

: DISCOVERY CHANNEL

Interactive Television



The Discovery Channel has long been a pioneer in interactive media – both on TV and on the Web. Recently, Discovery Channel Online recognized an opportunity to demonstrate some of the ways in which interactive television can enhance TV, both for consumers and networks. Discovery Channel was producing an hour-long special feature called "Extreme Hawaii" and saw that this show would work perfectly with interactive television. Discovery chose tractor as a creative partner noting that tractor is part of Microsoft's content builder initiative. They sent us a copy of the "Extreme Hawaii" show and asked us to create an iTV application that would demonstrate some of the more appealing features of interactive television.

The demo was to be developed for use on Motorola DCT5000 interactive set top box. The DCT5000 supports Flash, making it easy to develop for, and is able to smoothly integrate web technologies like HTML and Flash, and normal television content. The application itself would have to be versatile – it would need to work both as a looping, stand-alone demo, and as an interactive application.

For the demo, we decided to use the show's first segment, which deals with the geological structure of the Hawaiian Islands, and volcanoes. We identified four main feature sets that could be smoothly worked into a versatile demo of this sort: enhanced content; commerce; travel; and Web

A Simple Interface The above and right images display the simple, minimal interface design. The main menu expands from a rotating sphere controlled by the Television remote and secondary information expands from the bottom of the television screen when being viewed.

integration. The demo's navigation would revolve around a single small, relatively unobtrusive element that would sit on top of the video footage and expand when activated by the user. The design of the navigation itself was inspired by the Discovery Channel Globe, and was built in blue so as to be readable while contrasting well with the yellow iTV highlight box.

The enhanced content portion of the demo provides extended information about the history and structure of the Hawaiian Islands, along with an expanding map that can be used to navigate the different islands and learn. We also decided to capitalize on the video replay capabilities, and captured some video footage demonstrating how a volcano forms. For the travel portion, we mocked up a set of travel options, showing how interactive television could be used to offer special travel deals to Hawaii from the viewer's local airport. The commerce and Web integration sections of the demo both connected directly with the Discovery Channel Online website. Users could navigate among any of these four areas, and go back and forth between the website and "Extreme Hawaii" with ease.

Our last task was to fully integrate the iTV demo with the video footage itself. This meant adding triggers to the video that would launch different parts of the demo – especially important since the demo had to work as a stand-alone piece. We recorded time-codes for different parts of the video and tapped one of our technology partners to encode the necessary triggers. This way someone could see how the entire demo works without having to navigate it themselves – perfect for a tradeshow like the Western Cable Show; where our work with Discovery premiered.



Results

The final demo serves as a fine illustration of the capabilities and advantages of interactive television – both for consumers and content providers. iTV will likely become increasingly popular in the years to come, and with projects like this, both Discovery Channel and tractor have firmly positioned themselves as leaders in the field.