Here's Your Sign - Summary Brief

Behaviors driven by access to flight status boards at San Diego International Airport

Overview

Airports are places filled with rules. Unfortunately, too many rules can confuse infrequent travelers. As a result, airports offer performance support through signage. A key performance support tool is the flight status board, which normally lists all arriving and departing flights with information about each.

Purpose

Through behavioral observation, this study sought to determine the effectiveness of flight status boards. Do certain demographic groups spend more time deciphering the boards? Do other distractions prevent accurate cognitive processing of the information being displayed? Most importantly, can the data point to ways in which flight status boards may be improved, thereby helping infrequent travelers?

Method

The observation protocol was configured to allow a single, outside observer to non-collaboratively collect behaviors. The data was collected during three-hour blocks on both a Thursday and a Friday. Data dimensions included temporal and basic demographic information, and follow-on behaviors such as checking a ticket or subsequent destination. A PocketPC mobile device running a customized database assisted data collection and analysis. This method helped the observer remain covert.

Findings

The airport status sign is located in a central area between two departure gates, near restaurants, the airport exit, and baggage claim. The sign serves travelers with many different needs, such as people picking up passengers, or travelers departing for flights. The sign offers a display for both departing and arriving flights, alphabetized by out-point airport name. Unfortunately, the location prevented a good correlation between sign viewing behaviors and subsequent actions.

Most people (78%) viewed the sign and departed within 30 seconds. Twenty two percent of the viewers needed to view the sign for more than 30 seconds. Many of these people scrutinized the sign for several *minutes.* Of this subset, 74% appeared confused while reading the sign, with behaviors such as scowling, frowning, looking back and forth along the sign, and pacing. Of the confused long-viewers, 33% compared the sign to a ticket, compared to only 8% of the survey population. Age, sex, and party size differences were negligible when considering this sub-set.

Follow-on studies should focus on travelers who need to view the sign for more than 30 seconds. Is the sign to blame, because of format or missing information? Do long-viewers have some kind of disability, such as poor eyesight? Or is the sign presented in a foreign language for these viewers? Personal interviews may be necessary to isolate any deficiencies with the flight status board.
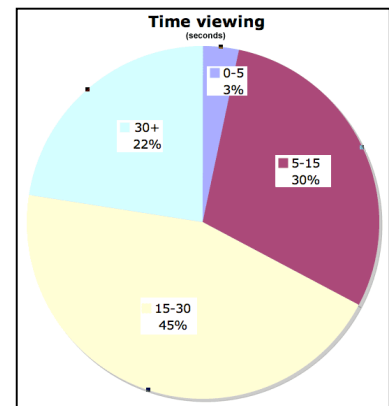
Lessons Learned

- Using an electronic collection device was definitely a labor saver. A PocketPC-enabled PDA can be configured to collect images, audio, and freeform data.
- Collection tool construction must be carefully considered, and perhaps even prototyped. For example, by moving the demographic information to the top of the collection form, the observer can time a participant while entering "administrative details".
- If the collection instrument autofills a value, beware of possible data corruption. If the tool was deployed to several assistants, it might be better to leave each collection dimension with "no value" and require a deliberate action to make each entry.
- Programming an auto-entry for date and time might also be a labor saver.