

# **Interactive Advertising for Local News Broadcasts: An Exploration of Potential**

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**Abstract**

Interactive Advertising for Local News Broadcasts: An Exploration of Potential  
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This thesis will discuss various forms of interactive television including one-screen, two-screen and three-screen interactivity. Various formats of interactive advertisements will also be analyzed in terms of how they could be applied to local news broadcasts. As a conclusion, a sample interactive television application for use during local news broadcasts will be introduced.



## Chapter 1: Introduction

“Interactive television (ITV) represents the convergence of interactive technology and television which allows the exchange of information between the sender and the receiver” (Constantakis-Valdez, n.d., para. 1). There are various interactive television models that programmers and advertisers can utilize. These include one-screen interactivity, two-screen interactivity, three-screen interactivity, multiscreen interactivity and blended screen interactivity, each of which is discussed below and summarized in Table 1.

Table 1 – Levels of Interactivity (Schreiber, 2008)<sup>1</sup>

<b>Level of Interactivity</b>	<b>Television</b>	<b>Computer</b>	<b>Mobile</b>
One-screen	Yes	No	No
Two-screen	Yes	Yes	No
Three-screen	Yes	No	Yes
Multiscreen	Combination of two or more		
Blended screen	One device controls another		

One-screen interactivity involves only a television with remote control access, two-screen interactivity involves a television and computer, and three-screen interactivity involves a television and mobile phone. Multiscreen is a term used to describe a level of interactivity that involves two or more devices, while blended screen refers to the ability of one device to control another. These levels of interactivity will be discussed throughout this thesis with a focus on local television stations, so that it becomes clearer which interactive advertising model would be most appropriate to implement.

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<sup>1</sup> This table was created by the author of this thesis.

## Chapter 2: Literature Review

### 2.1 One-Screen Interactivity

There have been numerous attempts in the past to create a successful one-screen interactive television service. Warner Communications developed the first commercial interactive television service known as Qube, which became available in Columbus, Ohio during December 1977. The system offered “30 channels of television divided equally between ten broadcast TV channels, ten premium or pay-per-view channels, and ten channels with original interactive programming” (Freed, 2000, para. 2).

The system was a technological success as its 50,000 subscribers were capable of responding to content through an 18-button remote control and set-top box while not significantly absorbing bandwidth (Freed, 2000). Qube was capable of transferring data at a rate of 256 kbps, which was very impressive at the time, and it provided users access to original features such as interactive polls, pay-per-view, home shopping and distance learning (McCracken, 2009). Despite the fact that two of the original interactive channels were Sight on Sound and Pinwheel, which gave birth to MTV and Nickelodeon respectively, high costs ultimately destroyed Qube. John Carey at Columbia University offered his analysis on this case by claiming that,

The service cost a fortune to deliver. The Qube set-top box alone cost \$200 at a time when cable converters cost \$40. Qube equipment at the Columbus headend added about \$23 million in construction costs. Economies of scale were not there. Further, there were reliability problems with the equipment, especially in the data transmission upstream from homes to the cable headend. Budgets for Qube programs were very low compared to broadcast networks, and interactivity with low production values really could not compete with network programming (Freed, 2000, para. 31).



During 2000, a company called RespondTV worked to develop interactive television technology. The way it worked was broadcasters would send video content to cable and satellite providers while simultaneously sending content over the internet to RespondTV servers. The cable and satellite providers would then send the video content to viewers' set-top boxes while a two-way communication path was established between the boxes and RespondTV's servers, which would collect sales data to be reported to the broadcasters (Negus and Wagner, 2001). Early trials with the San Francisco television station KBHK were successful. A Domino's Pizza interactive ad received 150 orders from one commercial, and a Melissa Etheridge concert that offered a coupon for her CD received a 46% click rate (Foley, 2000, para. 3).

Although RespondTV eventually went out of business, its founder David Kaiser has attempted to create an interactive platform called Coincident TV that can be used by content providers to create interactive videos that incorporate social media elements, links to websites and commercial transactions within the video player application (Coincident TV, 2010). Coincident TV introduced an interactive video player for the hit show "Glee" called The Glee Superfan.

