Exploring Social Media Scenarios for the Television

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Abstract

The use of social technologies is becoming ubiquitous in the lives of average computer users. However, social media has yet to infiltrate users' television experiences. This paper presents the findings of an exploratory study examining social scenarios for TV. Eleven participants took part in the three-part study that included in-home field visits, a diary study of participants' daily usage of TV and social media, and participatory design sessions. During the participatory design sessions, participants evaluated and discussed several paper wireframes of potential social TV applications. Overall, participants responded to most social TV concepts with excitement and enthusiasm, but were leery of scenarios that they felt violated their privacy.

Introduction

Whether in the form of blogs or online social networks, social technologies have become increasingly prevalent in the lives of average computer users. Millions of people around the world login to MySpace, Facebook, and countless other social network sites to share their lives with others and keep tabs on their friends and family. It is estimated that there are over 215 million registered accounts of social network sites around the world [8] and more than half of American teens use these sites [7]. Now more than ever, computers and mobile devices have become more than mere productivity tools and have emerged as facilitators of social interaction. Even as social technologies have become more ubiquitous in users' daily lives, they have yet to infiltrate the screen in the living room – the television. How can traditional TV watching and social technologies come together? Moreover, are users of online social networks interested in a TV experience that is supplemented by social technologies?

An exploratory study examining social scenarios for the television was conducted April – May 2007. Eleven participants took part in the three-part study that included in-home field visits, diary study, and participatory design sessions. The goal of the study was to understand how social media currently fits in participants' lives, gauge their interest in potential social TV features, and understand their concerns for such features. This paper discusses related research in combining TV and social technologies, presents the study's research methods, introduces the participants and their defining characteristics, and summarizes the study's findings in terms of the participants' current TV and social media usage and their interest in social scenarios for the TV.

Related Work

In recent years, a great deal of research has been conducted around the use of blogs and online social networks. Studies exploring social television applications have been fewer in number, likely due to the limited availability of such applications in consumers' homes. Regan and Todd investigated integrating instant messaging with TV and found that users enjoyed using IM while watching TV [11]. However, users wanted the ability to limit which of their IM contacts could contact them while watching TV [11]. Oehlberg et al analyzed the social rules and practices of TV watching in a group setting and tested a social TV concept where distributed groups watched the same program and communicated with one another through an audio link [10]. Using a similar prototype, Harboe et al conducted an in-home trial where participants seated in different rooms could watch the same TV program and communicate through microphones [5]. The trial participants saw value in the social TV prototype and some found it similar to watching TV with others together in the same room [5]. These studies focused on integrating real-time synchronous communication (instant messaging or voice chat) with TV watching. This paper, on the other hand, considers a number of concepts that employ indirect TV-mediated communication such as sharing program recommendations and one's TV viewing history.

Research Methods

The study included three phases: in-home field visits, diary study, and participatory design sessions (see Figure 1). During the week of April 23 – 27, 2007, eleven participants were visited in their homes in the San

Francisco Bay Area by at least one Microsoft interviewer. Over the course of approximately two hours, they were interviewed about their TV watching habits and their experiences with social technologies. They demonstrated some of the features of their TV services and how they typically use social media websites. Participants also provided tours of their homes, where they showed and described their various entertainment systems and devices and personal computers.
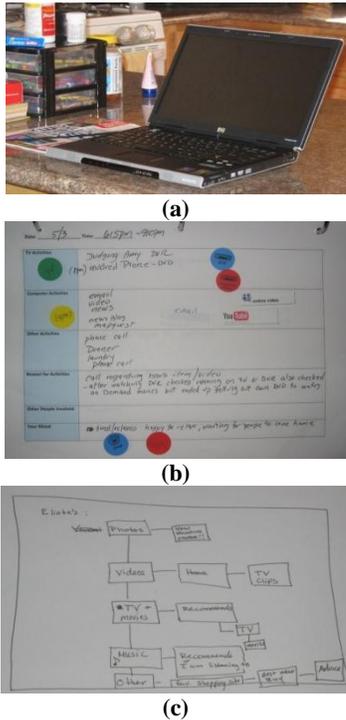

(a)

