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Pro-Design: Digital Media Pack for Professional Graphic Designers

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Digital Media Pack for Professional Graphic Designers

Anita Heavey : October '08

MA Digital Media Technologies

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MA Digital Media Technologies

A report submitted in part fulfilment of the degree of MA
in Digital Media Technology under the supervision of
Caroline Dunn. Dublin Institute of Technology. October 2008

Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to award of

MA in Digital Media Technologies

Is entirely my own work and has not been submitted for assessment for any academic purpose other than in partial fulfilment for that stated above.

Signed: _____

Date: _____

Acknowledgements

I would like to thank my supervisor Caroline Dunn and Mick Muldoon for all their help, advice and support.

Abstract

The importance of developing a comprehensive digital design presence as well a as digital business strategy has become a necessity for graphic design practitioners. In this report I review how this could be achieved and document the development of a coherent digital presence that has a more inclusive approach to client/designer communication and that better suits the needs of a graphic designer in industry.

This document provides a detailed overview of my research and development for this MA Project. It sets down the course of action and the directions that the project took and identifies the aims and objectives I hoped to fulfil during the development of the project. It documents the process that I followed to achieve this including research, analysis and development, realisation, presentation and reflection. It also provides a description of the projects deliverables and the relevant functionality and content.

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1.0 Introduction

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This report documents the development of a prototype for an interactive digital media pack to help present & promote graphic designers in a professional context. It aims to develop a coherent digital presence and a more inclusive approach to client/designer communication. In the following report I will systematically bring you through the research, design, production and testing carried out to make this prototype.

1.1 Project definition

Pro-design is a prototype for an interactive digital media pack to help present & promote graphic designers in a professional context. It is a coherent digital presence and a more inclusive approach to client/designer communication.

This project could be potentially broken down into 3 phases. For this MA project I propose to develop Phase 1: Flash Website and Flash Presentation template that can be used in presentations, pitches and work-in-progress meetings.

Phase 1:
• Design and development of a prototype Flash website
• Design and development a Flash presentation template

Phase 2:
Develop a design template to facilitate a dynamic web database connection with client log in options. This would allow increased transparency and more client involvement throughout the work in progress stages.

Phase 3:
Develop an interface, navigation structure and design solution as a skin which could be customised and used by many design professionals.

1.2 Aims and Objectives

The primary aims and objectives of this project are as follows:

• To encourage designers to use digital media more effectively as a business development tool.

• To help develop a more inclusive approach to the client/designer relationship which will ultimately result in a stronger design solution and a happier client.

• To create an integrated digital design solution for designers.

• To produce a more interactive, versatile and media rich alterative to the standard portfolio type website used by many designers.

• To produce a Flash interface that is more adaptable to the needs of the design Industry and professional practice.

1.3 Why I chose this subject?

Below is the result of a preliminary mind mapping on this topic. It identifies some of the reasons why I chose this topic and also why I think it would be a worthwhile topic for development.
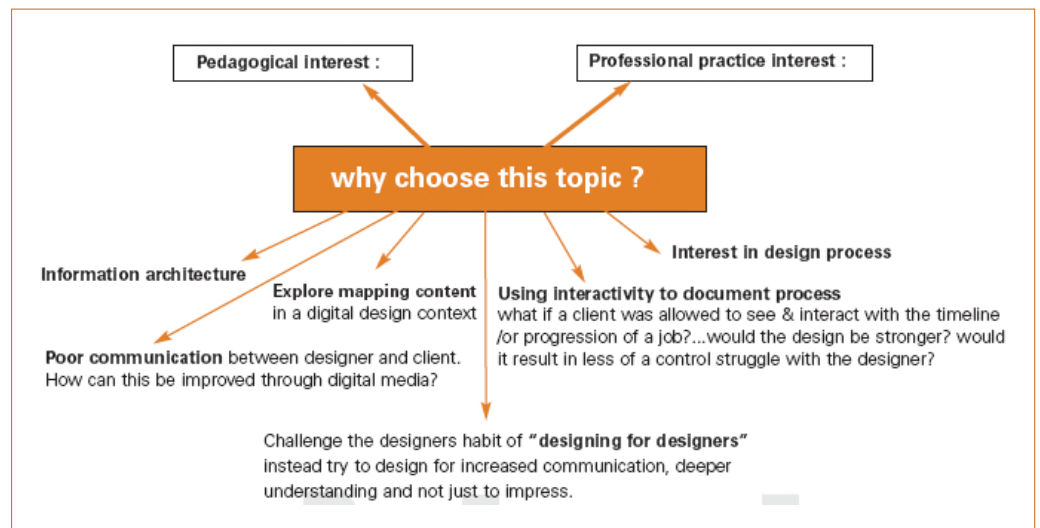
The two major areas of interest are a Pedagogical interest and a Professional Practice interest and the disparity between them. In 3rd level pedagogy for Undergrad teaching of design education, importance is placed on concept development, documenting & communicating the design process clearly and developing an integrated design approach. Professional practice on the other hand seems to place all importance of the final product and gives little attention to creating

an inclusive and transparent process that excludes others from understanding what the designer is really doing. The Irish Design Institute identified the lack of transparency by designers along with clients poor understanding of process as being key reasons for poor communication, understanding & trust between client & design (Opportunities in Design,1999

3rd Level Pedagogy **(+)** Professional Practice

PBL: Problem Based Learning: emphases on the analysis /development / problem solving.

Presentation: All importance on final design aesthetic. Undervalues design process and thinking.

3rd level pedagogy

PBL (Problem Based Learning) is the primary 3rd level pedagogical approach used when teaching design at present. Strong emphases is placed on the analysis and development of a design problem. "Problem based learning methodologies have been introduced as a means of fostering independent learning among students. This methodology focuses on documenting design thinking and understanding process' The approach promotes important key skills such as teamwork, negotiation skills, problem solving, project management" (Boud,1998, p.45). All this reflects the nature of the design industry where designers need to work in teams and collaborate with others disciplines.

Professional Practice

In Professional Practice the presentation of the final visual design outcome seems to be given precedence over everything else. This ultimately leads to design process and problem solving being undervalued and misunderstood.

 "Not all clients understand the design process or the value and depth of a good design solution that springs from a professional client-designer relationship. Good graphic design is not about style or fashion, it's about communication. A single design visual, without the opportunity to truly understand a clients aims and ambitions, will not solve a clients communications problem"   *(Cloake, 2006, p.10)*

1.4 Target Audience / User

Potentially clients:

Potential clients would include design companies of all sizes, independent freelance designers and recent graduates entering professional practice & wanting to develop a creative, progressive and a more inclusive business strategy and who want to present to the public in a digital context.

These could include:

• Resent design graduates coming from any of the main design courses that teach design thought the PBL/ design process model. NCAD (National Collage of Art and Design) DIT (Dublin Institute of Education) School of Art Design and Printing and Dun Laoghaire School of Art and Design.

• Smaller independent designers and partnerships such as Fuse Design, Austin Butler Design, Connect Design.

• Larger design consultants such as DesignWorks, Design Factory, Image Now, Dynamo. XMI design, Red Dog Design, Boyle and Associates

Proposed Client:

For the purpose of this project I intend to develop a catalogue using some of my own design work as examples. The Digital Design Pack will be a bespoke application to help me develop a more professional presence in industry.

Audience:

The audience would be potential clients and existing clients who would value the opportunity to gain more understanding of the design process and be more involved in the development of their own design solutions.

1.5 Context and technical requirements

The web:

Flash website used to promote and encourage better understanding of design process and encourage dialogue between designer and client.

CD Rom :

Hard drive : FTP download :

Stand alone Flash application used for presentations, pitch and design progress reports.

Also this could be sent to client via FTP in place of work in progress meeting or accessed through the website.

Technical Requirements:

Specification: Flash interactive application

Mac OSX and Microsoft Windows compatible.

Content: Images 72 dpi , 8 bit colour jpegs/pngs/gifs to facilitate functionality.

300dpi jpegs for detailed representations in pdf downloads and FTP.

Video content: Quicktime video files and FLV Flash video files (CS3)

Platform: CD or DVD ROM subject to requirements.

Programming   Action Script 2

Web-based prototype, (phase 1). Content of application:

• Low resolution images to improve functionality

• High resolution images representing the full art work for download

• Text, video, animation, action scripted interactivity

• Visually illustrated design process and project development - interactive and easy to update in the future

• Other possible content could include audio or video used to show brainstorming sessions, mind mapping, research, Action scripting for creative navigation solutions and a dynamic text import option for easy updating of content. Search functionality and client sign in option.

Hardware / Software requirements for the completion of the project:

Hardware: Desktop computer. G5 Apple Mac

Software:

Text editing: Microsoft Word / InDesign

Image editing: Adobe Photoshop / Images Ready

Graphic editing: Adobe Illustrator

FLASH authoring: Adobe FLASH and Action Script2 / Dreamweaver

Audio editing: Audacity / iMoves / Garage

Dynamic Text: Dreamweaver

2.0 Research: Design and the design process

2.1 What is graphic design? / 2.2 Define and document the design process

There were two ares I felt I needed to explore in more detail before beginning this project. Firstly, what exactly is meant by graphic design and the design process? How could it be quantified and broken down to facilitate clearer understanding? Secondly, I wanted to look at the area of user experience and user interface development in a web context.

2.1 What is graphic design?

> *"Design is a whole lot more than just the various aspects that go into it. It is about understanding the fundamentals of form and composition, manipulating colour messages, understanding semiotics and the relationship between different kinds of visual signs, controlling the pacing of material and informational hierarchy, integrating type and image for unified coherent messaging to ensuring its physical quality as final object, whether its printed, animated on screen or built. Applying those fundamentals to evoke emotion and signify higher order concepts"*

(Newark, 2006, p.121)

Effective visual communication requires graphic designers to inform and motivate the viewer. Ideas are generated through the design process, in which the designers research, organise and interpret information, define the objectives, originate ideas, and create visual forms. New and constantly changing computer and communication technologies further challenge the role of the graphic designer in creating clear messages for many different media such as the Internet, film, television and even the mobile phone.