The Glee Superfan experience streams interactive online episodes while allowing viewers to simultaneously navigate the Web, access their favorite GLEE social media sites, purchase GLEE-related merchandise and watch bonus material – all without ever exiting Coincident TV's interactive video player (Coincident TV, 2010, para. 4).

The video player received an Emmy nomination during 2010 for the Outstanding Creative Achievement in Interactive Media category.

There have been several other experiments with the concept of one-screen interactive television such as the introduction of WebTV, which was a Microsoft interactive television software application that essentially allowed users to access the internet through their television and a phone line. Ultimately, WebTV became more of a tool for visiting web sites and email applications rather than interacting with television programs. (Figler, 2002).

Even though WebTV...did not turn into the blockbuster businesses they were originally considered, they did prove a significant hypothesis in the market, namely that consumers become more engaged with the medium when presented with interactive features and when they have more control over their viewing content. Broadcasters and advertisers had always had this hypothesis, but had not had an opportunity to test and prove it in the mass market (Schreiber, 2008, p. 42).

During 2006, the Bravo cable network show *Top Chef* and Time Warner Cable also experimented with the one-screen interactivity concept. The program provided viewers the opportunity to answer trivia questions by using their remote control and reached an unprecedented participation rate of close to 30 percent (Schreiber, 2008, p. 43). The success of the first season led to Sears becoming the exclusive sponsor of the application for the second season, and had its logo visible with text prompts during the program ("Bravo and Time Warner Cable," 2006).

One company that is attempting to create an interactive television marketplace is Canoe Ventures, which is an organization comprised of the leading cable companies in the United States whose goal is to make television programs and advertisements more interactive and effective. Its members include Bright House Networks, Cablevision, Charter Communications Inc., Comcast Corporation, Cox Communications Inc., Time

Warner Cable, as well as several other bureaus and agencies throughout the media industry. According to Cable360.net, "Canoe remains in a start-up mind-set as it develops the digital infrastructure for advanced, addressable advertising" ("2009 Top 10 Places," 2009, para. 4).

According to former CEO David Verklin, Canoe's three objectives are to provide an opportunity for advertisers to directly interact with television consumers, create incremental revenue streams for networks by offering new forms of inventory such as polling/voting and requests for information, and to turn set-top boxes into currencies for advanced TV applications (Meyers, 2008).

Canoe is first gearing up to launch a lead-generation application that will allow viewers to request more information after seeing an advertisement. After that, Canoe plans on launching voting and polling applications. "That could change our culture," Verklin says. "If you can instantly get five million people to participate in a poll, that could change the nature of the television experience."

The third application Canoe expects to roll out is a commerce application that will allow viewers to make purchases during commercials. "You'll be watching a commercial and then all of a sudden a slate will pop up asking, 'Are you interested in buying this product?' You'll enter a credit card number and a pin code, and that product will be charged to your credit card and winging its way to you in 72 hours," Verklin says. "It will revolutionize the infomercial business..." (Albiniak, para. 8 and 9).

In order for Canoe and the participating networks to provide their interactive content, Enhanced TV Binary Interchange Format (EBIF) must be enabled in set-top boxes and appropriate servers must be installed at headends. This technology creates an opportunity for viewers to use a remote control to make direct purchases and requests for information. There are two footprints that overlap: the more than 25 million set-top boxes that are EBIF-enabled and Canoe's 18 million set-top boxes with interactivity

(Hardesty, 2011, para. 3 and 4). Canoe utilizes one-screen interactivity by giving users the option to make requests for information five seconds into a thirty second spot, and have promotional offers or coupons sent to them as a result (Goetzl, 2009).

The following is how Arthur Orduna, CTO at Canoe Ventures, explains the process of a national interactive ad buy (Hardesty, 2011, para. 6):

- Canoe sends an EBIF app for a 30-second commercial to the broadcast center for the network.
- It gets injected by the network into its main broadcast signal and gets shot out over satellite to all the MSOs.
- The operators pick up the signal and pass it to their households that have EBIF-enabled set-tops.
- Subscribers click if they want to receive more information on, perhaps, a product.
- The data is collected by the MSOs, and they send it to Canoe, which then prepares reports on performance.