(b)

(c)

Fig. 1: *The study was composed of three phases: in-home field visits (a), diary study (b), and participatory design sessions (c).*

At the end of each field visit, participants were provided with a paper diary to keep track of their TV viewing and usage of social technologies. Each diary entry page included space to record TV activities, computer activities, other activities, reason for activities, other people involved in the activities, and the participant's mood during the activity. TV viewing activities tracked included interacting with live TV, digital video recorder (DVR), video-on-demand, and watching video rentals. The diary included instructions, activity entry pages, and stickers for various social media services, entertainment devices, and moods. A sample entry was also included to guide participants. Participants were asked to keep track of every instance of these activities for seven days, starting April 30 and ending May 6.

Lastly, each participant took part in a participatory design session the week of May 7 – 11 at the Microsoft TV Usability Labs in Mountain View, CA. During these one-hour sessions, participants reviewed their diaries from the previous week, designed a service that combined TV and social media features, and evaluated and discussed paper wireframes to various social scenarios for the TV. After reviewing each wireframe, participants completed an abridged version of the desirability toolkit exercise, where they described the wireframes by selecting from a list positive and negative words [2].

Qualitative data from all three phases of the study was analyzed using affinity diagramming [3]. The affinity diagrams helped in identifying core patterns of usage behavior and user requirements. Tag clouds, lists that display tags in differing sizes based on their popularity, were used to analyze the data from the desirability toolkit exercise [4].

Profile of Study Participants

Eleven participants with varying experiences with TV services and social media were recruited to take part in all three components of the study. They were recruited for their interest and current participation in social media. Participants ranged in age from 27 to 57 and were employed in a variety of professions including human resources, education, information technology, and car racing. Table 1 offers a detailed overview of the participants' defining characteristics.

#	Age	Gender	Occupation	TV Service	Social Media
P1	33	Male	University registrar	Digital Cable with DVR	YouTube, Newsvine, MySpace, minivan forums
P2	53	Female	Actress	Analog Cable	YouTube, MySpace, Yelp, TV forums
P3	50	Female	Homemaker	Digital Cable with DVR	MySpace
P4	57	Female	Cooking instructor	Satellite with DVR	Yahoo! Answers
P5	43	Female	Recruiter	Satellite with 3 DVRs	MySpace, Friendster, YouTube, Yahoo! 360
P6	54	Male	Race car driver	Satellite with DVR	YouTube, Xbox Live
P7	36	Male	System administrator	Satellite with 3 DVRs	Yelp
P8	27	Male	Computer hardware salesperson	Digital Cable	Xbox Live, gaming forums, MySpace, Blogger
P9	36	Female	HR generalist	Digital Cable	Xanga
P10	37	Female	Event planner	Digital Cable	YouTube, MySpace
P11	56	Male	Web designer	Satellite with DVR	YouTube, Orkut, LinkedIn

Table 1: *Overview of participants' key defining characteristics.*

TV as a Social Medium

For all participants, TV watching rarely occurred alone, even in households with multiple TV sets. Most participants watched TV with immediate family members on an almost daily basis. Watching TV with others generally impacted the type of content watched. P7, P8, and P1 watched cartoons and children's programming with their young children, while P5, P3, and P11 watched certain programs that appealed to their teenagers. P3 described her daily routine that included watching TV with her teenage daughter when she returned home from school. P3 appreciated having this TV time and even referred to it as spending "quality time" with her daughter.

Watching TV with friends and extended family members occurred on a less frequent basis. Several participants cited inviting others to watch TV in their homes or attending TV parties at the homes of friends and family. These events usually occurred once or twice a year and were around a major TV event such as a major sporting event, the *Academy Awards*[1], or a season finale. Participants felt that TV served as a backdrop in these social gatherings. Some participants watched TV with friends on a more frequent basis. P8 invites his friends over every Thursday night to watch *UFC*[2] fights. He also orders fights through pay-per-view once a month, which he watches with friends. P6 invites friends to watch TV (recordings from his DVR) on a weekly basis, usually after an evening out. Similarly, P5 invites friends over on a monthly basis to watch a movie after dining out. "We're the crash house," she says, in reference to these monthly TV gatherings at her home.

