



General Advice

on

Setting up a Web Site

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Introduction

This document explains the components of common websites in simple terms, and covers the decisions required and necessary steps to set one up.

Types of Website

There are two main types of website:-

- “static” or “corporate presence”
- “active” or “dynamic”.

The first type can be likened to a brochure, in that it can contain information about something, e.g. a company’s products and services, together with email links and other contact details. It gives a company a presence on the web, hence the term “corporate presence”. The pages are the same for every user, hence the term “static”.

The second type usually has a database and some more complex logic contained within it, and can interact with the user in more complex ways. For example the user may have to be identified in some way and the web site may record their personal preferences. It may also create some of its pages as it goes along, with data tailored for that user only, e.g. to show them their most recent orders.

A Website is Separate

It must be noted that a website is a separate entity to a companies systems, in that it sits on the internet on a host server, and doesn’t require anything at its owner’s site to be switched on in order to serve users on the internet.

This is a benefit because even if the owner has broadband, access for many internet users at the same time would be slow and one wouldn’t really want the stress and complication of looking after your own internet servers, its far better to leave this to a specialist hosting company. Another benefit is that you can split your service providers: for example, NTL could provide the connection, Freeserve could provide your email and One and One could provide the web site hosting.

This does create complications however, because in the case of dynamic sites, much thought needs to be given to how the owner can get to essential information, such as what goods has been ordered, etc.



Website Components

For the purpose of this document, there are two types of server, mail servers and web servers. Both exist on the internet, on PC's known as "servers". Server is a general term for something that talks to many other computers, rather than to a end user through a screen and keyboard.

Web Server Overview

A web hosting setup on the internet is very technical and could consist of many components, such as:-

1. Web Server.
2. Mail Server to allow the website to send emails.
3. DNS Server to store domain names, e.g. www.johnsonsoftwaredesign.co.uk
4. DHCP Server to hand out new IP addresses to new users who log onto the internet.
5. Database server for storing data such as customers, products and orders.
6. Firewall and virus checking programs to ensure security.
7. Backup programs/strategy to ensure backups exist in the event of server failure.
8. A massive connection to the internet to allow for many users to access the hosted websites at once.

The internet hosting companies have to do all of this and more, on installations costing thousands of pounds, and will have staff on 24 hour call out to ensure that the many websites that they are looking after will stay up and running all the time.

Mail Server Overview

A mail server in effect is a place on the internet that stores emails, so that both users do not need to be logged on at the same time in order to communicate.

For example, if an_other@abc.com sends an email to enquiries@johnsonsoftwaredesign.co.uk, the following steps take place:-

1. User presses Send. The SMTP server at the users end will pass the email onto the internet, aiming it at the address that it is being sent to.
2. If the address can be found, it ends up in the destinations mail server. If not, the SMTP server usually sends a message back to the originator telling them the message cannot be delivered.
3. At some point in time later on, the recipient logs on to the internet and presses Send/Receive in their email program. This logs on to their own mail server, which has one message waiting. This is downloaded and displayed.



Website Considerations

These are listed below:-

1. Graphic Design, i.e. a view on how each page on the website will look.
2. Actual Content, i.e. the structure and relationship between all the website pages and data to be shown on each page.
3. At least one Domain Name, such as www.johnsonsoftwaredesign.co.uk
4. A hosting company to provide web space on the internet and look after your domain names for you.
5. Getting listed on Search Engines such as yahoo, etc.
6. Getting statistics on web site access, number of hits, who has been accessing, from where, etc.
7. Copyright of your Site

If the site is an “active” site, there are additional considerations:-

8. How to get data to the site, e.g. product information.
9. How to get data from the site, e.g. orders that customers have placed.
10. How to take payments.

Additionally, the owner usually has an internet connection, but as previously stated it doesn't need to be from the same company that provides the hosting.

For completeness it should be noted that the website developer (if this is not the owner) will have an internet connection and a server to put a development copy of the site on. This allows the developer to develop and test the site before publishing the approved version to the internet for use by internet users.



Graphic Design

The colours, graphics, logos, fonts, and also the page sizes (which are decided based on commonly used screen resolutions of your target audience) have to be decided on.

JSD can help here if required, we normally ask for copies of all your brochures and letterheads, etc. However if your graphic design requirements are more than what we can handle, we don't mind receiving input from a third party company on this aspect.

Actual Content

Much thought needs to be given to the content of each page and its relationship with other pages. It is best to get a big piece of paper and draw the pages out with brief comments on what they will contain. The web designer can take this information and produce the site from it.