> *"With respect for the users, the goal of design should be to create successful and satisfying experiences : successful in that the user can complete his task efficiently: satisfying in that this experience is pleasurable, not merely functional, where pleasure may have aesthetic, or a fun elements"*

(Alben cited in Macdonald 2003, p.34)

Fundamentally design is about using your visual knowledge to create a message, engage an audience and solve a communication problem on behalf of a client. Simplicity and clarity should be the fundamental goals of graphic design. Timothy

Samarg suggests in his book "Design Evolution" that sometimes in the quest for profound communication and visual experience, designers sometimes forget that common sense is often the best source of profundity (Samarg, 2008)

While it may not be a popular concept among some designers I believe it could be beneficial to view design as a service and not merely as a product. It could be viewed as a visual communication strategy for a specific problem that a client or company have and not just an outlet to designers personal aesthetic interests.

2.2 Define and document the design process

The design process differs among practitioners and there are as many ways of working as there are designers. Some are extremely methodical and analytical, looking to understand each step as they go along. Others work in an intuitive way, relying on feelings supported by their knowledge of the basic design principles. Some others jump back and forth between each method, letting analysis and intuition play off each other. These approaches often translate into a way designers structure their fees and business interaction.

The design process is far from linear and methodical, even for the most experienced professional. Creativity is iterative in nature. There will always be some back tracking and some reinvestigation once a certain point in the process is reached so that an idea can be tested and altered for clarity. Even designers who work in a highly intuitive way or without an official phase structure, the road from beginning to end is one of making, testing, selecting and remaking and assimilating the knowledge acquired from each activity.

While processes and development models should not be set in stone during a project, if a process isn't followed at all the project can wander, the client can get confused and the design can end up not getting credited or paid for the time spent on development and background work (Baer, 2008) For this project I would like to define and present the design process in a series of steps in order to demystify the process for the client or any end users who may have been "spooked" by creativity in the past. This approach gives the designer an opportunity to formally codify their working process for the client, to clearly define the work involved, demystify the budget breakdown and use the process structure as a way of presenting their work

Phase 0ne : The Brief / Phase Two : Research / Phase Three: Analysis   / Phase Four : Development / Phase Five : Realisation / Phase Six : Presentation Phase Seven : Production / Phase Eight : Review and reflection

1. Phase 0ne in the design process : The Brief
In my opinion this is probably the most important phases of a design process. If this is done effectively the changes of misunderstanding and disappointment on completion of the project are slim.

The creative brief is a short document that outlines the pertinent information about the project so that there is a clear understanding of the projects aims, goals objectives and required deliverables. The Brief acts as a single point of communication to ensure that everyone is on the same page as the project moves forward. It starts with a meeting between the client and designer, then the designer documents that meetings and develops the brief. The client then gives feedback and final approval before the brief is finalised. The brief should define the problem and establish the objectives. What is the message? Who is it for? What format can best express the message? What are the budget constraints?

 KimBaer (2008, p.51) suggests breaking the brief down into four general catalogues: (a) Client information, (b) Project information (c) Project goals and requirements, (d) Project logistics

(a) Client information
• Client basics: This includes basic information such as size and age of company, accomplishments, global or local approach as well as the business model and projected plans.
• Client sector: Information about the business or industry. How competitive is the market? Any major changes in the industry?
• Competitor information: Identifying approximately 5 competitors and listing strengths and weaknesses in relation to the client.
• Intended audience: Who are they? Age, nationality, gender? Any subset of this group need to be identified for this project?
• The business context for the project: Why commission this project at this time? Is there any history of the project that would be helpful to know? Have similar projects been done before and were they successful or not? Why?
(b) Project information

- Begins with a short overview of the project, size, timescale, budget etc
- Key information and hierarchy: What is the key information to be conveyed to the audience? What is the tone of the project? (eg. To instil confidence, to encourage play or learning, to dispel resistance to change etc.)

(c) Project goals and requirements

What's the problem to solve? Where are the opportunities? How will success be measured? What are the technical requirements? Are there existing brand guidelines? Is there any other abstract information that can be helpful (eg. Anything the client really dislikes, any deal breakers)

(d) Project logistics

- Specific list of deliverables: Including page count, word count, pic count, document size, print spec/screen spec
- Overview of project team and define roles: Who on the client side will be supplying content and signing off on content and final designs. Who will be involved in the out-souced work such as photography, printing, programming, database development and maintenance etc
- Key dates. A project schedule including key dates for delivery and meetings. Include an overview of hours allocated to the project.

I feel it is really worth spending the time writing a comprehensive and well considered brief. Done well, it can ground your design decisions at every step and make the design process clear and transparent to the client. When presenting to a client, your design decisions can be mapped to key points in the brief. This way, when clients are responding to the work and making design choices, they are doing so from a strategic point of view, as opposed to just a gut or personal aesthetic response.

Phase one deliverable : Written brief, one to five pages long.

2. Phase two in the design process: Research

This phase will be decided by the brief and depends on the job but will involve the a brainstorming session to clarify what areas need to be looked into in more detail and clarify what you have committed to in the brief.

This phase also serves a number of other roles:

- Better understanding to client, business, audience, context.
- Understand the scope and complexity of the project
- Evaluate the non-design resources, skills and inputs that will be needed

• Investigate the IT or print constraints and scope what resources are needed.
• Looking for parallels in others fields, subjects or industries. The more information collected from multiple sources, the more associations you can make between them and the more ideas you will have to choose from.

This research can be done through formal and informal interviews, workshops and discussion with suppliers and the target audience as well as Internet, book and editorial research.
Phase two deliverable : Documented research, written and visual.

**3. Phase three in the design process: Analysis**
• Strategic analysis
This can include a review of existing projects, competitors approach to similar projects or successful approaches in other fields. Review the look and feel, the concept, the overall approach, use of materials, probable budget, overall success.

• Scenarios
This is a technique that brings users needs and context of use to the fore and is the first form of testing. Scenarios are stories about people and their activities. They tell stories about the way intended users might use the design. Jack Carroll, director of Virginia Tech Centre for Human Computer Interaction characterises scenarios as "having a setting, they have agents or actors who have goals or objectives, they tell a story which involves action applied to objects and the events that result, and they have an outcome" (Carroll, cited in Macdonald, 2003, p.58)

• Brainstorming and Thought Mapping
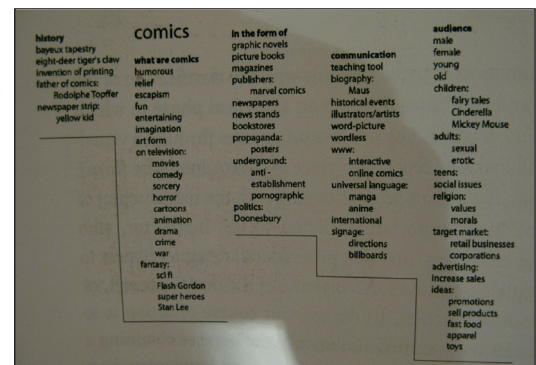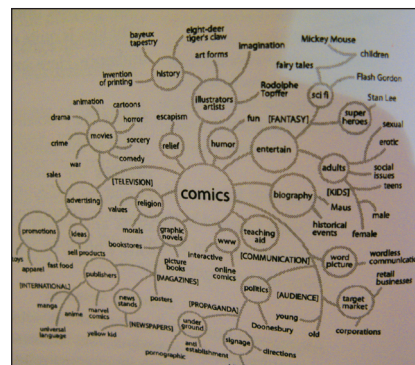
Brainstorming is an idea-generating exercise based on free association that uses written records of verbalised ideas that can help reveal direction or concept. Thought Mapping is also referred to as verbal diagramming and is done by placing key words in the middle of a piece of paper and branching out in all directions as you write down others ideas that are related.

• Moodboards and notebook development

Moodboards are the visual equivalent of verbal brainstorming. They are a visual exploration of the visual atmosphere and aesthetic approach you are trying to achieve. They consist of imagery, typography, colour samples, diagrams and sketches. There main aim is to investigate how a product might communicate at an aesthetic level.

Phase three deliverable: Concept developed, Documented strategic analysis, clearer understanding of end user, visual moodboards and notebook development.

4. Phase Four in the design Process: Development

This is when you investigate the visual problem more deeply and many techniques support this investigation.

• Information design and visualisation.

Core to this development phase is the idea of iteration: an idea is worked up quickly, and then reflected upon, discussed and perhaps tested, at which point appropriate modifications are made and the process is repeated.
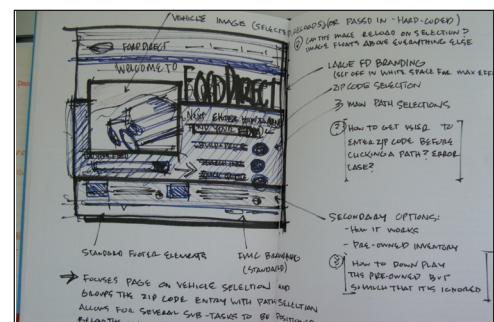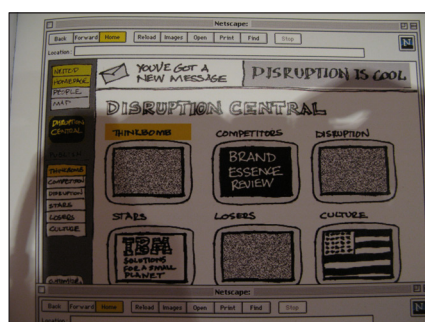
Ideas begin to be visualised by making thumbnails sketches and preliminary design ideas. These thumbnails develop into a narrative and the information structure begins to happen. Sketching out abstract concepts, layout, information and content flow. The crudeness of the finish can help people (especially the client) avoid focussing on the detail rather than concept.