Most participants found out about new programs to watch through friends, family, and co-workers. Several participants also discussed TV programs with friends and family over the phone. P3 mentioned learning of the HBO program *Entourage*[3] through a phone conversation with her sister; while P4 regularly calls her father to notify him of programs she is watching and might be of interest to him. In her diary, P3 cited switching to a different program after receiving a phone call from her son recommending that program. P6's friends call him to discuss the technical plausibility of *CSI*[4] plotlines. P2 described calling a friend while watching a program:

> "It was during watching *Project Runway*[5] . . . I had a friend of mine and we would call each other during each commercial to assess what just happened."

Whether watching TV with family members, finding programs through other people, or talking to friends and family about TV programs, TV already serves as a social medium for these participants.

Social Software Usage and Behaviors

Participants used a variety of social media services including YouTube, MySpace, Xbox Live, Yelp, Blogger, and Xanga. Most participants used these services, particularly MySpace, to keep in touch with friends, family, co-workers, and acquaintances. For most participants, using MySpace usually involved reading new messages and comments on their profiles, browsing the profiles of friends, and reading the blogs of others. Several participants noted that they only checked MySpace when prompted via an email from the website (usually when they received a new message). Those participants (P7, P2, P11) who used Yelp regularly, used it to find reviews of restaurants and other services but did not contribute new reviews to it (except for P7). Several participants also mentioned contributing to online discussion forums related to their hobbies and interests, including forums related to TV programs. P2 reads posts from the online forums for TV programs such as *Dancing with the Stars*[6] and *So You Think You Can Dance*[7], P1 regularly posts to a minivan club discussion forum, and P8 participates in gaming forums.

Participants did not all use the same services but YouTube and MySpace were the most frequently used. Most participants maintained accounts on multiple services, several of which they rarely used, used only once, or had abandoned. Friendster and Yahoo! 360 were most often cited in this category of usage. For some participants, including P8, P1, and P10, using social software was part of a daily routine that usually also involved routine online tasks such as checking email and reading news headlines.

> "If I were 20 years younger, I'd use it." – P5, regarding MySpace

P6 and P11, on the other hand, used social media primarily for professional reasons. P6 used Xbox Live for racing simulations and instructing his students, while P11 used Orkut and LinkedIn to maintain his professional contacts and land leads for contract jobs.

Participants mostly communicated with family and friends, but several also noted communicating with people whom they did not know in real life. Through discussion forums, P2 and P1 regularly communicated with people whom they did not know. P8 plays multi-player games with friends on Xbox Live on a daily basis. His friends include both people he has met in real life and others whom he only knows through Xbox Live and gaming forums.

[1] http://www.oscars.org/
[2] http://www.ufc.com/
[3] http://www.hbo.com/entourage/
[4] http://www.cbs.com/primetime/csi/
[5] http://www.bravotv.com/Project_Runway/
[6] http://abc.go.com/primetime/dancingwiththestars/
[7] http://www.fox.com/dance/

Participants' levels of engagement in these social media services and online discussion forums ranged from creating and sharing new content, finding and sharing content created by other users, to consuming content created by others. Observed in a variety of social media, Horowitz characterized these three tiers of users as creators, synthesizers, and consumers [6]. Figure 2 illustrates the three tiers of social media engagement and each participant's level of engagement. Making up a small percentage of users, creators are the most active and engaged users, creating and sharing new content on a regular basis [6]. Synthesizers generally do not create new content, but may add to it, actively look for it, and share it with others [6]. Consumers make up the majority of users and only consume the content created by others, rarely creating new content, adding to it, or sharing it [6]. In online communities, consumers are often referred to as lurkers, those users who "lurk" in communities, reading discussion threads but never contributing to them [9]. Of those interviewed, P8 was by far the most active user of social media services, using multiple services on a daily basis, and the only one that could be referred to as a creator. Along with playing multi-player games on Xbox Live, he also maintained a blog through Blogger, shared online videos with others, maintained a MySpace account, and read other blogs and posted blog comments. P1, P9, and P10 could be classified as synthesizers. Both P1 and P10 regularly shared online videos with others, P10 occasionally posted comments on MySpace, and P9 regularly commented on her friend's Xanga journal. The remaining participants (P2, P3, P4, P5, P6, P7, and P11) were all consumers of social media, rarely generating new content, contributing to it, or sharing it.
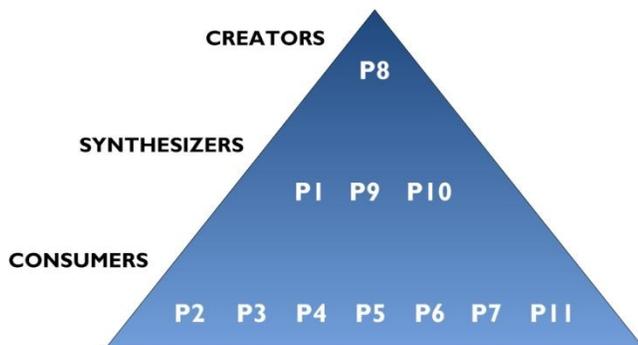

