Qualitative vs. Quantitative Testing Process

Testing breaks down into two main areas: **Quantitative** (does it function correctly?) and **qualitative** (is it a joy to use?)

Quantitative testing of actual site pages should happen before qualitative. Obviously more subjective impressions about usability will be skewed if the site isn't functioning correctly. However, qualitative tests can be used as part of the site development – and run against wireframes, Photoshop designs and html prototypes for pages.

Test groups

Quantitative testing can be run in-house or by an agency. Ideally bug testing should not be carried out by the development team once they have released code, as inherent heuristic bias will cause them to not 'see' some issues.

Qualitative testing should be conducted across in-house and client user groups. In deciding the make-up of the test group, the following questions should be addressed: What is the target market? How are COMPANY X readers / subscribers currently broken down? How are new readers /customers / subscribers being targeted?

Test groups could include:

Group 1: COMPANY X staff Group 2: Friends / Contacts Group 3: COMPANY X current subscribers / readers Group 4: Target subscribers / readers / users

Test documents/methodology and deliverables

1. User profiling doc (age, gender, location, web familiarity, COMPANY X familiarity)

2. User tasks (see 'goal identification' below).

3. Usability_test.doc Users should also describe how they found the tasks (easy, difficult) What their expectations are of the site. This document should ideally be used in conjunction with <u>Silverback</u> videos, which will track the user's spoken commentary, their eye movements, and their mouse actions whilst carrying out the test.

4. Usability Matrix Logs non-descriptive results of tasks – collated by testers once each round of testing is complete.

Quantitative Tests

Top ten browsers:

Browser and OS Visits	Visits
Internet Explorer / Windows	80,268 / 40.03%
Firefox / Windows	58,550 29.20%
Safari / Macintosh	20,925 / 10.44%
Firefox / Macintosh	18,373 / 9.16%
Mozilla / Linux	6,849 / 3.42%
Chrome / Windows	4,833 / 2.41%
Firefox / Linux	3,257 / 1.62%
Opera / Windows	2,703 / 1.35%
Safari / iPhone	902 / 0.45%
Camino / Macintosh	549 / 0.27%

Source: Google Analytics

Step one is to set up test machines running each of the browsers listed above. The site should be tested on each of these, and the results posted on *trac* so that we can ensure cross-browser compatibility. Internet Explorer is the top browser used to access the site (with most users on IE7 and IE6) but features poor support for javascript and css, as well as for the .png image format.

Bugs could fall into a number of categories:

- 1. **Typography**: body text or headers fall outside of design parameters. Body text or headers include text that is too small or not legible. Copy in text areas features lines that are too long for comfortable reading (more than 12-15 words per line)
- 2. *Layout*: content is not positioned correctly, or doesn't flow properly when text is resized
- 3. Broken Links
- 4. **Javascript errors** check that ajax elements (e.g. interactive menus, issue cover carousel, etc) are functioning correctly across target browsers
- 5. Accessibility issues: e.g. Poor contrast on text, over-reliance on colour to indicate link states, poor mark-up, which will cause the site to function badly on e.g. text-readers. The site should be tested to aaa compliance using an online service like: <u>http://www.cogentis.com.au/online-free-accessibility-test.html</u>

Testers should be made aware of the above examples, and cross-check for each consistently, noting their results and saving the results of any online tests.

Step 2: Create bug-tracking threads for each of the pages on the site, numbered as in the module catalogue/sitemap.

Step 3: Assign various pages to testers. Testers should make a note of exactly which browser / OS configuration they are testing with. Here is an example of an online issue reporting form, which records which browser and OS the issue was observed on. Note that it appends each bug with information about the page, title and test setup.

Report an issue
Your Email
Please describe the bug / issue as clearly as possible.
make report
Report Summary
You're probably running the following setup: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10_5_5; en-us) AppleWebKit/525.27.1 (KHTML, like Gecko) Version/3.2.1 Safari/525.27.1
Affected page Section: Page Title: none Page UPL:
http://www.c2h6.com/cms/issue_register.php

Step 4: Optimise across browsers

Work through development pages and css addressing issues. Issues should be rechecked by testers before being passed.

Qualitative Tests

Qualitative testing examples:

- 1. **Context interview:** Understand how people might have used the product or features in previous situations.
- 2. **Comprehension test:** Ask people to explain what they think the product is for and the functions of individual elements.
- 3. **Pre-defined tasks:** Ask people to use the interface to perform specific tasks that the team consider important. These should be mapped to goals/funnels within google analytics, and logged using Silverback and the usability_test.doc
- 4. **User-generated tasks:** Ask people what they would like the interface to do, and then see if they can get the results they want.

Using Google Analytics to measure goal conversion

Goal conversions are a good metric for measuring how well a site fulfills business objectives. A goal is a website page which a visitor reaches once they have made a purchase or completed another desired action, such as a registration or download.

Once you have set your goals, you'll be able to see conversion rates and the monetary value of the traffic you receive. You can also define a "funnel path" for each goal. A funnel path is the path you want visitors to take to reach a goal. Defining a funnel path allows you to monitor how frequently visitors who begin a conversion process actually complete it.

Examples of goals for the a site could include:

Registration Content downloads Completion of games / challenges Sales / purchases Forwards, likes and shares of content Newsletter Signup

These goals should be identified in the first stage of testing, and then form the basis against which qualitative testing is run.