• Visual exploration and design elements: Notebook work
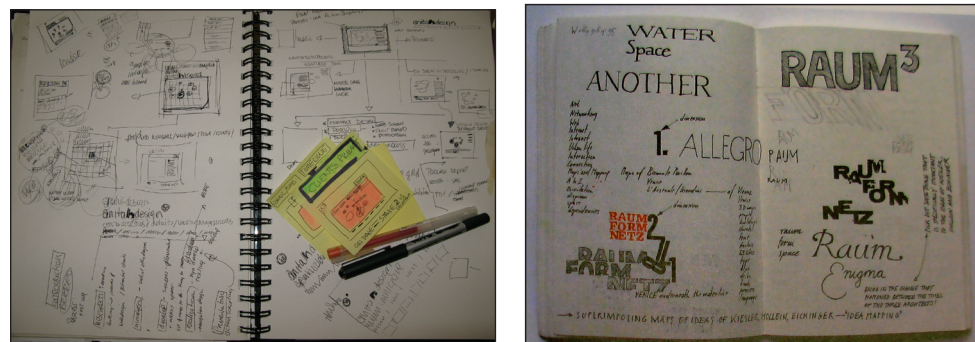
Now the notebook work gets more details and final decisions on typography style, images approach, layout and grid structures are decided and planned.

• Development a content structure:

A valuable tool for organising and reorganising content, navigation and functions is Post-its. Written or drawn on they can grouped spaced and moved around easily and help to conceptualise a multilayered product like Web design.

• Click/flick though.

Sometimes a rough mock up using sketches is made or a rough click through PDF for an interactive piece. This can be very useful to get a feel for the flow of the design concept, content structure and also as an early test for the navigation structure.

Phase Four deliverable: Moodboards, content structure, design and layout development, click/walk though.

5. Phase Five in the design process: Realisation

This is when all the visual design elements are finalised and the navigation model and content structure is realised.

• The elements and principles of design are realised.

"No matter what format or concept, every design will consist of the basic elements of line, texture, space, size value of light and dark. Once these concepts are formally realised, then the principles of design - balance, emphasis, rhythm, unity and contrast are realised. The structural foundation of a design is defined and the various design elements determined within the compositional space"

(Resnick, 2003, p.24)

Phase five deliverable: Computer generated layouts, navigation flowchart with all design and concept issues realised. Printout and storyboards.

6. Phase Six in the design Process: Presentation

Client is presented with final design solution before it is sent to production (print) or development (web). If the client has been included in the design process and involved in the decision making throughout there should be no surprises!

Phase Six deliverable: Final printer proofs proofs (Sherpa or digital proof) or offline digital prototype.

7. Phase Seven in the design Process: Production

Production stage requires clear documented instructions from the designer and at least one handover meeting. The more the design can get involved in the production the better.

8. Phase Eight in the design Process: Evaluation

Refection, future possibilities and archiving of all work for revisiting or reprinting. Reflection is an important aspect of the design process and this should involve all those who were involved in the project, including the client if possible.

Testing

Testing is not a linear element of the design and product development and it may be appropriate at any point to evaluate a design idea or solution. Testing of design ideas is an important part of the design process but it cannot be assigned to one phase of the design process because depending on the project it can occur anywhere from the brainstorming to the evaluation phase.

• Expert testing. This kind of testing may be conducted by a design peer who is detached from the project and design solution. This testing is based on strong design and communication principles
• Testing against scenarios. This method can be used most effectively as ideas are being developed. They consider a users journey through a proposed design solution.
• Testing the user. Testing with the intended audience of the product is the most common type to evaluation. Usability testing is most successful when refining visual design concepts and preproduction. Tests may be qualitative or quantitative (or sometimes both) the former seeking to understand how the users are thinking while they address the task, the latter recording task completion time, directions they go in and other metrics (Macdonald, 2003)

3.0 Research: User experience and User interface

3.1 User experience and User Interface /   3.2 Technical considerations to ensure a positive user experience / 3.3 Design considerations to ensure a positive user experience.

While screen based design and especially web based development has much in common with the approach to other areas of design, there are some important differences which require a shift in thinking for a print designer. Take for example legibility problems with typography, the need to more kerning, shorter line width, colour accuracy and consistency problems, image quality, limited dimension options, download speeds to mention a few. However I feel the fundamental difference and the biggest challenge of screen based design is the need to create an effective interface between people and technology and a pleasant and successful experience for the user.

In this section I will explore in more detail what the User Interface and User experience is and why it is particularly important for a web based project. I will look at both design and technical strategies to enhance the users experience and hoe I could implement them into my project.

3.1 User experience

User experience describes the overall experience and satisfaction level of someone engaging with a product or system. It is a multidisciplinary fields and overlaps with many areas of information design related fields including information architecture, graphic design, interface design and computer system specialists.
Nielsen Norman defines the User Experience as follows:

> *"User experience encompasses all aspects of the end-user's interaction with the company, its services, and its products. The first requirement for an exemplary user experience is to meet the exact needs of the customer, without fuss or bother. Next comes simplicity and elegance that produce products that are a joy to own, a joy to use. True user experience goes far beyond giving customers what they say they want, or providing checklist features. In order to achieve high-quality user experience in a company's offerings there must be a seamless merging of the services of multiple disciplines, including engineering, marketing, graphical and industrial design, and interface design"*

> (Nielsen Norman Group, 2008)

A positive user experience is very important to the success of a design strategy for the web. Hoekman (2006) states in his book 'Designing the Obvious' that up to 30 of web transactions end in failure. Some of these failures are human error but many are a direct result of unresolved design and technical issues.

3.2 Technical considerations to ensure a positive user experience
Html or Flash?

There are many visual and structural differences between developing in HTML and Flash. Many graphic designers build their sites in Flash, primarily because of the potential for animation and the increased control over layout and typography. However it is important to look into both and evaluation which approach is appropriate for each individual project

Summery of main differences between HTML and Flash user experience

html user experience	Flash user experience
Pro: • Everyone will be able to read content •. Smaller file sizes Con: • Multi-page applications • User session expire • "Click and hope" problem	Pro: • Single-screen applications • Retain state offline • Maintain visual continuity Con: • No back button • Flash Player detection needed

Html user experience: Main considerations

• Multi-page applications.

A html built site spans across multiple pages. For example in a shopping cart, the user is brought step by step through the process, each step brings you to another screen. Because of the nature of this technology rarely can you get an entire html web based application onto an single screen. This can cause a fragmented user experience and break any visual fluidity the design might be trying to achieve.

• User session expires.

If time elapses or something went wrong the session can expire the user would have to start over. This is not helpful to inexperienced or special needs web users.

• "Click and hope" approach.

Hoekman (2006) describes the stress between pages when screen whites out for a moment. This is true of any traditional HTML site where you are going through a paging type system. It has been demonstrated in numerous usability studies that there is actually a moment of stress in the users minds when you are switching from one page to another, the whole page disappears and the screen whites out before you see new content. The users level of stress can also depend on the content they may have just entered, like personal details.

Flash User experience: Main considerations

• Single-screen applications.

Shared objects, maintains context, no wipe out stress. This one screen usability allows the user feel in control at all times. The accordion component in Flash allows the user fill in and view consolidated content on a single screen.

• Maintains visual continuity, so less chance of getting lost.

• Retains state offline.

For example is the users Internet connection disconnects they don't have to start over when connection is restored, content gets stored and will sync with next event.

• User most have the Flash Player installed.

If there is no Flash detection programmed into the site and the site is published for a player the end user doesn't have, then the site will look and behave incorrectly, eg typography will be rendered and formatted wrong, background elements may not show, interactivity lost due to Action Script incompatibility issues.

• No back button in the browser.

If the back button on the browser window is used then the user jumps out of flash and back through the html history. The browser cannot not recognise the pages within the swf file and jumps to last HTML page.

Observations and possible solutions

Overall a Flash developed website is the approach I want to take and I will try to address the technical disadvantages as follows:

1. Effective flash player detection

 Flash detection can be built into the site. It will catch the fact that user doesn't have the player and will either try to display alternative content in its place or will run a Flash detection which instructs users to update their Flash player.

A good example of this is www.absolut.com It was developed in Flash 9. When you enter this site you are given instructions and guidance on what to do eg what plug in you need depending on the browser you are using, a link to download this plug in or alternatively view the content in html.

2. Choosing appropriate and effective alternative content
If something goes wrong, if the user cant view content or a page is not found it is important to let the user get back on track and communicate with the site when things goes wrong. Always give user the option to email you or report the problem. If a page is not found allow the user to check out other options or other pages.

3. Action Script a back button into site
By imitating the HTML bread crumb approach to the forward and back button use on the browser your Flash site can become more intuitive for the user. This can be done by embedding Action Script command into the site:

3.3 Design considerations to ensure a positive user experience
Usuable controls : Fitts Law

Fitts law is a model of human motor response developed by Paul Fitts in 1954. It has been applied by Human Factors and Ergonomics engineers to thousands of designs ranging from assembly lines to computer interfaces (Hoekman (2005)

In human-computer interaction and ergonomics, Fitts's law is a model of human movement which predicts the time required to rapidly move to a target area, as a function of the distance to the target and the size of the target. It is used to model the act of pointing, both in the real world (e.g., with a hand or finger) and on computers (e.g., with a mouse) (Hoekman 2005)

How this relates to the web is by identifying where are the easiest points to hit on the screen. According to distance and size in relation to where you are, there are 5 points identified as easiest to hit on a screen.
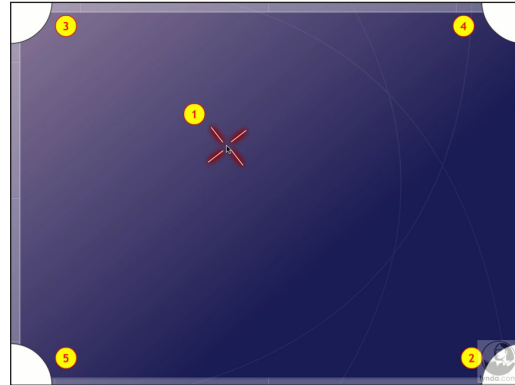
Area 1: Where your mouse is

Area 2: Lower right corner

Area 3: Upper left corner

Area 4: Upper right corner

Area 5: Lower left corner

According to Fitts Law the most prominent, easy to find and easy to get to option on a screen is wherever your mouse is. Generally people keep the mouse to the left of screen, out of the way. (Hoekman 2005) This would also suggest that having a hit area that can be dragged by the mouse could be the most prominent area of any screen to access important content. Also a right click option could be considered which can be coded into a flash site.

