Delivering Extension to the Living Room Using Internet TV

Abstract
Television is a widely adopted source for viewing educational information. Unfortunately, producing a television show on network television can be costly and time consuming. Internet TV offers Extension video content producers the opportunity to create a niche topic channel quickly and at low cost. Internet TV offers viewers a low-cost and comfortable way to watch educational Extension programming on their home television. As of March 2014, there have been a total of 72,063 video views on the Texas A&M AgriLife Extension Service's sub-channel within the AgSmart Roku Channel.

Introduction
Respondents to a 2007 survey of public water resource priorities indicated that television was one of the most cited sources for water resource information (Mahler et al., 2010). Unfortunately, creating a TV show or purchasing airtime on a major TV network can be costly and time consuming. The schedule for programming is also tightly controlled by a group of market leaders ("Resources: Who Owns What," n.d.). Extension video content producers are locked into a certain day and time for broadcast depending on the channel and subject matter of their broadcast. The budget for this type of professional production is usually beyond the means of any state or grant-funded Extension program.

At the same time, cable and satellite TV subscription rates have been rising. Instead of paying for these costly subscriptions, about 1.8 million people ended their cable TV subscriptions in the second quarter of 2013 (Edwards, 2013). However, most of these "cord cutters" choose to keep some type of Internet service at their residence. The Internet offers a plethora of videos to watch on popular websites, such as YouTube, Vimeo, or Lynda.com. Unfortunately, most of these videos still require that audiences watch them hunched over a smaller screen, such as a phone, tablet, or desktop or laptop computer.
Internet Television

According to Wikipedia, "Internet television (or online television) is the digital distribution of television content via the Internet" ("Internet Television," 2014). Video content is streamed from a server over the Internet to a subscriber's modem. Then it is carried to a wireless router that sends the video to a receiving device, such as a Roku Streaming Player, or Roku. The Roku sends the video over an HDMI cable to a TV.

The Roku Streaming Player

Approximately 5 million Roku Streaming Players were sold between May 2008 and April 2013 (Wood, 2013). Roku offers a system for channel creation and content distribution. Any Extension content provider can create their own Roku TV channel around a niche topic area. This type of system also offers lower start-up and distribution costs. There are fewer "gatekeepers," and the video does not have to be very high quality. Since the Roku system is fairly young, there is less competition for viewers from other content providers.

The Roku Streaming Player is also very affordable for viewers. The different Roku versions range in price from $49.99 - $99.99 ("Compare Roku Models," n.d.), and they all require an Internet connection to work. Most Roku TV channels are free to install and watch. Some of these channels are based around niche topics, such as technology, animals, Westerns, fitness, comedy, religion, and more. Some Roku TV channels, such as Netflix or Hulu, charge low monthly subscription fees of $7.99. When compared to the cost of buying a Roku and paying for Netflix or Hulu, the cost is much less than paying for the standard cable or satellite subscription fees.

Distribution of Texas A&M AgriLife Extension Service Video Content

In December 2012, the Texas A&M AgriLife Extension Service (AgriLife Extension) contracted with Two Wings Media LLC to provide access to the AgSmart Video Network. The network includes the AgSmart Roku Channel, the AgSmart.tv website, and the AgSmart YouTube channel. Two Wings Media provided the initial development and design services to create an AgriLife Extension sub-channel block within the AgSmart Roku Channel (Figure 1). They also provided server hosting and management. Most important, they already have an established audience of interested viewers subscribed to their network.

Figure 1.
AgSmart Roku Channel Interface
AgriLife Extension video content is collected from departments, programs, and specialists. Each video is categorized into one of 10 categories. These categories include AgriLife Today; Animal Science; Dinner Tonight; Horticulture; Meat Science; Rangeland Management; Soil and Crop Sciences; Water; Wildlife and Fisheries; and Texas 4-H and Youth. Each video is given a short title and description. The videos are then sent monthly to Two Wings Media for upload to the AgSmart network. Based on the current subscription with Two Wings Media, there is a 120 video limit on the AgSmart Roku Channel. An unlimited number of videos can be uploaded to the AgSmart.tv website and YouTube channel.

**Program Outcomes**

As of March 2014, there have been a total of 72,063 video views on AgriLife Extension's sub-channel within the AgSmart Roku Channel. As more and more viewers purchase Roku players and install the AgSmart TV channel, the number of video views continues to rise (Figure 2). The high numbers of video views demonstrate that broadcasting Extension video content to a niche Internet TV channel, such as the AgSmart Roku Channel, is a cost-effective way of reaching Extension clientele. For the viewers, it is a convenient, comfortable, and enjoyable way to watch educational Extension programming at home.

**Figure 2**

Total Video Views per Month on AgSmart Roku Channel (December 2012 - March 2014)
For More Information

To learn more about Texas A&M AgriLife Extension Service's Internet TV Project, go to http://internettv.tamu.edu/, or e-mail Treye Rice at tgrice@ag.tamu.edu.

References


