

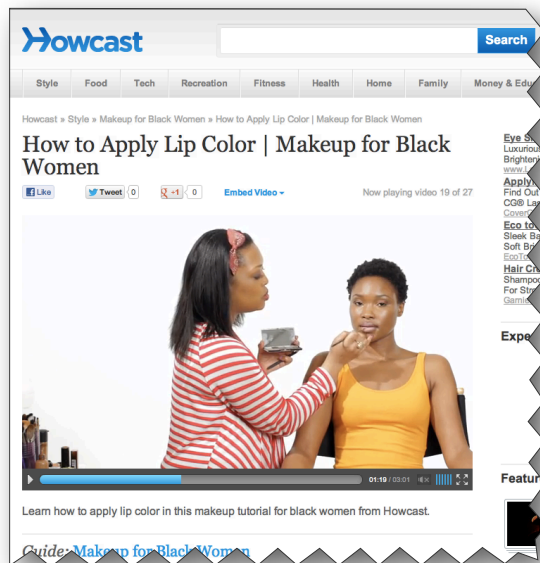
# Who makes, shares Internet how-to videos?

## Stacy M. Branham

Center for HCI, Virginia Tech  
sbranham@vt.edu

## Scott Carter

FX Palo Alto Laboratory, Inc.  
carter@fxpal.com



**How-to video example.** This is a screen capture of Howcast.com, one of several devoted to hosting how-to video content. The selected video is filed into the “style” category and explains “How to Apply Lip Color” for black women. Other categories of how-to content are “food,” “tech,” “recreation,” “fitness,” “health,” “home,” “family,” “money and education,” “relationships,” and “video games.”

## Introduction

The ways in which we come to know and share what we know with others are deeply entwined with the technologies that enable us to capture and share information. As face-to-face communication has been supplemented with ever-richer media—textual books, illustrations and photographs, audio, film and video, and more—the possibilities for knowledge transfer have only expanded. One of the latest trends to emerge amidst the growth of Internet sharing and pervasive mobile devices is the mass creation of online instructional videos. We are interested in exploring how smart phones shape this sort of mobile, rich media documentation and sharing.

For a number of reasons, the content genre that has captured our interest is the *how-to video* (see figure to left for an example). First, how-to documents tend to be succinct and relatively informal—characteristics that we think are well-suited to light-weight (both literally and figuratively) mobile capture devices as opposed to more sophisticated professional devices. Second, videos may be particularly suited to how-to instruction. They have the ability to *show* instead of simply *tell*, a quality that Wittgenstein [6] argued was essential to communicating knowledge. Third, how-to videos hosted on the Internet have recently become very popular [3], yet there is still a dearth of research to document this phenomenon (see the work of Torrey et al. for exceptions [4][5]).

## Background

We have experience building mobile applications like NudgeCam [1], which supports video recording with live feedback to positively influence video quality at the point of capture. We are also in the process of refining ShowHow [2], a mobile application which supports rich media annotation of how-to videos after they have been captured. But, we have yet to identify whether the types of systems we have made will be of practical use to current and prospective how-to video content producers.

Two studies conducted by Torrey et al. [4][5] are the only, to our knowledge, that have attempted to shed light on how-to as a genre of Internet content. The first study set the groundwork by defining how-to content and developing high-level understandings of how electronics hobbyists build, document, and then broadcast their projects. The second looked at crafting communities and focused on the ways that crafters search for how-to content. We are, however, interested specifically in how *videos* are made and used in the how-to world, an area for which Torrey et al. [4] call for more exploration.

There are many questions yet answered regarding how-to video culture. There are basic functional and usability questions about how the videos are made. Which tools are used? What role do mobile devices

## References

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play? What is the end-to-end process of development? Why is video used, and are there secondary media? What are the pain points? There are also deeper questions regarding how-to video culture that we would like to probe. What are the personal histories that drive how-to content creation and sharing? Is there a sense of community around how-to videos, and how did it develop? To what extent is how-to documentation also a form of personal documentation and identity building? We are drawn to these types of less system-centric questions because we believe that deeper character sketches will help us more thoroughly evaluate the ShowHow system concept. They may inspire new paradigms of how-to video support altogether.

## Planned Study

Like Torrey et al. [4][5], we plan to contact individuals who create how-to content and interview them. However, we will narrow our focus to those who have created *videos*. Both of the studies carried out by Torrey et al. took a relatively broad lens; they worked with over 10 participants for each study and interviewed them in one sitting for a maximum of 3 hours. Instead, we would like to have multiple interviews with a smaller set of participants. This approach will help us achieve more depth of understanding about each participant's context, practices, and motivations.

We would like to find participants who are local to us in the San Francisco Bay Area, and would ideally engage with those that make a variety of how-to videos. Torrey et al. studied hobbyists and crafters, so we may try to find, for example, cyclists and cooks. By identifying local participants, we will be able to meet them in person and ask them to show us the physical places, tools, and products of their work.

In addition to recorded interviews, we plan to gather other forms of data. If possible, we would like to observe participants in the process of making how-to videos. We might also collect pictures and videos of their workplaces and activities. We will collect snapshots of their online how-to videos and related materials. We are additionally considering asking participants to make a how-to video about how they make how-to videos. This would be useful for a few of reasons. It might help participants reflect on their process. The videos might help us communicate relevant questions during interviews. Finally, this would give us an opportunity to observe participants during video creation.

Our final product will be a set of multimedia case studies, one for each participant. This medium will allow us to capture the rich details of the individual without having to identify limiting “implications for design.” The case studies can be a source of multiple, potentially conflicting, stories of design guidance and inspiration for us as well as other designers. We will use the case studies to evaluate the ShowHow system and also guide other design efforts. We plan to begin this study in the next two weeks, so that by the time of this workshop we will have preliminary results to share.