Visual hierachy of content :The Banana Principle

Seth Godin in his book entitled The Big Red Fez (2002) presents the The Banana Principle. He believes that while the user should have complete control over the navigation and freedom to explore, if you can visual present a compelling reason for them to go the way you want them to go, they will. He disparagingly describes a user as a "monkey" that you dangle a banana in front of in order to influence where they go and what they look at first (Godin, 2002)

A good example of the Banana Principle can be found on Googles web site (www.google.ie).
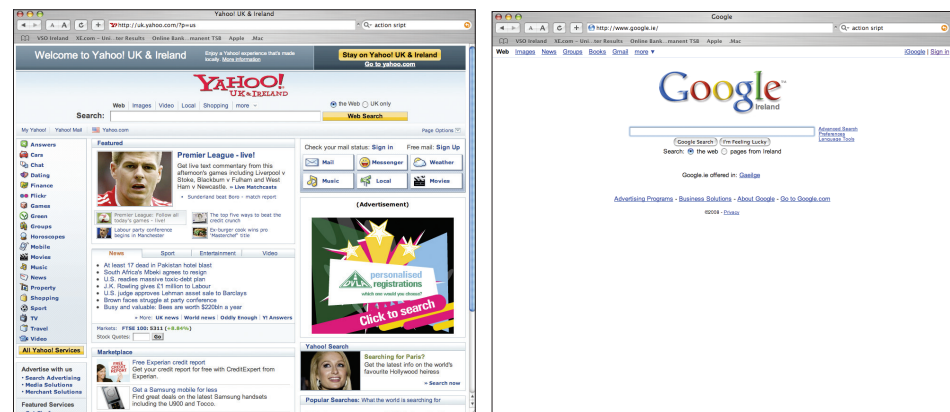
yahoo and google index pages

There is one big option which makes it very clear that the search option is where Google expect you to go first. Sub menu is also available but clearly of secondary importance. Compare this site with yahoo.com which houses similar content but employs a very different visual hierarchy. There is no one clear entry point and it is not clear what yahoo is trying to get us to do. The interface seems crowded, content heavy and cluttered. It looks like they are trying to keep everyone happy without analysing what they want the user to do or experience (Hoekman 2005).

google index pages

Apple is another example of Godins principle. Apple have over 30 entries on this site yet with its cleanly balanced content it is clear that Apple think you should visit the new Nano content first.

4.0 Competitive Analysis:

4.1 Compare print design solution to web design solution / 4.2 Review the visual design strategy of Irish and international design companies

In this section I will first do an overview analysis of print and screen design to compare how successful they are as a promotional and business tool for a designer. Then I will do a more detailed website review of some of the leading national and international design firms in order to analysis how they approach the visual design, information design and use of technology in a digital context.

### Print design vs screen based design solution

Print media:
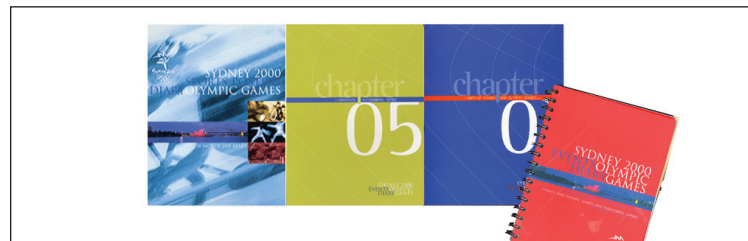
Print media

(eg. Brochures/portfolio/catalogue/presentation documents/pitch & presentation boards) The standard print catalogue and printed pitch presentation is an old but extremely successful means by which to present design work.

Pro: Designers are familiar with the production of print material, it allows for highly creative visual solutions, often collectable with high image quality.

Con: Producing printed material can be expensive, very difficult to update, places importance on the final product not on design concept and approach. It is also not environmentally friendly.

Screen based:
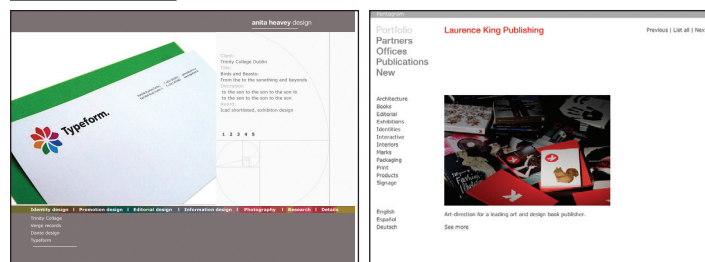
Eg: (Irish) www.reddogdesign.ie, dynamo.ie, (International) www.pentagram.co.uk, frostdesign.co.uk, Imagination.com.

A standard portfolio based website has been used for many years to show previous work, tell about the designers experience, list previous clients and act as a "show and tell" of portfolio work.

Pro: Can be a powerful showcase of previous design projects, easy to update.

Con: Often contains very little interactivity and limited user communication. Content places importance on final design not on design concept and approach.
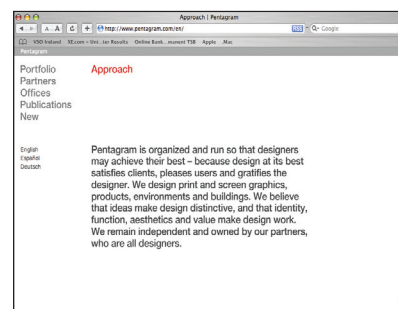
4.2 Website reviews

I chose to review five design companies for the US, Uk austiralia and Ireland.

Pentagram design studios: New York. www.pentagram.com

Overview:

Pentagram studios was established in 1972 and have 6 publications about the firm, one every 5 years documenting their process and thinking. These publications are used extensively in design education to teach students about strong design thinking and best practice in design business. They have always recognised that clients as well as peers, students and the general public "can benefit from a sharper understanding of design process and problem solving whether it a building or a poster" Yelavich, S (2004. p8) The dominant conviction is that Pentagram is about communication, solving problems, adapting to the media "and always with no strong party line on aesthetics" Yelavich, S (2004. p8)


Pentagram index page and portfolio
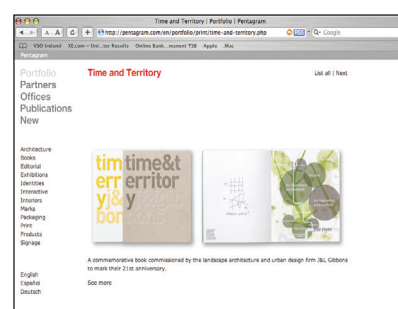
Website review:

With a philosophy like this I was surprised at their web design approach. The look and feel is strongly influenced by print layout and grid structure. The content is very formulaic, with basic portfolio, about us, contact options off home page. No thought

has gone into navigation structure and the whole site relies heavily on back and forward arrows to get to next page or travel through the slide shows. Nowhere does it discuss design as a process and problem solving exercise, the very thing they are most famous for.
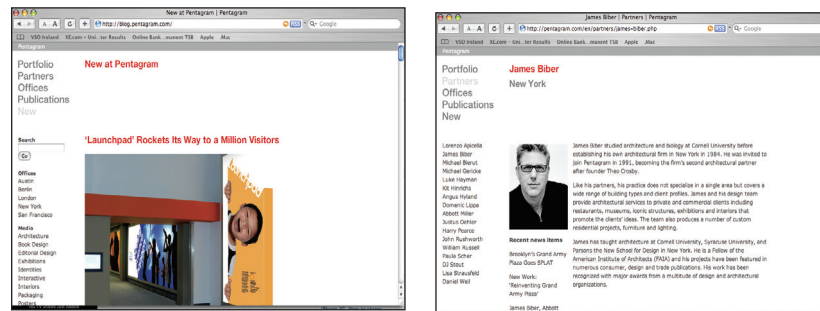
Pentagram 'portfolio' and 'about us' page

Content:

Development in Flash

Use of tech: No audio, no video, no animation

Use of type and image. Almost exclusive typographic (Helvetica Neue) with bitmap images in portfolio section. No vector graphics used.

Action Script: basic actions of gotoAndPlay, gotoNextFrame, no Action Script drop down menus, external swf file linkages or external classes used.

Approach to design process: Process is not mentioned. Design is displayed as finish product and very little written details or background information about design solutions in portfolio.

Findings:

While Pentagram have no need to use the web to sell or promote themselves I feel they could be more adventurous in their approach and more creative with the technology. It doesn't embrace the design potential of Flash and follows a very print based approach. However it has an understated approach that emits an air of confidence that you would expect from such a prestigious company.

Meta Design: USA . www.metadesign.com
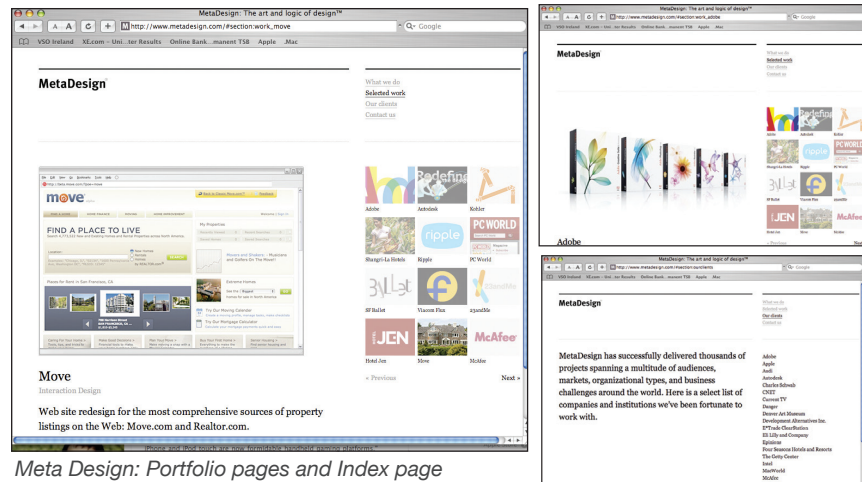
Meta Design: Portfolio pages and Index page

Overview:

This is a multi-skilled team that includes brand specialists, visual designers, interaction and information designers, content strategists, production specialists, and project managers. They have experience in understanding brand and user needs in a wide range of applications, including print and digital media. They have a very high profile client list which includes, Adobe, Apple, Nike and CocaCola and highly regarded within the design industry.

