Web Design and Development

The design and development of a website consists of a number of steps.   To achieve the best results within the time and budget required, clients are advised to consider the following requirements before engaging Spire Express.

The requirements relate to the following areas:
1. User
2. Technical
3. Content
4. Review & Iteration
5. Speed to delivery

1. User Requirements

What is the objective of the website? Who is the intended audience? How will they be viewing the proposal/prototype? To help facilitate this process please find enclosed our Web Survey questionnaire, which must be filled out prior to project start.

An understanding of the objective and audience for the site is critical to determining the technical, design, development and delivery elements of the website.

2. Technical Requirements

What screen resolution will be used? What Internet browser software will the audience use to view the site?

Screen resolution can be set to either 800*600 pixels or 1024*768 pixels on many machines. Older desktops often only support 800*600, with similar differentiation in laptops. Projectors also can often only support one or other resolution.

If a site is designed for 1024*768, it will distort when viewed in 800*600 and single view pages require scroll bars. In reverse, an 800*600 site can be viewed in 1024*768 but will not fill the entire screen view.

The most common browsers are Internet Explorer and Netscape Navigator.   Older versions of these applications do not support some of the tools used in web design, and in some cases IE treats on-screen events differently to NN.   Early definition of the browser and version to be used is critical to the design of a website that fits the user requirements.

If required, websites can be designed to be viewed in both browsers, however complexity of functionality can be reduced and the user experience can be less powerful.

3. Content Requirements

What are the navigation elements of the site? How will the user navigate through the different levels of content and know consistently where they are?

To enable the development team to build the basic structure of a site, it is critical to define both the levels of navigation required and the actual words to be used in the navigation menus. No development work can be done until this has been defined.

e.g. define **Level 1**
                        Level 2
                            Level 3

As well as how many level 1 (2and 3) headings there are and what the words will be, e.g. Level 1 – Home, myProcurement, News, Contact Us; Level 2 within myProcurement – Buy online, Frequent Purchases, Repeat Orders, etc.

What is the structure of the site? What is the basic layout for the content of each page?

The best way to communicate the structure of the site to us initially is through a paper-based storyboard that visually maps out the levels, layout and basic content of each page of the site.

The client normally determines the structure and content of the site, although we have worked on prototypes where we have proposed a structure and basic content for review by the client.

4. Review and Iteration Process

How can we best communicate updates to the basic structure/content?

Once the basics have been discussed, we have found the best way of refining the storyboard is using PhotoShop designs, or a basic beta site, focusing on content rather than presentation. This enables the information to be communicated visually without requiring a face-to-face meeting.

What is the optimal process for review and iteration of design & content?

We have found the optimal review process for design is for clients to view our progress on the beta website and to have an update meeting/phone call with the web development team manager.

For content iterations, version control is essential, particularly if a large number of small changes are made over time. If text is being taken from Word, images from PowerPoint, Excel or other, it is essential to link the names of the files to a standard naming convention relating to each page of the site.

5. Speed to delivery requirements

What key factors affect the speed of development?

i.   **Stability of the content.**
        If the content of the site has already been determined then the site can be created quickly and to a high standard. If the content is only partially completed

and has to undergo several iterations and reviews then this will slow the build process and may impair the quality of the site.

It can take between 1 and 5 days development time *per page* depending on the amount of graphics in the page and the amount of testing and review iterations required.

ii.   Graphics
Unlike PowerPoint presentations, most navigation menus, headings, diagrams, mouseover effects, etc. are images (.gif or .jpeg) rather than basic text or master slide design layouts. These images take time to create and are time consuming to alter once developed.

Graphs and diagrams created in PowerPoint often need redrawing to maintain the quality within a web page. Small changes to layout or size can result in the whole image needing to be redrawn, and this should be considered when defining content.

Managing Flow

```
        ( Project )
        ( Kickoff )
             │
             ▼
    ①  Requirements
        Meeting
             │
             ▼
    ②  Develop
        Storyline &
        Corresponding
        Lo-Fi's
             │
             ▼
    ③  Get Storyline
        Approval &
        Confirm Workplan
             │
             ▼
    ④  Hold Kickoff
        Meeting w/
        Development Team
             │
        ┌────┴────────┐
        ▼             ▼
    ⑤ Design Home   ⑥ Develop Other
      Page Colors,    Key Pages with
      Layout,         Text Placeholders
      Navigation
        │             │
        ▼◄────────────┘
    ⑦  Initial Review
        & Confirm
        Dev. Direction
             │
             ▼
    ⑧  Flesh Out
        (Build & Test)
        Web Pages
             │
             ▼
    ⑨  Daily Review,
        Feedback and
        Control Project
             │
             ▼
    ⑩  Product Test
        and Final
        Packaging
             │
             ▼
    ⑪  Final Sponsor
        Approval and
        Complete Actuals
             │
             ▼
        ( Complete )
        ( Project )
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