live]:

NBC has created its own social network app, offering access to selected shows within a central application. This is a free app offered through iTunes.

NBC’s vision involves centralizing viewer experience within a centrally branded Second Screen thereby creating greater loyalty to the network and offering viewers a broader social experience than a show-specific app. The app includes more features and an evolving landscape as shows come and go.

While independent app producers are creating specific show apps, NBC’s network-centric Second Screen portal has direct access to scripts, behind the scenes footage, director notes and is therefore closer to the whole production process, thus creating a richer experience for users.

According to Steve Andrade, SVP & GM of Digital Development for NBC.com[^steve-andrade], the cost for doing one show at a time would be too prohibitive for them. This kind of endeavor requires investment in digital staff for app updates and development, content creation and management, creative integration with the show’s producers and several people to monitor the social conversation and the analytics. This is considered a new division by NBC requiring additional staff.

To change the app content as shows are introduced and canceled, it is much more cost and operationally efficient to simply remove a module and create a new one based on other shows.

Producers are discovering that a Second Screen experience is quickly becoming mandatory as the audience using mobile devices continue to grow and the aspect of being “cool” figures into the show’s popularity with a significant section of the audience.

The Voice is a prime example of where app development is set to go. Most shows don’t consider the Second Screen until the end of the production cycle as budgets can be slim at that point. The producers of The Voice planned for Second Screen upfront in the budget process and content development follows the show’s production cycles.

This creates more compelling content, especially within reality TV programs such as The Voice, where the audience is more engaged with the outcome of contestants.

[^steve-andrade]: Comments delivered at the Entertainment Apps Conference, 12/1/2011 Sofitel, LA
NBC Fan It (Gamification)

Going a step further, NBC has created a companion site for further engagement with their programming in a totally different way than Second Screen, although it still ties the audience to their favorite shows.

Fan It\(^1\) is a social networking portal, where fans can log in and make comments about a show; in fact both the app and Fan It provides a single sign-on so that your Second Screen login on NBC Live works on Fan It as well.

NBC uses gamification to drive viewer behavior by dispensing points for participating in events and challenges, such as watching videos, sending comments, playing games and performing specific activities in a given time.

Fans are able to earn and accrue points and exchange them for NBC merchandise. You could think of it like credit card rewards; the more you use it, the more points you get for redemption towards NBC goodies.

Like NBC Live, registration is free. As an option, users are asked to input their Facebook/Twitter/MySpace/Google+ information during registration so that users can earn points for posting various things on these other networks as well.

Of course the analytics available from both NBC Live and Fan It provide a much crisper view of audience behavior that can help focus advertising and marketing campaigns to target specific interests and impulses.

ABC - My Generation

ABC was one of the first to try out Second Screen with this experiment on their property My Generation back in 2010.

This iPad app creates a seamless, two-screen, interactive television experience by bridging a cable/satellite connection and an iPad and by measuring analog sound waves using the iPad’s microphone. In the creation of the show, the program goes through an Audio Watermarking process using a Nielsen product called Media-Sync. There will be more on this technology in Part 2 of this series.

The app looks for certain contours in the audio signal so that it knows when to display a particular poll or other item linking up with a precise moment in the show.

This can also trigger ads or links on the Second Screen app, where an ad will be displayed on the primary screen first and then reveal more in depth content through the app. Users can still fast forward the ad using their DVR, but they are typically more compelled to click on ads within their mobile device. This is another revenue opportunity for the network, and a lot is dependent on how willing advertisers are to use this route.

While ABC only offered this for a single program, it was a giant step toward seamless interactivity between the viewer and the show, and it is referenced within the community as a model for future developments\(^2\).

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BBC - Autumnwatch TV Companion

The BBC has a dedicated Research & Development department that conducts many Second Screen experiments, one of which was launched a couple of years ago for the nature show Autumnwatch. The difference with this app was that it is created for a laptop and not a mobile device.

Since then, BBC has evolved in creating the iPlayer and now recognize the opportunity to develop the Second Screen app for smartphones and tablets. They feel that the experience adds another dimension for the viewing experience and the chance for viewers to interact with others interested in the same program.

Although the iPlayer currently works as a single-screen device, they already provide some of this complementary information in the app such as character bios, show synopses, related shows and social integration, and they expect to evolve as user expectations around the Second Screen grow.

As a result of the advances in tablet and mobile phone technologies, viewers can now truly synchronise their interaction with TV and open up a world of social viewing, deeper content, gaming, advertising and interactivity.

