

# ***Expert Inspection and User Testing Services***



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## Evaluation and User Testing at the IDE@S group

The IDE@S group have a range of skills within Human-Computer Interaction that can benefit business that are interested in professional usability feedback on any interactive product. Whether that product is already developed, under development or even in the concept stage, our expertise can help you to match the business goals of your product to the expectations and needs of your users.

### Our Approach

We take a value-centred approach to usage studies. We do not assume that standard user testing approaches and measures will deliver business value. Instead, we work backwards from an understanding of business value to evaluation measures, targets and instruments.

Therefore, we *never* undertake a project without full consultation so that we have a clear understanding of the goals of the product and understanding of users and their expectations. Equally important, although our inspection/user testing services are explained separately, many projects benefit from a combination of both evaluation methods. We are always available to offer advice to help you decide the best option for you.

### Our Skills

Our team has user-centred design expertise from almost 50 years of combined experience in HCI research and usability practice.

Gilbert Cockton, Alan Woolrych, Sharon McDonald and Michelle Young have worked together on a range of successful research, consultancy and event projects. We have consistently delivered quantifiable business benefits.

### Our Facilities

We have at our disposal the very latest equipment in our fixed and mobile usability laboratories:



- Fixed/mobile user testing lab. And eye tracking system
- Video and audio analysis software (Observer, Atlas TI)
- Video, audio and screen recording software/hardware
- Statistical, video editing, DVD and document production software

Our static lab is in the Media Centre on the award winning campus at St Peters and was custom built in 2004. The lab is fully digital allowing for the complete recording of all screen activity and user actions and verbal protocols.

## ***Expert Inspection***

In our time in various projects, in excess of 50 local and international companies have benefited from expert inspection by the group team members. These expert inspections involved a variety of interactive products from learning media (interactive CDs) to commercial web sites. The scale also varies, for example, some larger projects can be measured in weeks and even months, whilst many involve considerably less time dependant on the clients needs. Below is an example of the effort distribution of a typical 5 day expert evaluation of a product.

### **1 Day - Understanding the scope and purpose of the site.**

*Gaining familiarity, and understanding the specific purpose (goals) of the product/site is a vital part of the usability evaluation. This prevents wasting valuable time focusing on less important issues. The types of end user (target audience) is also identified during this phase. Achieved through discussion with the client and initial familiarisation with the product/site.*

### **0.5 Day - Deciding which aspects and areas of the site to undergo usability evaluation**

*Unless otherwise directed by the client, specific areas of focus for the evaluation are identified at this point. Much of this phase is contextual in that, although the areas for evaluation have been mostly identified various strategies need to be considered before evaluation can start. For example, expected information structures and task flow need to be fully understood before commencing navigation evaluation.*

### **0.5 Day - Development of typical end user tasks**

*Once all of the above has been covered sufficiently, the final strategy for efficient and effective evaluation can be developed. The evaluation team can confidently develop scenarios of how 'typical users' will navigate and attempt to accomplish specific tasks and thus be better placed to discover and understand potential user difficulties.*

### **3 Days - Evaluators work independently to determine possible problems and merge results into a master problem set.**

*The actual evaluation where the evaluation team methodically work through the relevant parts of the site looking for possible usability problems. Evaluation, as previously mentioned, is a combination of visual inspection and user task replication.*

### **1 Day – Final writing of report for client.**

*Each evaluation is completed with a formal report outlining the outcome of the evaluations, and where appropriate, recommendations for prioritisation of issues (i.e. which problems are most severe and hence need immediate attention).*

The key is, we are happy to discuss any project, large or small.

## ***User Testing***

As mentioned previously, we have both static and portable user testing facilities that rival any facilities in the North East, and many in the whole country.



Just as important we have the expertise and experience to make the most of this state-of-the-art equipment.