Website review:

Not unlike Pentagram in its overall visual look and feel, it uses a simple black and white palette, a lot of negative space, all based around with a simple understated navigation structure. Their client list is given importance. Directors are named but not introduced with a picture or any detail. The portfolio section is simple and uncluttered with only one slide for each job, which also makes it quick to download

Content:

Development in Flash

Use of tech: No audio, no video, no animation but nice use of fad in alpha transitions on all large type and all images in portfolio.

Use of type and image. Almost exclusively black typography (Meta meduim) with bitmap images on portfolio section. No vector graphics

Action Script: basic code of gotoAndPlay, gotoNextFrame, no action script drop down menus, external swf file linkages or use of external classes used.

Approach to design process: Process not mentioned. Design is displayed as a finish product and very little written details or background about projects is given.

Findings:

There is a visually understated elegance to the overall design but I feel it would be greatly enhanced by a more creative approach to technology. It emits an air of confidence that you would expect from such a prestigious company. While they don't discuss their design process they do place importance on their business approach and explains their three main areas of business (identity design, Interaction design and print design) as well as their strategic business plan clearly. I also like the portfolio approach of giving a visual sample of resent work rather then trying to show everything.

Frost design: Australia. http://www.frostdesign.com.au/
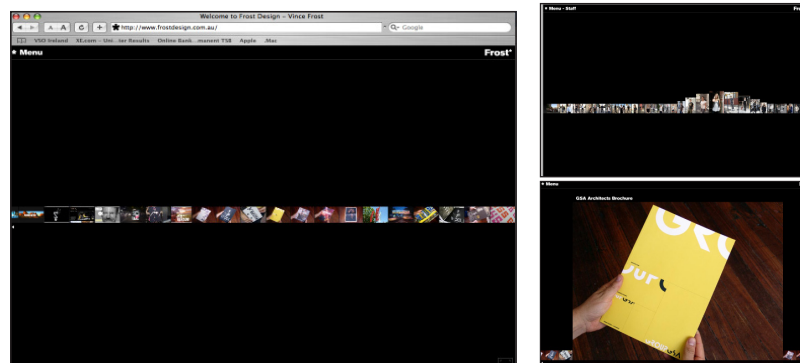
Frost Design: Index page, people page and portfolio detail

Overview

Started in London by Vince Frost, now based in Sydney and employs over 30 people. They are an multi-skilled studio and pride themselves on developing effective solutions to difficult problems.

Website review:

This site is primarily based around their portfolio of work. The home page is dominated by and interactive linear menu showing thumbnails of design work. Each sections content is housed within a similar animated linear menu. All the members of staff are introduced, also a history of the company and list of awards. The site is heavily coded and bitmap heavy which makes it slow in some areas.

Content:

Development in Flash 9. No audio, no video, animated linear menu bars throughout and drop down menus.

Use of type and image. Almost exclusive black with reversed out while type (helvetica bold and black)

Use of images: Animated thumbnails with large bitmap images in all sections. Vector animation of logo used as loading animation.

Action Script: Action Script used throughout

Findings:

Very creative approach to the navigation and the predominant use of black gives a very dynamic visual feel. It creates a personal approach by introducing you to all the all the staff. This site is slow in some areas especially when waiting for samples of design work to scale up. Very little information is given about the design brief or the process. I found the hierarchy of content confusing in some areas and the naming conventions in the submenu unclear.

WhyNot Assocaties UK
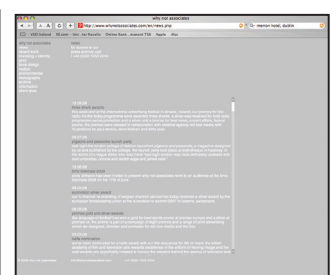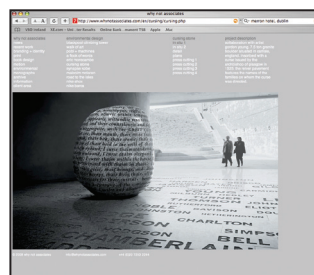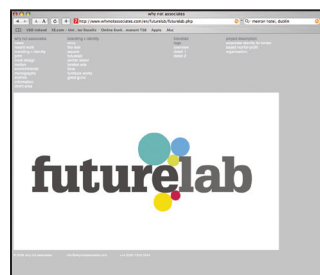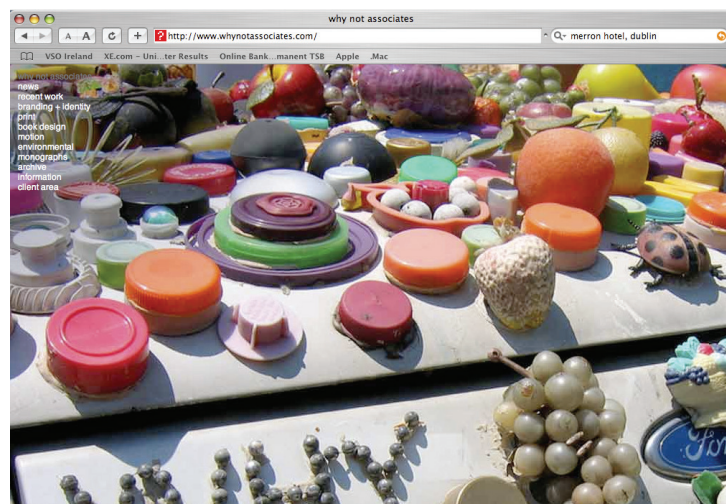
WhyNotAssociate: Index Page, portfolio pages and news page

Overview

Why Not Associates is small London based company. Started in 1980's and considered to be experimental and progressive in its' approach to design and especially deconstructive typography.

Website review

The look and feel of this site is not what I expected from such an experimental design company. It is developed in Flash but follows a html format of cascading style sheets. It is content rich with well structured navigation and a log in section for clients. Each design projects contains four to six slides which download quickly for large physical high res images.

Content:

Development in Flash

Use of tech: No audio, no video or animation

Use of type and image: Almost exclusive white type reversed out gray (helvetica reg and black) Large bitmap images used throughout.

Action Script: Action Script used throughout

Findings:

Very professional approach with will structured and useful content. Sign in area obviously means they use the site as a business tool. Images compression and the sites download speed is well considered and makes the site easy to use.

Kin: London UK
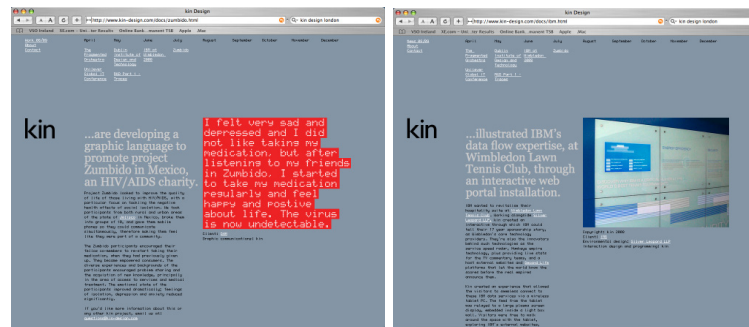
Overview

New London based digital design company set up in 2007 by two ex-digital design-ers from Imagination Design, London. Specialises in strategic planning for large digital design projects.

 Website review

Created in html and what makes this site interesting is its' blog approach to content. The index page consists of a half year diary with all the projects and events that the company are involved with. The user can click on any project and read a scrolling review or updates, accompanied with images.

Content

Development in html. No audio, no video or animation. Extensive use of Cascading style sheets and linked to a database.

Use of type and image. Dynamic text using aliased system fonts.

Findings

Very inclusive approach to site content and structure. Content regularly updated and blog approach is very personable strategy. However I find the look and feel too clinical for the content that is presenting.

Creative INC : Ireland
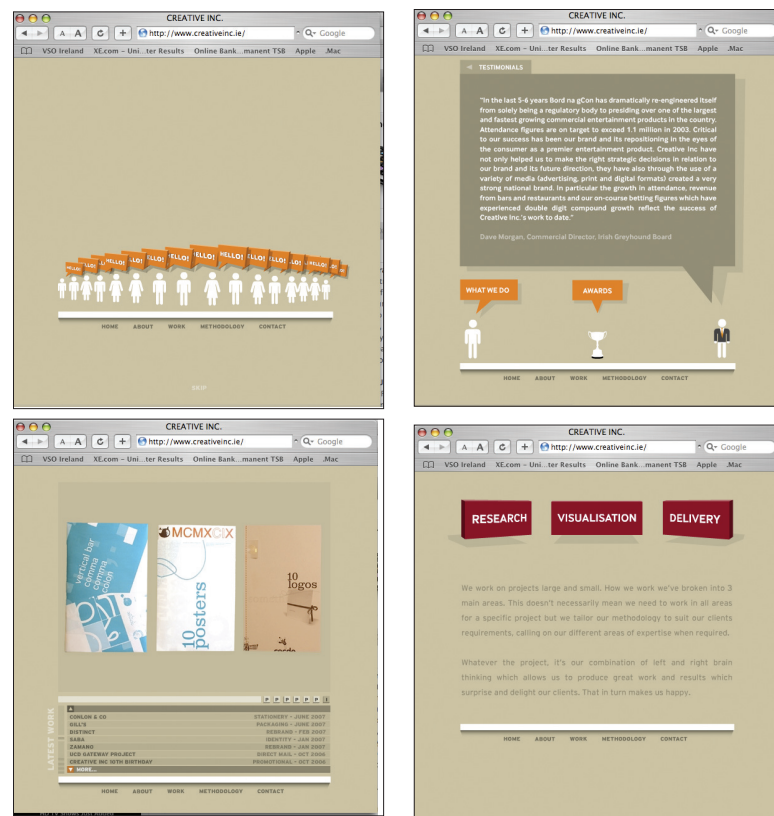
Overview

A young contemporary Dublin based print and digital company. This site has won a number of design awards from ICAD and GBDA.

website review

The site relies heavily on action script as well as vector animations and drop down menus. Small square format with compact content. Contemporary colour palette of taupe with highlight orange and dark greys. Development in Flash, extensive use of audio and animation throughout. small san serif uppercase type used. Action Script:

Findings

This is a very "entertaining" site with a lighthearted and young approach. Its use of action script is very creative and executed perfectly. While they show an extensive examples of their design work, the structure of this site seems to take precedents over the content.