Fig. 2: *The participants' levels of engagement in social media varied from consuming media created by others, synthesizing media created by others, and creating original media.*

Online Video Usage and Behaviors

Overall, participants spent more time watching online videos than participating in other forms of social media. All participants watched videos online through YouTube, news websites, movie websites such as Rotten Tomatoes[8]

and Moviefone[9] (for movie trailers), or TV network websites including ABC.com, VH1.com, and Fox.com. Most participants watched online videos several times a week, while others browsed YouTube on a daily basis.

YouTube was the most popular venue for locating online videos. Participants enjoyed browsing YouTube because of its expansive collection of videos. Participants used YouTube to find long tail [1] content and clips from TV programs. Long tail content that participants specifically looked for included humorous user-generated videos (P8, P1, P11), rabbit videos (P10), cat videos (P2), video game walkthroughs (P8), and racing clips (P6). Along with the variety and breadth of its content, participants liked the user-generated aspects of YouTube videos:

> "There are people as insane as you out there [on YouTube]." – P2

> "[YouTube is] people sharing little pieces of their lives." – P10

Browsing and finding video content followed a consistent pattern for most video websites, except for YouTube. When looking for videos on news, TV network, or movie websites, participants followed a directed approach, generally finding videos that accompanied articles they were reading or directly visiting a network or movie site to watch a specific episode or movie trailer. Finding and watching YouTube videos was far more spontaneous, largely due to YouTube's viral nature. Much of the YouTube videos found by participants were sent to them by friends, family, or co-workers. Along with receiving YouTube videos through email, P2, P1, and P8 were also referred to YouTube videos via message boards. A link to one YouTube video usually initiated browsing the site for other content, often prompted by the links to related and popular videos.

> "I'll look what's out on the main page. If there is anything interesting, just to check in, and then I'll check it out. I'll check out that video. But usually that leads to something else and that leads to something else. . . Once I see one video, they always offer a few more videos . . . If I have the time, I'll start checking out what's out there. Again, one thing leads to another." – P1

Several participants found that they can easily lose track of time watching YouTube videos. Both P10 and P11 stated that they attempted to limit their time on the website.

> "I can spend hours watching YouTube. I usually limit it to 30 minutes." – P10

Nonetheless, several complained about the poor video quality of YouTube videos. Most participants expected low video quality of YouTube videos due to their user-generated nature. P2 even remarked that the video quality

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[8] http://www.rottentomatoes.com/

[9] http://movies.aol.com/

of YouTube videos is attributed to the quality of the original videos submitted by YouTube users.

> "You can only watch so much of it." – P3, regarding the video and content quality of user-generated videos on YouTube.

Participants (P7, P10, P1, P9, P5) who watched TV through network sites did so when they missed an episode of a program (and that program was not available through video-on-demand, they forgot to record it, or could not record it due to a DVR conflict) or when they are unable to watch it on their TV (due to travel, being at work, or unavailability of the TV due to another member of the household watching something else). Both P7 and P1 remarked that they would rather watch these programs on their TV instead of the computer, since their TV screens are larger. P10 even wishes that she had purchased a better quality video card for her laptop, given how often she watches videos on it. ABC.com was the network site most frequently used by participants (P10, P1, P5).