In an attempt to design an effective interactive television model, Backchannelmedia (BCM) has developed software that allows users to ‘click’ various icons during television programming through the use of a remote control and set-top box already installed by the cable or satellite provider. This technology could be used to purchase an item, download music and videos, visit a website or send a link to a mobile device. BCM seems to believe that digital convergence is reshaping the media industry and that interactivity will play an important role in the future of the television industry.

Armed with encouraging consumer studies, BCM had begun to deploy its technology to local television stations and their viewers. In spring 2008, four television stations in New England, reaching nearly 200 market trial homes, had agreed to a one-year trial that would expose over 1,500 local and 1,000 national advertisers to the benefits of BCM’s technology. By April 2009, BCM had signed on LIN TV, which had 31 stations covering 9.1% of the U.S. households,

and Gray TV, which had 35 stations covering 5.3% of the U.S. households, for trial launches (Gupta, Shukla and Clayton, 2009, p. 1).

Gupta, Shukla and Clayton (2009) discuss BCM's five potential sources of revenue as it grows. The first is an installation fee would be required from customers in order to install necessary hardware and software at television stations and cable operators. There would also be a maintenance fee that would cover the cost of repairing and upgrading the equipment. Additionally, there could possibly be some form of charging per click, although there does not seem to be a clear solution as to who would be charged and when. Portal advertising is another form of revenue that would be linked to a sign-in page each visitor would have to go through in order to gain access to interactive services. Theoretically, advertising could appear on the BCM portal itself, which would reach all users. There is some disagreement within BCM's management regarding this topic due to the fact that some management believe television networks should have control of this portal as an incentive to partner with BCM. Meanwhile, other management feel as though BCM should maintain control of this portal for additional long-term revenue. Lastly, BCM could potentially develop an analytics system similar to what is installed at Google, Inc., however, this will likely not be feasible until BCM has a large enough customer base.

## 2.2 Multiscreen Interactivity

Two-screen interactivity involves the use of a personal computer with an internet connection in conjunction with television viewing so that participation in events such as polls or quizzes is possible (Schreiber, 2008). Three-screen interactivity is similar, except viewers utilize mobile phones to interact with programming. This is the fastest growing model, and it was made popular by text message voting on programs such as *American Idol* (Schreiber, 2008).

The Nielsen Company is a leading provider of media research information and its reports are studied daily throughout the entire media industry. Nielsen's 1Q 2011 Mobile Device Report concluded that "seventy percent of tablet owners and 68 percent of smartphone owners said they use their devices while watching television..." (The Nielsen Company, 2011, para. 1). This means that television viewers are becoming accustomed to looking at another screen while watching programming.

A potential concern that may arise with one-screen interactivity is the traditional remote controller. It is currently limited by signal transmission distance in that it cannot be used too far away from the television. Also, its functionality is somewhat restricted due to having a limited number of buttons and controls. As a solution to this issue, mobile devices such as cell phones and computers could connect to an internet network and wirelessly control the interactive functions of a DTV set-top box, which is a device used to receive a digital television signal (Lo, Lin and Chen, 2006). In other words, the fact that mobile devices can be used almost anywhere and the fact that they are capable of

supporting various custom applications may be a strong reason to consider their integration into an interactive television system.

A 2007 study demonstrated the use of a touch screen Personal Digital Assistant (PDA) as a tool for controlling volume, changing channels, and accessing the Electronic Program Guide (EPG) (Tseklevs, Cruickshank, Hill, Kondo and Whitham, 2007). In addition to providing the functionality of a remote control, the PDA device was capable of setting program recording schedules, remembering channel history, reconfiguring the EPG, offering pay-as-you-go billing and working along with a second PDA device for another user. Testers of this service appreciated the simplicity of the touch-screen and its ability to offer interactive services without disrupting the programming on the television screen. They were also pleased with the opportunity for parental controls, however there were concerns that the product would be expensive and difficult to replace if lost or damaged (Tseklevs, Cruickshank, Hill, Kondo and Whitham, 2007).