Red dog Design: Ireland
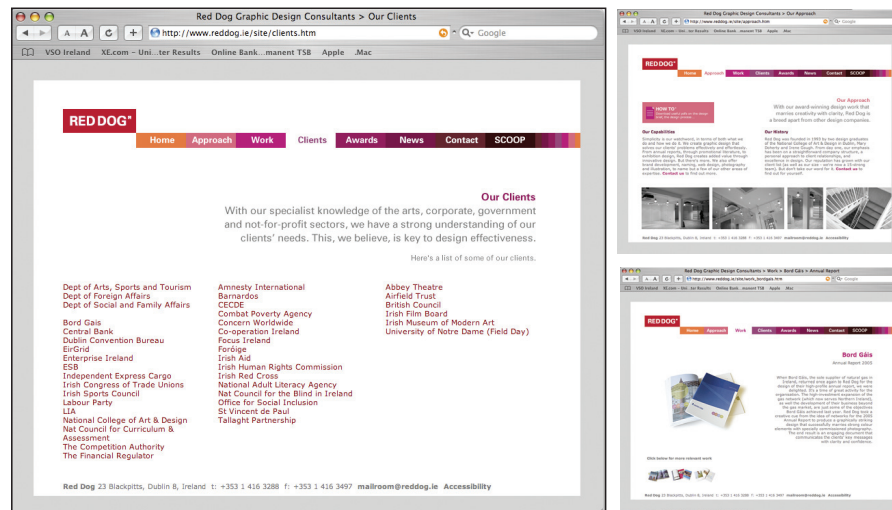
Overview:

Large Dublin based design company with a large and diverse client base ranging from the banking sector to art gallery and the music industry.

Website review:

Flash based site which is content rich with a clear navigation structure. A formulaic approach but what I find interesting about this site is the new download option they have recently added to the index page. You can download a PDF about how to write a good brief. It contains general instructions and questions to ask yourself before constructing a brief and it explains the process the design will take and stresses the importance of reviewing the final outcome.

Findings

While the design process is addressed its not given precedents and treated like an add on. I also find it interesting that they suggest that it is the client who should learn to write a comprehensive brief. I believe it is the job of the designer to master the art of writing a creative brief.

Findings and actions.

Examining these sites was extremely beneficial and I felt the strengths and weakness of the work were very clear to identify. I came to the following conclusions:

Findings

• Not communicating with your clients through your website is a missed opportunity for both designers and clients.

• Very few of the sites I reviewed even attempted to address the design process and presented design as a product and not as a problem solving service.

• It is important to work with the webs strengths and not try to imitate print design principles too closely. However it is also important not to overindulge in Flash animation where it is no longer improving communication but hindering understanding and becoming annoying to the user.

Actions

• Use Flash to improve communication rather then hinder.

• I would like my site to be visually understated and give the appearance of confidence and professionalism

• Improve Scanability of content. People don't like to read too much on screen and they scan. Be mindful of this when editing content. Allow user to download and printout larger or more detailed content.

• Maintaining context for the user at all times. What they are doing, where they are going, what you are viewing, who are you looking at etc

• Strip the design down to essentials without loosing visual integrity. Unnecessary design elements can obstruct the users understanding.

I feel there exist a need for designers to develop a more inclusive approach to their process, develop better communication strategies with their clients and encourage more client input.

5.0 Prototype development

5.1 Overview / 5.2.Development   / 5.3 Testing

5.1 Overview

Realisation and Production:

• I wanted to produce a working prototype of a website for my own design practice.

• I wanted to produce a skeletal prototype for the proposed Flash presentation tool. The visual content of the application was drawn from my own as well as collaborative work. The prototype included working examples of all the applications function. A small volume of content & examples of functionality were feasible within the time frame of the project. The prototype needed to be flexible to facilitate future development of dynamic web connection and skin development in the future.

5.2 Development

Visual Design Strategy:

Preliminary moodboard

Early moodboards allowed me to visually explore the tone and aesthetic approach I was trying to achieve. I looked at the use of imagery, typography, colour palettes contrast and scale, grid systems and navigation structures.

Visual Design Strategy

• I aimed to employ a visual design language that would be appropriate to the client, communicate to the user, reflect the work being presented and appeal to the design industry in general.

• I tried to create a strong branded presence. Design elements such as typography, colour, grid structure, scale & contrast all correspond tightly to the overall visual identity.

• Design of the functionality corresponds to the overall design strategy ie allow the user to map & interact with content in a mindful way.

• The design operates to enhance the content & not dominate the application.

Information structure:

I began to development a content structure for the site. Following on from my earlier research I knew I wanted to give primary importance to the eight stages of the design process. With this in mind I began developing a content flow using Postits which allowed for easy editing until the final structure was decided. Written content and rough interface sketches were drawn on each Postit and were grouped to create the website structure. I found this was a valuable tool for quickly organising and reorganising content as well as working out a strong navigation system. I also found this a really helpful way help to conceptualise the projects content, scale and structure.
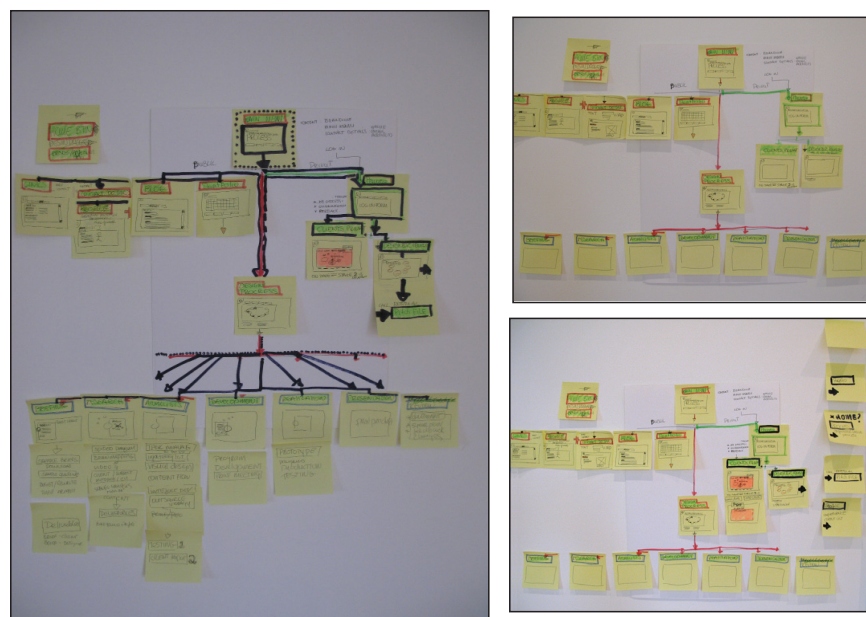
Using Post-Its to develop site structure

Information Flowchart

The Post-Its structure was then formulated into a final information flowchart. I could now see clearly what design elements and navigation options were needed on each screen.
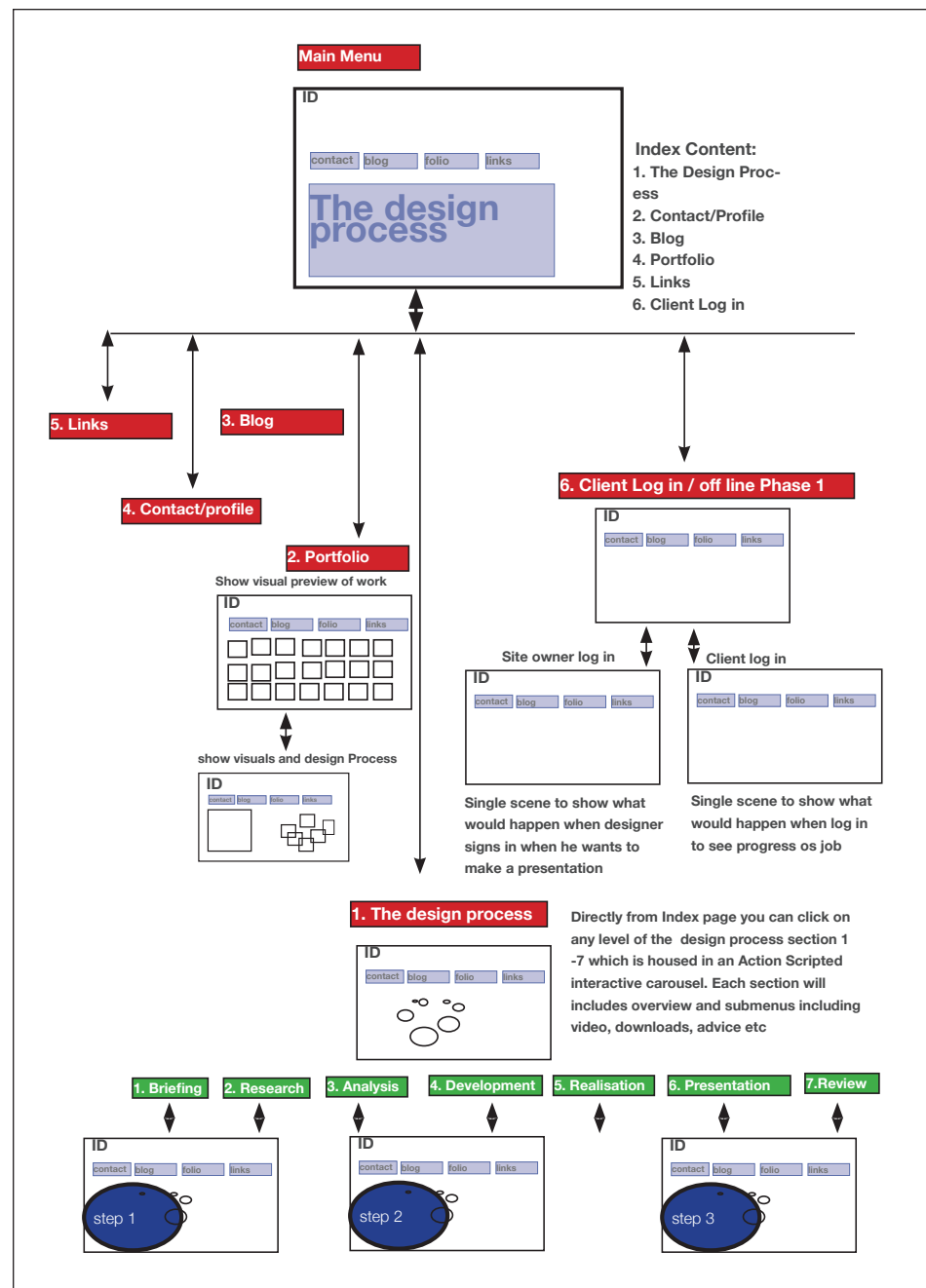
Interface development:

