

## Chapter 3.10

# Getting to Know Social Television: One Team's Discoveries from Library to Living Room

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### ABSTRACT

This chapter presents results from an ongoing social television project, in the context of other research in the field. The authors give a detailed description of the STV prototype used in their research, and summarize their studies, which provide the findings explained in the rest of the chapter. Three major research focuses are identified, namely evaluation and validation of Social TV systems, communication modality comparison, and detailed observation of user behaviors. Based on the findings in these areas, the authors list three major open questions and challenges for the field: multi-user support, new equipment requirements, and the creation of distinct and

unique social television experiences. Finally, the chapter suggests that the emphasis within social television may be moving from research to design, implementation and deployment.

### INTRODUCTION

Over the course of this decade, social television has gone from a marginal idea to a major focus area within the field of interactive TV (ITV). As members of an ongoing Social TV project in Motorola's applied research division, we have studied the issues around the subject extensively. In this chapter, we aim to discuss some of the things we have learned about social television,

point out a few major unanswered questions and unsolved problems with social television, and offer a perspective on where social television is headed. Throughout, our own research and experiences are used as a jumping-off point, complemented by findings from the growing literature on the topic.

The main part of this chapter is devoted to three big questions that have attracted much attention. We look at attempts to evaluate the effectiveness and appeal of social television experiences, and find that their potential has been largely validated, although some important misgivings remain around privacy, disruptions, and systems that do not offer full freeform communication. We next examine comparisons of different communication modalities, primarily text, voice and video. Our findings indicate that contrary to previous, inconclusive studies, text is a better communication option than voice in the context of in-home social television, while video does not appear to be a suitable option. Finally, we describe the observed usage patterns of Social TV systems. We find that in naturalistic use, conversations are not as closely tied to the TV content as has previously been thought. On the other hand, television presence provides an important link between viewing behaviors and social interactions.

Because each topic draws widely on results from all our different studies as well as from the literature, the chapter is not broken up by individual study. Instead, to provide the necessary background for the reader to assess the findings we present, and explain where we are coming from, we first describe the prototype system used in our

research, followed by a summary of the research we have conducted, before we start talking about what we have learned.

### STV: A SOCIAL TELEVISION SYSTEM

At Motorola, we have explored several different kinds of social experiences around the TV. One of the experiences that has received most attention is to allow a small group of friends or relatives to share a feeling of contact or togetherness while watching TV; a “virtual couch.” As part of this research, we have developed a series of prototypes, collectively known as STV, for use in lab and field trials (Table 1). The first iteration, STV1, consisted of a simple, single-session audio link between households, which allowed users to communicate via open room-microphones and hear their conversation partners through their television speakers, mixed with the TV audio (Harboe, Massey, Metcalf, Wheatley, & Romano, 2008a). There was no visual user interface, and the only control given to users was the ability to adjust the relative volumes of the TV audio and the voice audio using a remote control.

Later prototypes have been more elaborate, providing fully integrated Social TV systems that could be deployed in the field for extended periods of time. Since their features largely overlap (the biggest difference being an evolution in communication capabilities), we will describe them together in more detail. The main features of these prototypes are television presence (pro-

*Table 1. Versions of the STV social television prototype.*

Version	Presence	Suggestions	Communication
STV1	No	No	Voice
STV2a	Yes	Live, Future	Emoticons
STV2b	Yes	Live, Future	Emoticons, pre-defined text-messages
STV3	Yes	Live	Emoticons, text chat, voice

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