More recently, Comcast has begun offering blended screen interactivity through its mobile Xfinity application. “The Xfinity TV apps allow customers to browse TV listings by area, schedule DVR recordings, change channels, filter and search for their favorite shows and movies and browse On Demand libraries” (Schmelkin, 2011, para. 2). The application was initially offered on the Apple iPad, but it has been expanded to iPhones, iPods and Android smartphones. In addition to having remote control functionality, it creates an interactive link between television content and the viewer’s own devices.

NBC's singing competition "The Voice" has begun implementing two-screen interactive features that are designed to keep its audience engaged. According to a June 7, 2011 NBC press release, viewers will be able to vote for their favorite contestants by downloading their songs on iTunes for \$1.29 each, and interact with "V-Correspondent" Alison Haislip via Facebook, Twitter, and NBC.com (Gorman, 2011, para. 2). Viewers of The Voice will also be able to interact via NBC Live, which is an application designed specifically for the iPad. It offers features such as "...trivia quizzes, polls, cast commentaries and other tidbits, synchronized with the show..." to people who enjoy watching television with a second screen (Dredge, 2011, para. 4). ABC also has released a similar application called ABC Video Bookstore that allows users to view archive news footage, photo galleries and interactive timelines (Dredge, 2011). The NBC and ABC applications do not offer live streaming television, however.

On January 13, 2010, CBS Television Stations announced the availability of a free iPhone/iPod Touch application in the Apple App Store. Different versions of the application are available for stations in thirteen markets across the United States.

According to CBS, the new local news apps--which were developed in partnership with Treemo Labs and whose pre-roll video and ad capabilities are powered by Transpera—offer...[t]he latest local news headlines and stories, [f]ull news video integration, with the ability to view on-demand video coverage of local news, as well as on-demand video from CBS News (Swedlow, 2010, para. 3).

The news stories and video offered as part of this application are currently independent of local television broadcasts, in that they are not linked to live broadcasts in real-time.



## 2.3 Ad Formats

Table 2 – Interactive Ad Formats (Bellman, Schweda, and Varan, 2009, p. 14)<sup>2</sup>

Interactive Ad Format	Description
Impulse Response Format	A prompt is superimposed for viewers to take advantage of an offer such as the mailing of a brochure or to enter a sweepstake.
Dedicated Advertiser Location (DAL)	A channel's bandwidth is divided into informative pages to function like a website.
Telescopic Format	Ads steer viewers away from their program and toward a comprehensive audiovisual experience.

Bellman, Schweda and Varan (2009) note that there are three primary interactive television ad formats, which are outlined in Table 2 above. The first interactive ad format is called the impulse response format. These ads superimpose a prompt for viewers to take advantage of an offer such as the mailing of a brochure or to enter a sweepstake. Secondly, dedicated advertiser location (DAL) ads function like websites in that they divide a channel's bandwidth into informative pages. These ads are generally appreciated less by audiences because they require more effort to gather the information presented than the impulse response format.

Lastly, telescopic interactive advertisements steer viewers away from their program and toward a comprehensive audiovisual experience.

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<sup>2</sup> This table was created by the author of this thesis.

The telescopic format...makes the most of the entertaining possibilities of ITV by offering additional long-form video; its superior performance cannot be explained readily by self-selection effects. The results suggest that the effectiveness of ITV ads should be measured by their interaction rate rather than the much smaller response rate, and ITV advertisers should consider ways to maximize interaction and response rates (Bellman, Schweda, and Varan, 2009, p. 14).

Claudio Marcus (2008) discusses the impact of telescopic advertisements and states that “[r]esearch conducted by DoubleClick revealed that consumers are roughly twice as likely to play an online video ad as they are to click through on a standard online graphical ad” (p. 95). He also believes, however, that online video advertisements will have a higher rate of response than on television due to the fact that online viewers have a greater desire to become engaged with content.