Domain Name

This is the web address that users will type in to get to your site, e.g. www.johnsonsoftwaredesign.co.uk. When a site is set up on the internet, only the domain name will get to it, the search engines will know nothing about it. It is your job to choose a domain name that is suitable for your needs and to put the domain name on all your stationary and emails, adverts, etc. to ensure that all your customers and potential customers know about it. Its as important as your brand name or company name in this respect.

Hosting Company

The hosting company provides web space which is accessible via a username and password. The username and password is used to copy web pages to the internet and is not required for normal use of the site.

The hosting company will normally look after the Domain Name in their DNS servers and also provide email services on that domain name, allowing a number of email addresses to be set up for your users, e.g. enquiries@johnsonsoftwaredesign.co.uk.

The web space could cost as little as £2 per month, to £25 per month, depending on your exact requirements. Domain names have a yearly charge associated with them also, normally paid every two years.



Search Engines

Once your website has been published, some of the search engines which are “robot” based, such as Google, will eventually find your site. Others will need telling about your site.

In some cases, it will be free, in other cases such as www.yell.com, there is a yearly charge for a directory listing.

Some search engines such as yahoo charge by keyword, in that you bid for a given keyword, the more you bid, the more likely you are to be at the top of the list, but it costs you a small amount each time you appear on the list.

It's a big job to go through all possible search engines and work out how the search engine works and how to get to the top of the list.

It is up to you to decide what keywords you want to come up on, and which search engines you want to appear on. We recommend employing a third party company to achieve this. It doesn't have to be the same company as the web designer because it's a very specialist area. Expect to pay £100 per year or more for these services.

Statistics

This may be part of your web space hosting or you may go to a separate company for this. If it's a separate company they usually ask you to put and hidden link to their site on your home page, which allows their site to count the beans when users access your site.

Copyright Aspects

Your website consists mainly of your data and proprietary information, so copyright of it should remain with your company. There are many cowboy web developers who try to maintain that this should not be the case.

JSD terms are usually that the web site is yours, but the (programming) code provided is for your use only, i.e. you cannot sell it, and we reserve the right to use this code on other customer's websites. We are getting into program/source code copyright here, and it prevents us having to re-invent the wheel every time we do an active website. No part of your website that is “visible” will be used elsewhere, only the “invisible” programming code.



Data Transfer from/to Active Sites

This is a very big area in itself. In the case of an active site, for example an electronic shop, product information has to be downloaded and order information received in a timely manner so you can deal with the orders. There are three main concepts here:-

1. For some sites, the web developer may “hard code” information into the site. This is the worst method, because you have to contact the developer and possibly pay charges in order to change your information.
2. The web developer leaves pages on the site that are password protected, that allow you to go into the site and maintain information. You might even have a different domain name, e.g. admin.johnsonsoftwaredesign.co.uk for this purpose.
3. Additional work is done such that your website integrates with your in house office systems. This is normally the most expensive option but provided your internet connection is up, information appears in your back office systems without you having to do anything, also updates to your prices would go out automatically to the internet at the correct date.

The second option is usually the best compromise for small companies, with the caveat that you must go on every few hours and check for new orders.

Please contact us for further information/advice in this or any aspect.

How to take Payments

The simplest method is to ask customers to email you or telephone you with their orders.

If you wish to take credit card payments on line, a third party company must be used, normally one that is compatible with your business bank account.

You may like to contact your bankers and ask what options they have to allow online payments, it may be a link you can add to your website.

The above options can be very expensive, another emerging option is paypal, which allows credit card payments to be taken and money sent to anybody with an email address. They also charge commission but depending on your volumes, may be a viable option compared to the others.

Please contact us for further information/advice on this or any aspect.



Important Security Considerations

It is very important that your company uses both Virus Checking and a correctly configured Firewall, to prevent your internal network from coming under attack. This is particularly important if you are using broadband and are connected all the time to the internet.

We can advise further if necessary.

About Johnson Software Design Limited

Please note also that Johnson Software Design Limited can advise on all your systems aspects, including your network, internet connection, PC's, servers, Microsoft Office, and any custom application software you may require for your business to be truly effective.

We start by finding out what you are trying to achieve and provide you with an effective solution based on our years of experience. Please contact us for further details.

Conclusion

We hope this has been helpful to our customers and prospective customers and hope we can be of service to you.

If you have any comments on the contents of this document, or would like to suggest improvements or areas not covered, please contact webmaster@johnsonsoftwaredesign.co.uk.

For further advice on any aspect of websites or database and application software, please contact Johnson Software Design on 0845 0513820 or email enquiries@johnsonsoftwaredesign.co.uk