Two participants (P1, P10) compared and contrasted the video quality and type of content offered by YouTube and ABC.com. P1 expected "homemade" content from YouTube but "highly polished" content from ABC.com. Similarly, P10 finds ABC.com to be "slick and professional" and YouTube to be "homegrown" but "more entertaining and heartwarming." Both P1 and P10 complained that ABC.com does not offer all episodes of a particular program and wished that more programs were available online. P10 also noted that YouTube is easier to use and only requires one click to play a video, whereas ABC.com requires a more involved ("cumbersome") interaction model.

> "It's one thing to go on YouTube and look at all these videos but it is another thing to get broadcast content on the computer . . . With YouTube you have this expectation that a lot of the videos are short clips and they're all mostly homemade. But when you go to a site like ABC you expect it to be highly polished." - P1

> "I think the ABC.com video quality is great and the YouTube video quality is great for the fact that people are posting from all over the place. YouTube is more entertaining. I don't feel like I'm being sold on something as much. With ABC if they didn't have a show that I'd like to watch, I probably wouldn't go to ABC.com. YouTube is homegrown entertainment and ABC is slick and professional. YouTube is heartwarming." - P10

For most participants, online video consumption did not necessarily constitute a social activity. Participants rarely commented on YouTube videos or used the site to maintain or form relationships. Nonetheless, all participants have shared videos with others at least once. Sharing videos mostly occurred through email, although both P1 and P8 post videos to message boards and P8 also

posts them to his blog. P10 noted that she would share YouTube videos more often if the sharing process was easier to do. She only recently realized that she could cut and paste the video URLs into an email.

Posting original videos to YouTube was rarely done. P1 was interested in uploading family videos to YouTube but felt that it required too much work. P2 has been considering posting her own videos of her cat but is concerned that she will find the process to be too frustrating.

Reactions to Social Scenario Wireframes

During the participatory design sessions, participants reviewed paper wireframes of several potential social scenarios around TV. After reviewing and discussing each scenario and set of wireframes, participants completed an abridged version of the desirability toolkit, where they circled three positive and three negative words regarding the scenario [2]. Figure 3 summarizes and aggregates participants' selections for all wireframes presented. Overall, participants responded to most scenarios with excitement and enthusiasm, selecting positive words such as *fun*, *desirable*, *innovative*, *collaborative*, and *easy to use*. Several participants even inquired about the availability of the concepts to consumers:

> "When can I get it? I want the toy!" – P5

> "I'd love to play with it." – P11

At the same time, participants found some features to be *undesirable*, *not appropriate*, and *overwhelming*. Participants' reactions to each specific set of wireframes and scenarios are discussed in the next sections.

Fig. 3: *This tag cloud summarizes and aggregates participants' desirability toolkit word selections for all social prototypes presented. Positive words are in blue while negative words are in red. The size of each word corresponds to the number of participants who selected that word.*

Send and Receive Recommendations

Participants were presented with two recommendation scenarios: recommending a program to a friend or family member after watching it and selecting a program to watch after receiving a recommendation from a friend or family member. Of all the wireframes they reviewed, participants

were most interested in the two recommendation scenarios. Participants perceived the recommendation concept as innovative and liked the idea of sending an entire episode to another subscriber's set-top box. They also responded well to being able to schedule a recording based on a recommendation. Some participants expressed concern about being able to send recommendations to friends and family members who were not subscribers of the same service. In that situation, they felt that their friends and family should receive an email with information about the recommended program. Four participants (P7, P11, P10, P6) mentioned wanting to make recommendations more personalized by adding a personalized message to each recommendation. Without doing so, they felt that the recommendation may be perceived as spam or appear impersonal.

> "I love that. That's a great idea. . . I like the idea of sharing what I've watched." – P10

> "If you could send an entire episode that would be great. . . I could have used it yesterday." – P3

> "That's pretty cool. I like that. . . . It's a very innovative fun way to share programs." – P9

At the same time, participants were concerned about the number of recommendations they would receive and the quality of those recommendations. Several participants stressed that their TV watching should not be interrupted by incoming recommendations. As with Regan and Todd's [11] findings, participants also wanted a way to block recommendations from certain contacts and to ignore recommendations for specific programs.