A potential disadvantage of telescoping is the fact that these extended advertisements remove viewers away from content and decrease the live television ratings that are reported by Nielsen. This problem can be avoided, however, by saving the promotional content for later viewing rather than displacing a portion of the live audience (Marcus, 2008). In other words, more viewers will be included in live rating reports by having the option to watch extended material after the associated program is finished. It is important to note that viewers watching time shifted content through a DVR are currently unable to receive interactive advertisements, but this is likely an issue that will be resolved over time (Berte, Vyncke, and De Bens, 2010).

### **Chapter 3: Research Questions and Analytic Strategy**

The following research questions will be addressed in an attempt to discover what aspects of interactive television are appropriate for local television stations during their news broadcasts. This will be accomplished by applying the data found in the literature review and by analyzing recent trends throughout the industry.

**RQ1:** What effect might digital convergence have on the development of interactive television services?

**RQ2:** What privacy concerns should be addressed as interactive television applications evolve?

**RQ3:** What testing and research is still required in order for local television stations to proceed with the development of interactive services?

**RQ4:** How could television stations work together in order to advance the growth of the interactive television industry on a local level?

**RQ5:** Which interactive advertising format might be appropriate for local television stations to adopt for their local news broadcasts?

**RQ1: What effect might digital convergence have on the development of interactive television services?**

There are several entertainment devices currently available that serve more than one function. Gaming platforms such as Xbox 360 and Playstation 3 are not only gaming devices, but also consoles for viewing media. They are capable of connecting to the internet and can stream movies and television programs from services such as Netflix and will soon offer content from Comcast's Xfinity service ("Microsoft Adding New Television Content," 2011). As this technology evolves, one might be led to believe that there will eventually be a single source that is responsible for all media entertainment in a household, however there is evidence that suggests otherwise.

Henry Jenkins' black box theory argues that there will not be a single device used for all media consumption any time in the near future. In his book *Convergence Culture: Where Old and New Media Collide*, Jenkins (2006) states that convergence does not refer to an endpoint, but rather a process (p. 24). In other words, the digital age has created an environment in which a host of devices like laptops and cell phones are used to find information, play games, listen to music, interact with others and much more. This interactive link between devices will not disintegrate with the creation of a black box, but rather strengthen and evolve over time.

Rather than using one-screen interactivity, local television stations could embrace the fact that consumers are using more than one device at a time by creating a multiscreen environment in which cell phones, tablets and laptops are used in conjunction with television news content. While this model is in line with Henry Jenkins' black box theory, more testing and research is required before a business model is implemented.

**RQ2: What privacy concerns should be addressed as interactive television applications evolve?**

Audience measurement is becoming more advanced as time goes on in that income levels, education, job title, county size and other market breaks are becoming important variables that advertisers consider so that they do not waste their money reaching an audience that would not be interested in purchasing their product or service. Additionally, audience measurement companies such as Nielsen are evolving how they measure ratings by including online and mobile activity. In order to acquire this level of audience detail, a sufficient amount of personal data must be provided which could potentially raise privacy concerns among audiences (Story, 2008).

Privacy is an issue that has been a subject of controversy in recent years, due in part to the development of social networking websites such as Facebook. Although these websites are optional to sign up for, social pressure creates a strong incentive for users to input their personal data such as phone numbers, email addresses, photos and more. Kate Raynes-Goldie (2010) conducted a study of 20 year-olds regarding identity, privacy and sociality in the age of Facebook. She found that every participant "...expressed concerns about some aspect of their privacy on Facebook" and "...some users engaged in subversive practices to mitigate their privacy concerns," however these concerns were primarily related to what she called "social privacy" rather than "institutional privacy" (para. 6). This means that Facebook users' privacy concerns are related more to the level of access peers have to their information than how third-parties or Facebook itself will use their information.