Whether these Second Screens offer audiences deeper engagement or further opportunities for distraction, it is clear there's huge creative potential for producers and digital developers who are willing to think outside the boundaries of traditional broadcasting models and embrace the possibilities of interactivity.

Cable & Internet TV

Comcast Tunerfish

Comcast is making a play to become what is known as the virtual “water cooler” where people gather to share what they’re watching on TV now, while the show is on rather than the next day at work.

This is a web and mobile app that includes its own database of television shows that autofills the text of viewer’s entries after a few keystrokes, making it easy to comment on shows to the viewers’ friends, which can also be imported from Facebook or Twitter.

Trend analysis tools let the user see what videos and shows their friends are watching — as well as the ones they’re starting to ignore. This can be invaluable to networks and advertisers in focusing their products to the most popular shows – turning the traditional ratings model on its ear.

Due to the system’s open architecture, these feeds can link out to Google Buzz, Facebook, Twitter, and other accounts, and they can coexist on Tunerfish and whatever the viewer normally uses.

In addition to whatever the viewer is watching on their TV, they can paste URLs into Tunerfish from YouTube, Vimeo and other sites. If the video is embeddable, these can be watched from within the Tunerfish system, and if not, viewers can still share it.
Comcast’s view is that not only will people watch more television if they use something like this, but that as viewing habits shift online, Comcast would own part of that conversation as well.

This summer Comcast, the parent of NBC Universal, is teaming up with NBC, ComScore and Google to study how viewers watch the upcoming London Olympics on live TV, the web, mobile devices and video-on-demand platforms. The idea is to come up with a single source for multiplatform viewing\(^\text{12}\) called non-linear programming.

All these systems and analytics will help Comcast weather the storm as viewers shift more of their hours to online streaming video and away from their cable subscription – a trend that will only be accelerated by offerings like Google TV.

**Google TV**

A lot has been written about Google TV over the last few years, mostly speculation as to whether it would work or not. Google partnered with Intel, Sony and Logitech to develop this Smart TV platform using the Android platform. Android is now considered the most desirable platform within mobile devices, surpassing Apple's iOS platform\(^\text{13}\). Google TV is a software platform aiming to bring together traditional TV and video content from the web.

It integrates Google's Android operating system and the Linux version of Google Chrome browser to create an interactive television overlay on top of existing Internet Television and WebTV sites to add a 10-foot user interface.

The platform works by combining channels from the user's existing cable / satellite providers with the content on the web — including Hulu, Fox Networks, CBS, YouTube, and others.

Google TV involves a hardware component that is controlled with a QWERTY keyboard-enabled remote control and also provides access to the Android app store to download and use specific apps.

The biggest advantage to viewers is that they do not have to change their schedules to watch programs; they can watch it anytime.

TVs that do not come with the Google TV platform can install a separate Google TV powered box on top of the current hardware, for example the Logitech Revue box.

Clicking through TV channels available with cable / satellite subscriptions is also possible as with the traditional TV experience. The internet will be accessible the usual way as on the PC. Google TV comes equipped with a flash-enabled browser which can be used to freely browse the internet.

In addition, Google TV is compatible with DVR set top boxes. The platform improves usability of this hardware by making its recorded content searchable from the home screen and schedule DVR recordings directly from the search results page.

Google TV has mostly seen slow adoption, mainly because it's another piece of hardware that the viewer has to deal with, and the integration is not as seamless as a Second Screen app to an iPad or other smartphone device that the viewer is already accustomed to.


\(^{13}\)http://www.puremobile.com/insiderblog/android-preferred-os-in-q4-2011
But the speculation is that as Internet TV becomes more the norm in the future, Google TV will have the advantage with a trusted audience and become the ITV of choice.

Research Acknowledgement:
Within this series, we have compiled sizable research about broadcasters, cable providers, platforms, social media apps and several devices in use today. This research was the product of the GCP Research Group, headed by Ritayan Banerjee who helped generate exhaustive and in-depth research. We extend our sincere thanks to the researchers who were critical to compiling this information, Kaushik Mukherjee and Sumit Misra.

Part 2: Second Screen Technology
In the next part of this series, we will be examining some of the cutting edge technology that is making the Second Screen experience more interactive, such as Audio Watermarking and Video Fingerprinting. These technologies are evolving every day providing what is best described as Third and Fourth Screen experiences for users. The possibilities for marketers, broadcasters, advertisers and cable/satellite providers are becoming limitless and widespread.
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