With a clear understanding of the scale and structure of the site I then begin to investigate the visual elements of the interface more deeply. A few ideas were worked up fairly quickly, and then reflected upon, discussed and modified.
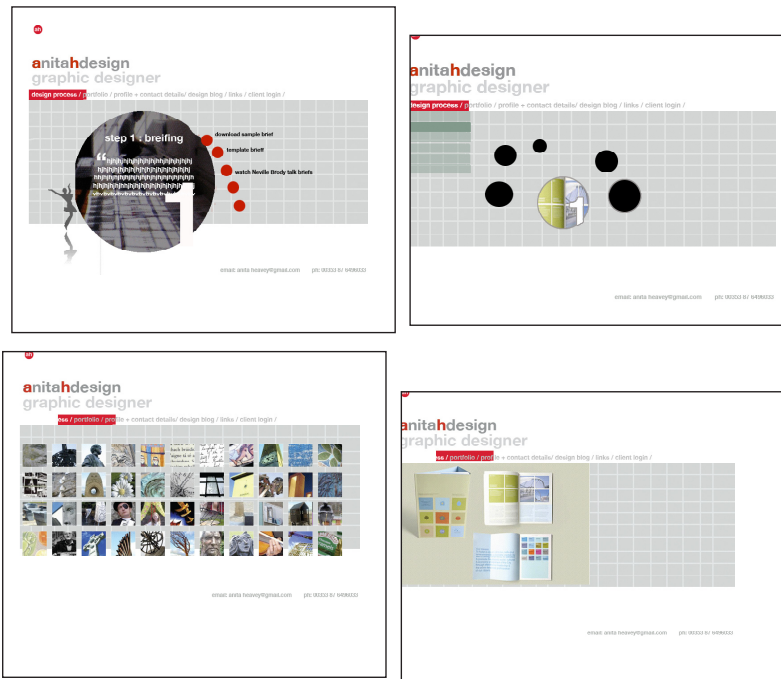
Early interface design mock ups

The thumbnails began as notebook sketches and were then developed into digital mock ups in Photoshop. The visual look and feel began to develop. With these rough digital sketches, I created a simple interactive PDF using simple click and go to next page commands. I found this a very useful way to get a feel for the content flow and the visual design. It also allowed me to conduct an early testing of the overall concept and navigation structure.

The visual design details:

When the structural foundation of a design was defined I could concentrate on the various design elements within the compositional space. The rough notebook designs ideas could get more defined and final decisions on typographic style, images, layout and grid structures could be realised. The elements of design (line, texture, space, size value of light and dark) and the principles of design (balance, emphasis, rhythm, unity and contrast) all began to be realised.

Design Elements that need to be addressed:

• Developing a brand name and icon.

• Colour palette: French gray, highlight orange. Reversed out white text.

• Typography: Sanserif: Helvetica Neue, regular and bold. Lowercase for headers and tonal changes rather then spacing in some areas. Reversed out for better legibility. I also found that legibility was improves on small text by adding .3 or .5 tracking space.

• Grid Structure : 6 column grid

Branding solutions

How to visually represent the design process?

Initially I had thought that the approach I would take to navigate through the design process would lead to a visually complex and explorative navigation structure. However after preliminary research into both the content and the user experience I felt that such a visually complex approach would be counterproductive to the communication value of the project.

Examples of early research into visually representing the design process.
Examples of a diagramming exercises by Kelly Horgan, Maeghana Khandekin, Alexandrra Matzner and Mughana Khandekan documented in Graphic Design The New Basics

The theorist of information designer Edward Tuftel (2006, cited in Lupton, Philips, 2008) argues that the design of data should not employ "metaphoric distraction or excessive flourishes but should stay within the realm of objective observation". This point of view is compelling but it may be overly restrictive. Information graphics do have a role to play in the realm of expressive graphics. The visual language of a diagram can create a deeper and richer understanding of the content and context.

I wanted to visually present the design process in a way that would demystify the process, try to compartmentalise the stages, give this content prominence, make it easy to navigate around and easy to update the content so it could be used as a presentation tool.

Rather then a structure that meanders in and out of the content which would only encourage even more misunderstanding, I settled on a circular carousel navigation structure. I felt this visually simple devise would let the user travel easily through content, give the feeling of a continuous process allowing user see one step after the next or jump to left to right. I employed a drag with mouse movement which gives the user instant and fluid control of the speed and direction.

Interactivity and Action Script

To achieve this I needed to look into writing and adapting Action Script classes as well and linking external .swf file and using dynamic XML text to allow for easy updating and development in the further. While I developed the project in CS3, I wrote the Action Script in CS2. This was because I found working with a non OOP (Object Orientated Programming) easier to manipulate and also allot of the open access code that was available to me is still being written for AS1 & 2.
(See Appendix A for code used in carousel)

User Interface design development

Here are early examples of interface design.

See **Appendix B** for final design solutions

File Structure

The file structure was important to get right because I wanted the site to be easy to update and fast to download. The main index page (Index.swf) holds the basic graphics for the home page as well as the submenu pages of the portfolio, log in pages, contact details etc. The carousel navigation is a linked swf file (carousel .swf) imported in via a movie clip. Carousel.swf also has externally linked files for all the design process pages as well as a dynamic text file. This allows me to edit the process content without entering the main site or having to rewrite any of the Action Script.

index

Navigation carousel.swf

icon.xml

1. icon1.swf ——— 1. brief.swf

2. icon2.swf ——— 2. research.swf

3. icon3.swf ——— 3. Analysis.swf

4. icon4.swf ——— 4. development.swf

5. icon5.swf ——— 5. realisation.swf

6. icon6.swf ——— 6. presentation.swf

7. icon7.swf ——— 7. production.swf

8. icon8.swf ——— 8. overview.swf
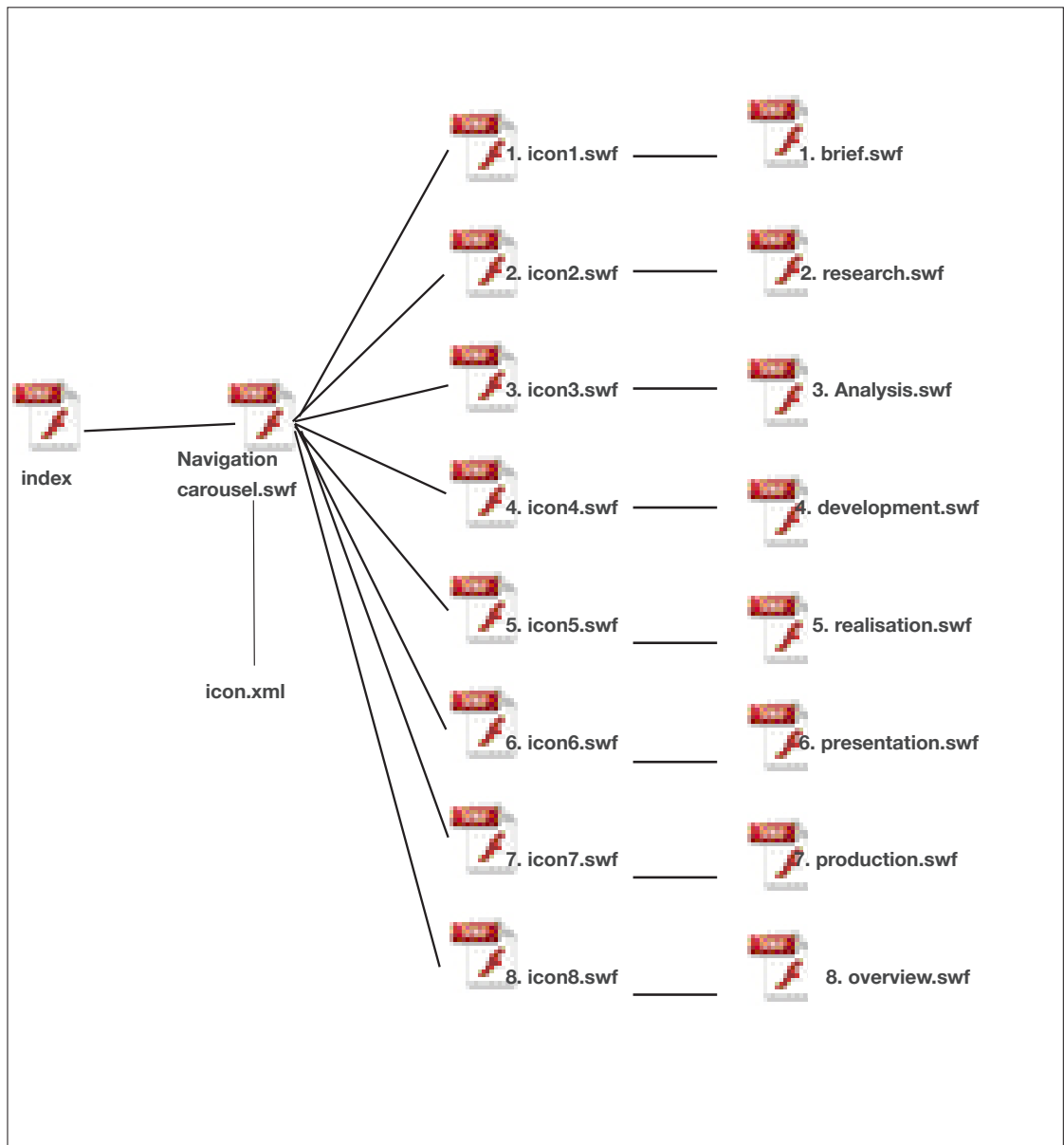
5.3 Testing

Continuous testing and debugging was a vital element for the success of this project. I carried out a variety of testing methods throughout the project, appropriate to the various stages using specific testing groups that were most suitable in achieving the desired critical results.