Raynes-Goldie also discusses how Facebook is widely popular despite privacy concerns, and how there is a social benefit for younger users in North America to upload their social life to the site. This is an important element to consider for advertisers who wish to reach the important young demographic. An interactive television service could incorporate several social networking elements to its service to attract younger users while being wary of the associated privacy issues. For example, personally identifiable information such as names and addresses could be removed from viewing data and purchasing behavior in order to help remove some of the potential privacy concerns that may arise.

**RQ3: What testing and research is still required in order for local television stations to proceed with the development of interactive services?**

Interactive television is still a relatively new medium. There are many factors that could affect its evolution and it is yet to be seen exactly how strong demand will be for this type of service. Since several major stakeholders in the cable industry are affected by its success, Canoe Ventures could shape the way the landscape develops. So far, Enhanced TV Binary Interchange Format (which is the format that must be enabled in set-top boxes and appropriate servers at headends) is enabled in over 25 million set top boxes and "[t]he goal is to get EBIF into every capable digital household," according to the CTO of Canoe Ventures Arthur Orduna (Hardesty, 2011, para. 3). The technology for widespread use of interactive television is currently being put in place and becoming ready to be utilized creatively by programmers and advertisers.

A crucial element that could have an impact on interactive television is the advancement of mobile technology. This technology is evolving at a rapid pace and it is becoming an integral part of media consumption. Apple, for example, is constantly upgrading its iPhone and iPad models in an effort to lead the way in mobile technology. They continue to reach a high level of success with their most recent release (the iPhone 4S) reaching 4 millions sales within its first three days after launch (Apple Inc., 2011). Designers of media-related mobile applications should stay current with this technology in order to succeed in making a truly relevant product. Industry trends should be heavily researched and events such as the Consumer Electronics Show should be attended in order to gain a strong perspective on the current state and future direction of the industry as a whole. When creating a new interactive platform, extensive use of focus groups and beta testers is necessary in order to determine key features to include and to eliminate bugs within the software.

Another factor that could influence the development of interactive television is government policy. As the infrastructure of broadband internet evolves, the Federal Communications Commission (FCC) has issued the National Broadband Plan which is designed to spread broadband connectivity to all Americans. According to the plan (FCC, 2010, para. 4), the government can influence the broadband ecosystem in the following ways:

1. Design policies to ensure robust competition and, as a result maximize consumer welfare, innovation and investment.
2. Ensure efficient allocation and management of assets government controls or influences, such as spectrum, poles, and rights-of-way, to encourage network upgrades and competitive entry.
3. Reform current universal service mechanisms to support deployment of broadband and voice in high-cost areas; and ensure that low-income

Americans can afford broadband; and in addition, support efforts to boost adoption and utilization.

4. Reform laws, policies, standards and incentives to maximize the benefits of broadband in sectors government influences significantly, such as public education, health care and government operations.

The specific impact of this plan is yet to be seen, but it is possible that interactive television could be affected if it uses broadband internet. The speed and availability of high speed broadband internet access will shape how many Americans view content in the future, whether it is on television or online, and overall engagement of viewers could be affected as a result. “According to the Nielsen Cross-Platform Report for Q2 2011, roughly half (48%) of Americans now watch video online, compared to 10 percent for mobile and 97 percent for traditional TV” (The Nielsen Company, 2011, para. 1).

After the major telecommunication company Comcast acquired NBC Universal, the FCC issued several conditions that must be met as a result of the deal. A portion of the conditions seem to imply that there is a concern that the quality of local content could diminish as a result of the deal. In the FCC statement released January 18, 2011 regarding the deal, it is stated that

To further broadcast localism, Comcast-NBCU will maintain at least the current level of news and information programming on NBC’s and Telemundo’s owned-and-operated (“O&O”) broadcast stations, and in some cases expand news and other local content. NBC and Telemundo O&O stations also will provide thousands of additional hours of local news and information programming to their viewers, and some of its NBC stations will enter into cooperative arrangements with locally focused nonprofit news organizations. Additional free, on-demand local programming will be made available as well (p. 3).

It remains to be seen what effect the Comcast-NBC deal will have on the quality and availability of locally produced content, however it seems that the government and public as a whole are concerned about its future direction.