Just like our expert inspection, we have vast experience of user testing projects also, ranging from commercial web sites to specialist products such as interactive TV for the elderly. Moreover, through our experience, we have developed several innovative techniques in our user testing that allows us to elicit the most important information about user experience and expectations during user testing.

And the same principles apply to user testing – we are happy to discuss your requirements, regardless as to how large or small the project is. Outlined below is the typical effort required for a project involving 5 test participants.

There are four specific phases involved in a full usability consultancy: preparation, user testing, analysis and reporting. These phases are described in more detail below with timescales and associated costs.

### **1. Preparation**

This involves discussions with client management to establish the goals for an interactive product or system. Discussions with developers are also required, as this helps us to become familiar with the website, and understand the design rationales.

#### **Time Scale**

This phase generally requires between two and five days. The amount of time required depends on the scope of the product. Obviously, if a complex product is to be subjected to a thorough usability assessment, more time is required.

Product briefing is not charged, however, upon agreement with the client any expert analysis will be charged.

### **2. User Testing**

There are two ways to approach user recruitment. The client can recruit their own participants for user testing. It can be done by any means at their disposal (e.g. through market research companies), and reward for participation will be by agreement between the client and participant. Adopting this approach, the only costs applied by IDE@S (SUNDERLAND) will be for staff time and lab time charged at the agreed rates.

The second approach would involve IDE@S (SUNDERLAND) arranging user test participant recruitment. Again the client would be responsible for participant reward and the charge for recruitment would be at the agreed rates depending on the required effort.

### **Time Scale**

This is dependant upon the number of test participants. It is recommended that no more than 5 sessions (up to 1 hour long) are conducted per day. Timing is not restricted to office hours; early to mid evening is acceptable.

### **Cost**

Essentially the costs are participant recruitment and reward plus lab costs and staff time. The lab costs (staff, media) are fixed regardless of recruitment method. Any reward (expenses) for user testing participants will be by arrangement with the client. In some cases, reward can be in the form of merchandise (T-shirts for example, and or book tokens, software etc.).

## **3. Results Analysis**

There are a variety of forms of analysis ranging from general real-time observation (noting obvious issues) to click stream analysis (observing, noting and analysing every mouse click, key press, user comment etc.). Basic test analysis requires three hours per participant. For more in depth analysis four or more hours per participant is required (to be agreed with client).

### **Time Scale**

Time scale for this phase is very much dependant on number of users. The three hour minimum only applies with up to five test participants. Above that, merging results adds to analysis time. For more than five participants, over four hours per user is required in order to analyse independent user transcriptions and compare for usability problem severity and frequency so as to establish problem priority. This is an absolute minimum amount of analysis time, and would also require some degree of developer participation. It is also recommended that developers participate in the user testing sessions (as observers) and post test discussions.

### **Effort**

The cost for user test analysis is charged at the daily rate. An example would be 5 users x 3 hours analysis each = 15 hours (approx. 2 days).

## **4. Report and Recommendations**

Project reports can be provided in almost any format including hardcopy/electronic report, presentation, even with accompanying edited video highlights of user test sessions on DVD.

### **Time Scale**

Depends on how in-depth and comprehensive a report is required, and if video highlights are required. An absolute minimum of one day is required, usually three days as an average, four or more days may often be required (dependant on the number of test users and whether video highlights and/or presentation

are requested). However, an electronic copy of basic results can be processed in the minimum 1 days effort.

**User Testing Example:**

User Testing – 5 Users, preparation, testing, analysis and report

**1.5 days** – Preparation and task set development

**1 Day** – Testing

**2 Days** – Data Analysis

**1 Day** – Report Writing

Total: 5 days effort

At the IDE@S group we are flexible in our approach to all usability studies. We are happy to discuss your requirements and can accommodate studies from basic audits to comprehensive usability consultancy. We charge at a very competitive daily rate, so our costs are based on the amount of effort required for any project which is always agreed with the client before we commence any project.

If you have any questions or would like to see our facilities and a demonstration of our eye tracking system email us at:

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