User Group Testing:
I tested two user groups. One represented the user and comprised of potential clients from various backgrounds. The second represented the design client and comprised of a range design individuals both established designers within the industry as well as resent graduates.

User group testing was first carried out during the developmental stages of the project to test and receive feedback on preliminary designs, navigation, functionality and communication layouts. It was then employed in the execution stages to test the final visual designs and working functionality of the project.

Software Functionality Testing:
Software functionality testing was carried out primarily by myself to test the workings of the application. It was carried out throughout the execution stage to insure a fault free prototype. Locating and removing errors in the code was important for the functionality of this project. To test for bugs in Flash Action Script the trace action was used. Flash sends a custom message to an output panel to say if a function has been successfully called.

Modifications and Implementation of feedback
The testing highlighted the following points:

1.The client based user group commented that while they may not want to know all the details of the design process and may not enter each section to learn more they felt added confidence towards a designer for taking such

a strong business approach. They also liked the feeling of inclusion and felt more inclined to give the designer more autonomy over certain decisions.

2. I received conflicting feedback on the look and feel. The designers (both the re-sent graduates and professionals) favoured the earlier design solution which was predominately white with a white background. They felt it created a better balance of negative space, was less overpowering and gave a more contemporary feel. However the potential client user group favoured the dark gray background and used words such as "more confidant looking" "more familiar" and " finished looking"

3. The dragable hit state of the process buttons needed to be slowed down considerably before the user felt comfortable exploring the content.

4. Almost no user systematically viewed all the content in the process section but dipped in and out, continuously going back and forward.

5. The designers were divided on whether they felt comfortable including the client so much in their design process. They unanimously agreed however that this ap-proach would facilitate their business practice and unify there presentation approach.

6. In my research, the lack control over the browser back button was sited as a major disadvantage of using Flash. However none of the testers attempted to user the back button in the browser when they were in the site.

7. Interface design elements that were changed included drop down menus for menu bar content. Users felt that it over complicated the content and preferred having less options when they first entered the site. Also I dropped a short introduction on the design process /index page. Users felt it was unnecessary.

8. All testers interacted with the carousel menu first before exploring the rest of the site. This proves Godins Banana Principle theory true.

6.0 Conclusion

In this report I have discussed the main stages of my MA project. I have presented the primary aims and objectives that I hoped to fulfil within the designated time frame and covered the key sections of the project from research to delivery.

To successfully build this prototype a solid foundation of research, reflection and testing had to be laid down. The design process was explored extensively and a deeper understanding of the user experience and user interface was acquired.

Future Development

An excellent way of developing this project would be to increase the login section and develop a design template to facilitate dynamic web database connection. This would allow increased transparency and more client involvement throughout the work in progress stages. Also I have considered the possibility of developing the interface, navigation structure and design solution as a skin/template which could be customised and used by many design professionals

While this is all future work and outside the scope of this MA project, the site has been designed to facilitate such a development in the future.

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Appendix

Appendix A:
Action Script for the Carousel navigation in Carousel.swf

```
Import mx.utils.Delegate;
import mx.transitions.Tween;
import mx.transitions.easing.*;

var numOfItems:Number;
var radiusX:Number = 300;
var radiusY:Number = 50;
var centerX:Number = Stage.width/2.2;
var centerY:Number = Stage.height/1.5;
var speed:Number = 0.03;
var perspective:Number = 90;
var home:MovieClip = this;
theText._alpha = 0;

var tooltip:MovieClip = this.attachMovie("tooltip","tooltip",10000);
tooltip._alpha = 0;

var xml:XML = new XML();
xml.ignoreWhite = true;

xml.onLoad = function()
{
var nodes = this.firstChild.childNodes;
numOfItems = nodes.length;
for(var i=0;i<numOfItems;i++)
{
var t = home.attachMovie("item","item"+i,i+1);
t.angle = i * ((Math.PI*2)/numOfItems);
t.onEnterFrame = mover;
t.toolText = nodes[i].attributes.tooltip;
t.content = nodes[i].attributes.content;
```

```
t.icon.inner.loadMovie(nodes[i].attributes.image);
t.ref.inner.loadMovie(nodes[i].attributes.image);
t.icon.onRollOver = over;
t.icon.onRollOut = out;
t.icon.onRelease = released;
}
}

function over()
{
home.tooltip.tipText.text = this._parent.toolText;
home.tooltip._x = this._parent._x;
home.tooltip._y = this._parent._y - this._parent._height/1.4;
home.toolTip.onEnterFrame = Delegate.create(this,moveTip);
home.tooltip._alpha = 100;
}

function out()
{
delete home.toolTip.onEnterFrame;
home.tooltip._alpha = 0;
}

function released()
{
home.tooltip._alpha = 0;
for(var i=0;i<numOfItems;i++)
{
var t:MovieClip = home["item"+i];
t.xPos = t._x;
t.yPos = t._y;
t.theScale = t._xscale;
delete t.icon.onRollOver;
delete t.icon.onRollOut;
delete t.icon.onRelease;
delete t.onEnterFrame;
if(t != this._parent)
```

```
{
var tw:Tween = new Tween(t,"_xscale",Strong.easeOut,t._xscale,0,1,true);
var tw2:Tween = new Tween(t,"_yscale",Strong.easeOut,t._yscale,0,1,true);
var tw3:Tween = new Tween(t,"_alpha",Strong.easeOut,100,0,1,true);
}
else
{
var tw:Tween = new Tween(t,"_xscale",Strong.easeOut,t._xscale,100,1,true);
var tw2:Tween = new Tween(t,"_yscale",Strong.easeOut,t._yscale,100,1,true);
var tw3:Tween = new Tween(t,"_x",Strong.easeOut,t._x,160,1,true);
var tw4:Tween = new Tween(t,"_y",Strong.easeOut,t._y,370,1,true);
var tw5:Tween = new Tween(theText,"_alpha",Strong.easeOut,0,100,1,true );
theText.text = t.content;
var s:Object = this;
Shadow = t;
tw.onMotionStopped = function()
{
s.inner.gotoAndStop(3);
Shadow.ref.inner.gotoAndStop(3);
s.onRelease = unReleased;
}
}
}
}

function unReleased()
{
s = this;
s.inner.gotoAndStop(1);
Shadow.ref.inner.gotoAndStop(1);
delete this.onRelease;
var tw:Tween = new Tween(theText,"_alpha",Strong.easeOut,100,0,0.5,true);
for(var i=0;i<numOfItems;i++)
{
var t:MovieClip = home["item"+i];
if(t != this._parent)
{
```

```
var tw:Tween = new Tween(t,"_xscale",Strong.easeOut,0,t.theScale,1,true);
var tw2:Tween = new Tween(t,"_yscale",Strong.easeOut,0,t.theScale,1,true);
var tw3:Tween = new Tween(t,"_alpha",Strong.easeOut,0,100,1,true);
}
else
{
var tw:Tween = new Tween(t,"_xscale",Strong.easeOut,100,t.theScale,1, true);
var tw2:Tween = new Tween(t,"_yscale",Strong.easeOut,100,t.theScale,1, true);
var tw3:Tween = new Tween(t,"_x",Strong.easeOut,t._x,t.xPos,1,true);
var tw4:Tween = new Tween(t,"_y",Strong.easeOut,t._y,t.yPos,1,true);
tw.onMotionStopped = function()
{
for(var i=0;i<numOfItems;i++)
{
var t:MovieClip = home["item"+i];
t.icon.onRollOver = Delegate.create(t.icon,over);
t.icon.onRollOut = Delegate.create(t.icon,out);
t.icon.onRelease = Delegate.create(t.icon,released);
t.onEnterFrame = mover;
}
}
}
}
}


function moveTip()
{
home.tooltip._x = this._parent._x;
home.tooltip._y = this._parent._y - this._parent._height/1.5;
}

xml.load("icons.xml");

function mover()
{
this._x = Math.cos(this.angle) * radiusX + centerX;
```

```
this._y = Math.sin(this.angle) * radiusY + centerY;
var s = (this._y - perspective) / (centerY+radiusY-perspective);
this._xscale = this._yscale = s * 100;
this.angle += this._parent.speed;
this.swapDepths(Math.round(this._xscale) + 100);
}

this.onMouseMove = function()
{
speed = (this._xmouse-centerX)/3500;
```

Code to load external swf files om index page.
```
Stop();

var myMCL: MovieClipLoader = new MovieClipLoader();
myMCL.loadClip("CAROUSEL.SWF" , "carousel_mc");

var myMCL_2: MovieClipLoader = new MovieClipLoader();
myMCL_2.loadClip("drop.swf" , "drop_mc");

var myMCL_3: MovieClipLoader = new MovieClipLoader();
myMCL_3.loadClip("drop_2.swf" , "drop2_mc");
```

Appendix B:

Interface design realisation