**RQ4: How could television stations work together in order to advance the growth of the interactive television industry on a local level?**

Currently in various cities across the United States, local television stations are combining resources such as helicopters and cameras in order to save money when creating news packages (BusinessWire, 2008). This is known as the Local News Service (LNS). Each participating station is free to edit the stories as they please, and they can still provide their own unique in-depth coverage to stories when they feel it is necessary. This allows the stations to maintain an identity while using resources efficiently. Similarly, local stations could pool resources together to create a local interactive television marketplace. In addition to cutting expenses, a consistent marketplace would also help each involved station incorporate more adequate benchmarks in terms of audience measurement when comparing themselves to competitors. As the interactive television environment becomes more standardized, there will be more clarity about how the involved parties could grow within it.

**RQ5: Which interactive advertising format might be appropriate for local television stations to adopt for their news broadcasts?**

The interactive advertising formats that should be considered by local television stations can be found in Table 2 of the Literature Review. These formats include impulse response, dedicated advertiser location (DAL), and telescopic format. The impulse response format would create an opportunity for viewers to take advantage immediately of an offer made by an advertiser. This would be appropriate for a local business to

utilize because it creates an incentive for viewers to act immediately in order to purchase goods and services from a business nearby.

For example, if a family-owned restaurant would like to increase its number of weekend customers, it could create an interactive ad that allows viewers to request a coupon to be sent to them via email. This would theoretically benefit the local restaurant by creating a more valuable advertisement, in that it provides an incentive for the viewers to act quickly to receive their discount. Additionally, a local station could benefit because advertisers may be willing to spend more when metrics such as audience engagement are included in their ad buys (Marich, 2008).

Two quickly growing companies that could find use of this service are Groupon and LivingSocial, which are popular websites dedicated to offering discounts to many consumers at one time. LivingSocial in particular seems interested in becoming involved with more media as they have recently signed a deal with Clear Channel (Sisario, 2011).

Dedicated advertiser location (DAL) ads and telescopic ads may be less appropriate for local news broadcasts. DAL ads require more effort from users to access information by bringing them to informative pages while telescopic ads take viewers away from content. This may be too much of a distraction for local news viewers who prefer to watch news broadcasts live as opposed to recording it and watching it later. In fact, according to a study by Frank N. Magrid Associates, Inc. (2010), only 17% of adults

between the ages of 25 and 54 who watched each genre<sup>3</sup> twice a week or more during the last 30 days have recorded local news to be viewed at a later time (p. 13).

It is possible that some viewers would like to access extended content on a news story that interests them via the telescopic format. The following chapter introduces an example of an interactive television application that could be used by local television stations. It avoids the problem of interrupting content with extended ads by utilizing mobile device features in conjunction with live content.

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<sup>3</sup> Includes broadcast prime time dramas/sitcoms, broadcast network prime time reality TV, cable network prime time dramas/movies, sitcom reruns, informational talk shows, local TV news, entertainment talk shows, broadcast network news, cable news, entertainment news, game shows and court shows.

## **Chapter 4: Conclusion**

There are several levels of interactivity (one-screen, two-screen, three-screen, etc.) and ad formats (impulse response, dedicated advertiser location, telescopic, etc.) that local broadcasters must consider if they wish to incorporate an interactive application into their news broadcasts. Due the high number of people who use laptops or mobile devices while watching television, multiscreen interactivity may be an effective concept to be utilized during local news.

Multiscreen interactivity would create a telescopic environment in which users are provided immediate additional content on their devices without being taken away from their live television programs. Furthermore, programmers could use the impulse response format by sending users a link to their mobile devices during advertisements that would offer a coupon for a product or service. If this application is successful, it could help create a more engaged audience, which advertisers may be willing to pay a premium for, and could ultimately generate additional revenue for the local television stations. For the purposes of this thesis, a fictitious example of such an application is described below.