> "I have friends who'll recommend things all day long." – P7

> "I don't want to be told what to watch. . . My tastes are very specific." – P2

> "There should be a way to say 'don't bother.'" – P11

Send and Receive Bookmarks

Participants reviewed wireframes for a bookmarking concept where they could select parts of programs and clip them. They were told that they could save these clips for themselves to return to at a later point or send and receive clips from family and friends. Most participants showed interest in this concept. Nonetheless, several anticipated that the feature could be difficult to use and cited that such a feature would only be desirable if it was easy and simple to use:

> "That's cool, too. I'd like to do that. I've wanted to do that with my DVR but it seemed complex." – P1

> "That'd be cool if it was self-contained and easy . . . It might be too technical or confusing for some people." – P11

> "I like it a lot. I'd love to have a simple facility to do that." – P6

> "I have a feeling it would be too technical." – P2

Participants noted that the concept could work well with programming that features different sketches or separate segments, citing programs such as *Saturday Night Live*[10], *Late Night with Conan O'Brien*[11], *The Daily Show*[12], and *American Idol*[13]. Several participants even compared the idea to YouTube, citing that it served a similar function. P6, P11, P1, and P2 all mentioned that they were more likely to use such a feature for their own benefit (to save specific parts of programs instead of entire programs) and less likely to share those clips with others. As with recommendations, participants felt that the feature could become overwhelming if they received too many clips and wondered how the feature would work with their friends and family who did not have the same system.

Rate Programs

Participants were also asked to consider the ability to rate programs on their TV set after watching them. Participants had mixed reactions to rating programs. Most felt that rating programs would only be beneficial if they received accurate program recommendations based on their ratings. These participants had previously rated movies with services like Netflix[14] and saw value in doing so:

> "I think that's excellent. I did it when I was in Blockbuster and Netflix for videos. I relied on the ratings from the whole Blockbuster [or] Netflix community to choose movies that I wouldn't necessarily go for." – P1

> "I do that with IMDB and Netflix." – P11

Other participants were concerned that the recommendations would be inaccurate and unreliable and that rating programs would be too time consuming. Some saw value in learning about how users of the same system rated programs, while others had no interest in reviewing community ratings and would rather see ratings from their friends and family.

> "If I'm forwarding it to my friends, I'm only going to give them the good ones. It is kind of pointless to have a rating system. . . It's just another thing to sift through." – P9

Participants' skepticism of rating programs could be attributed to a form of rating fatigue. They are frustrated by the pressure to rate books, music, movies, and services on various websites. At the same time, the effort involved in doing so may not lead to an equitable return.

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[10] http://www.nbc.com/Saturday_Night_Live/
[11] http://www.nbc.com/Late_Night_with_Conan_O'Brien/
[12] http://www.thedailyshow.com/
[13] http://www.americanidol.com/
[14] http://www.netflix.com/

"The only time I rate things is when it will lead to recommendations. . . . On my iPod, rating my stuff is a complete waste of time." – P10

Online Community

The idea of a TV-themed online community was also discussed during the participatory design sessions. Through this community, users could share their TV viewing history and favorite programs with family, friends, and others, meet new people who watch the same programs as they do, post reviews of programs they have watched, and discuss their favorite programs with other people. Most participants were not interested in joining a TV-themed online community or social network. All participants felt that such a service would be overwhelming. A majority of participants felt that an online community would be of more interest to younger users:

"This is great for a kid." – P6

"I could see my kids getting into that." – P3

"I don't have a MySpace . . . I think it [this concept] is younger than me. It feels like it could be a lot of work." – P2

"I think I'm old and frumpy. I think this would probably be attractive for someone who is younger and looking to expand their base of friends. I don't have enough time to spend with the friends I already have. I'm not going to look for new ones!" – P5

Several participants were concerned about their privacy and cited that they had limited time to devote to online social networks. One participant (P10) stated that such a feature would only be of interest to her if her friends and family were also participating in it. Some participants did not feel that TV offered enough common ground to warrant new relationship formation:

"I'm not trying to make friends through TV." – P4

"For me the websites like Xanga they're more about what's going on with you than what's going on with TV. . . . A social webpage - it is social not TV." – P9

Now Watching

Lastly, participants were introduced to the Now Watching concept, where they could share what they are currently watching with others and also view what their friends and family members were watching. The concept mirrors the functionality of Last.fm[15], where users share the track information of the music they are currently listening to and their historical music listening behaviors and patterns. Despite the popularity of Last.fm with music fans, the participants of this study strongly rejected this idea. They found the scenario to be extremely invasive and were very

concerned about their privacy, several comparing it to being watched by "Big Brother:"

"Oh my God! No, that makes me really nervous. Big brother. That would cause me to not get it." – P3

"That's scary! That's pure scary! I wouldn't want to know what people are watching sometimes and I'm sure they wouldn't want me to know. I wouldn't want everybody to know exactly what I'm watching at any given moment. It is easy enough to shout out to people and tell them what you're doing but for them to peer into your living room?" – P1

"Terrible idea. I have no intention of letting them know what I'm watching. What if I'm watching porn?" - P6

"I maybe curious about other people but it seems invasive. What if someone is watching porn or a guilty pleasure?" – P11

"I don't think it's anyone's business what I'm watching." – P2

"No! That's just too much big brother is watching. That just sounds all bad to me. Not that I watch porn but what if you're watching porn on Cinemax in the middle of the night?" – P9

Even participants who liked the concept and were not concerned about their privacy, wanted the ability to turn it off at times:

"It seems pretty cool . . . I like the idea . . . But I want to be able to turn it on and off. Maybe I don't feel social." – P8

"I'd be fun to see what someone else is doing . . . There is voyeurism involved." – P5

These comments raise an important question – if music fans are willing to share information about their listening habits with others, why are TV viewers so reluctant to share their TV viewing history? Although tastes in music differ between people, one's choice of music does not usually reflect negatively on her character. However, watching pornography has societal implications about one's morality. Observing one's TV viewing history may also raise questions about his interests, particularly if they are perceived as deviant. Unlike listening to music, watching an excessive amount of TV is culturally less acceptable and conjures the stereotypical image of the "couch potato."

Conclusions and Future Work

Whether offering a shared entertainment experience or common ground to elicit conversation, TV watching is already a social activity. The convergence of television and social media is an exciting prospect for researchers and one that is also of interest to users. Even those users who

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[15] http://www.last.fm/

are not actively engaged in creating social media are actively using social software to consume content on a daily basis. Regardless of their level of engagement in social software, this study's participants reacted to most social TV scenarios with overwhelming enthusiasm.

However, TV is rather different from other forms of media. Not all social concepts that have been successful online or in the mobile space will work with TV. Participants shied away from scenarios that they perceived to be encroaching on their privacy and violated their current mental models of TV. Despite its social nature, there is a private aspect to TV that people want to preserve. In some cases, they may be embarrassed by the cultural implications of their content choices or the amount of TV they watch on a daily basis.

Along with users' preconceived notions of TV, there are also logistical constraints that make TV different from other media. Unlike a mobile device or an online profile, TV tends to be part of a shared space and is a shared device, used by various members of a household. Social media scenarios usually follow a one to one model (e.g. one user recommending a movie to another). How would a recommendation be perceived when multiple individuals in a household receive it? Will TV viewers want separate personal profiles in order to use these scenarios? How will these profiles function when multiple individuals are in the same room watching TV together? Resolving these issues will be critical to advancing these scenarios from paper wireframes to a functional TV system in the living room.

The next steps for this research include developing a functional prototype to be evaluated in home environments and among friendship groups. The study presented in this paper took place in the San Francisco Bay Area, a region known for technology breakthroughs and early adopters of technology. Even though the participant pool varied in technical aptitude, it is possible that these participants were receptive to social TV scenarios due to their exposure to information technology in the region. Future studies should take place in other geographic regions that do not exhibit the same level of technology adoption as the San Francisco Bay Area.

Acknowledgments

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