### **4.1 Example of Local Television Interactive Application<sup>4</sup>**

This product would be available as an application for mobile devices such as Apple's iPhone and Motorola's Droid. It would allow users to interact with programming through "pop-up bubbles" that appear on the device's touch screen in real-time. Programmers would have the opportunity to input information regarding their

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<sup>4</sup> This example is a creation of the author of this thesis.

shows to be displayed through the app at certain times. Bubbles could be designed to include links to websites as well as portals to additional text and video. In addition, users of the application would participate in surveys, polls and voting scenarios with opportunities to leave comments on programming. The results of these activities could be analyzed and discussed immediately on-air, which would theoretically create a more engaged audience.

In addition to programming benefits, there would be significant advertising implications as a result of the implementation of this application. “Interaction with ITV ads has positive effects on awareness and net positive thoughts, which increase purchase intentions compared with the influence of regular ads” (Bellman, Steven, Schweda, Anika and Varan, Duane, 2009, p. 14). By using this application, advertisers would have the opportunity to distribute their own bubbles at the same time their commercials are displayed on television. These bubbles would display text that is related to the product advertised, links to their website, extended video footage, etc. There would also be an opportunity for users to request more information via e-mail, ask for a sample of a product or even make a direct purchase. Additionally, the application service itself could be sponsored.

Although many local stations already have their own mobile applications, most do not synch with live television broadcasts in real-time. Instead, they offer a service similar to their websites in which users can read news stories and view video footage on-demand. This interactive television application would serve as a tool for multiscreen interactivity, in that a mobile phone would be used while viewing a separate television screen at the

same time. This would provide an opportunity for businesses to reach a more engaged television viewer, which could lead to higher advertising revenue for programmers.

NBC 10 in Philadelphia, PA is an example of a local station that could benefit from this application. On Friday, April 2, 2010, the station aired its 6PM news. It began with a report by Chief Meteorologist Glen “Hurricane” Schwartz who described the recent good weather in the Philadelphia area. As a story such as this is discussed, a satellite image could be made available through the interactive application by sending users a bubble with a link to the location of the weather report on NBC 10’s website. Users would then be able to analyze this information on their handheld devices as it is discussed on-air. The same idea could be implemented later in the broadcast when the seven day forecast is presented or during the traffic update.

Other types of news stories could take advantage of the application as well. For example, NBC 10 reported on a murder during its April 2<sup>nd</sup> broadcast. As the suspect’s mug shot is displayed on the screen, a link to a written article regarding the investigation could be sent to users of the application. This would provide television viewers immediate access to additional information if they see a story they are interested in during the news broadcast.

There is a significant commercial benefit to this application. Advertisers would be capable of submitting information regarding their website or promotional opportunities, and this information would then be sent to users’ mobile devices exactly when their commercials air on television. For example, when NBC 10 airs a commercial for the Philadelphia Museum of Art, a bubble could be sent in real-time to those who are

using the application that would give additional promotional information regarding a current gallery or a link to the museum's website.

Advertisers would at times have opportunities to promote their products or services during news broadcasts themselves. During the seven day forecast on April 2<sup>nd</sup>, a banner ad for Marvin Windows and Doors was displayed on-screen. The application would be able to send users a link to this advertiser's website as its logo is displayed on television. This could create an environment where users would be able to access additional information and an opportunity to make direct purchases.

This application takes into account The Nielsen Company's (2011) conclusion that "seventy percent of tablet owners and 68 percent of smartphone owners said they use their devices while watching television..." by linking content between screens (para. 1). Any of the three main interactive ad formats (impulse response, dedicated advertiser location and telescopic) could be utilized through this application. Impulse response would allow users to respond to an offer immediately. Dedicated advertiser location format would provide users immediate access to an informative webpage on their device that contains information on the products and services of their choice. Finally, telescopic ads could provide users extended commercials and long-form content that would not be possible during a normal thirty second television ad. Given the fact that the extended video plays on a device that is separate from the television, the problem of displacement (where users are taken away from live television content) is eliminated. Testing and research is required before this application is introduced, however, it has the potential to become an informative, entertaining and lucrative supplement to local news broadcasts.

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