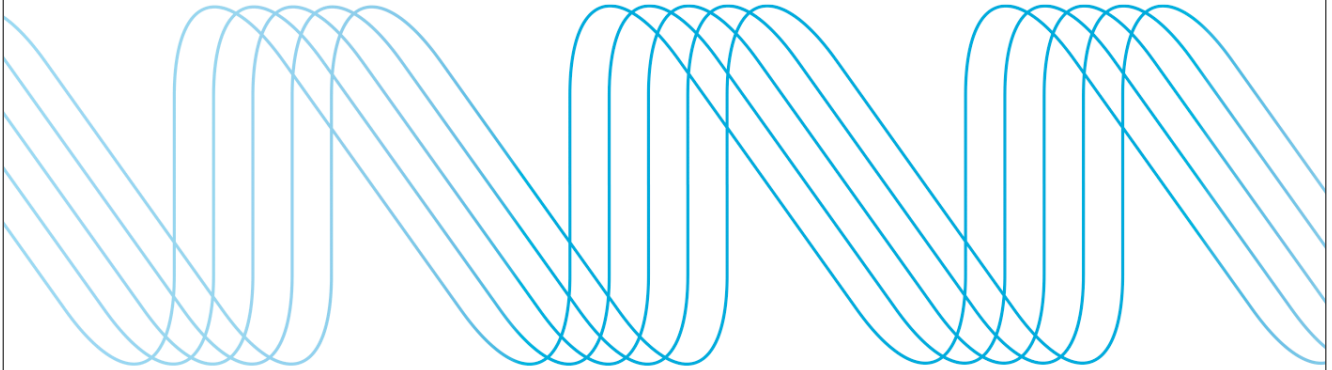

Maximising Online Resource Effectiveness



Session 4
Websites

Subtopics

- Purpose and plans of a web site
- Reaching the audience
- Search engine basics
- Content Management System
- Search Engine Optimisation
- Metrics
- Content structure
- Accessibility
- Integrity of a site
- Metadata and semantics
- The importance of social media

Web sites are important

Poor websites cost UK councils around £11m a month

Janine Milne, 8 January 2010

Shoddy websites could be costing UK councils £11m a month, according to the Society of IT Managers (Socitim).

Faced with badly designed or poorly constructed sites, people are choosing to either call their council or visit a council contact centre, both far more costly channels.

Only 21% of the 7.3m unique visitors to the 120 council websites found part of the information they were looking for.

On average, a fifth of site visitors couldn't find the information they needed. That equates to 4.4 million failures in dealing with online enquiries across all local authorities. As each call to a council is estimated to cost roughly £2.50 to handle, local authorities could be haemorrhaging up to £11m each month.

Despite these serious misgivings about the web, it was the most popular way for citizens to contact their local authority, preferred by 70% of the customers. But it was also exposed to be the least satisfactory channel, with 42% of visitors rating its service as poor, compared to 21% of face-to-face meetings and 2% of phone calls.

http://www.cbronline.com/news/poor_websites_cost_uk_councils_11m_a_month_281009



Why do people visit web sites

- Individually, for 5 minutes, write down the five web sites you visit most
- Rank these in order of importance
- Briefly note the reasons for using each
- Then, appoint a group notetaker and spokesperson and compile a merged list from all the single lists
- If a web site features more than once, indicate the frequency



Why do people visit web sites

Web site address	Importance	Reasons for using

The challenge

- You have (or will have) an online resource (web site)
- To which you want to attract visitors
- The right kind of visitors
- Who will find all that's relevant to them on your site
- And get real value from what they find
- Then tell others, who will do the same
- And you will obtain evidence of this
- So that you can secure funding to keep things going
- And improve the site
- And maybe make it something more important
- By being the definitive source of something
- In a bigger picture



The real challenge

Convergence is everywhere. It's easier than ever to reach a large audience, but harder than ever to *really connect* with it.
Competing against the millions?

<http://www.youtube.com/watch?v=6ILQrUrEwE8>

Search Engine Optimisation



photo: http://www.flickr.com/photos/great_northern_running/2950700489/

Search engines—signposts or billboards?



Advertising?



Search engine use

October search engine numbers: Google, Bing up; Yahoo, Ask, AOL down

Andrew Munchbach, 17 November 2010

Google 66.3%, up from 66.1% in September;

Bing 11.5%, up from 11.2% in September;

Yahoo 16.5%, down from 16.7% the month prior;

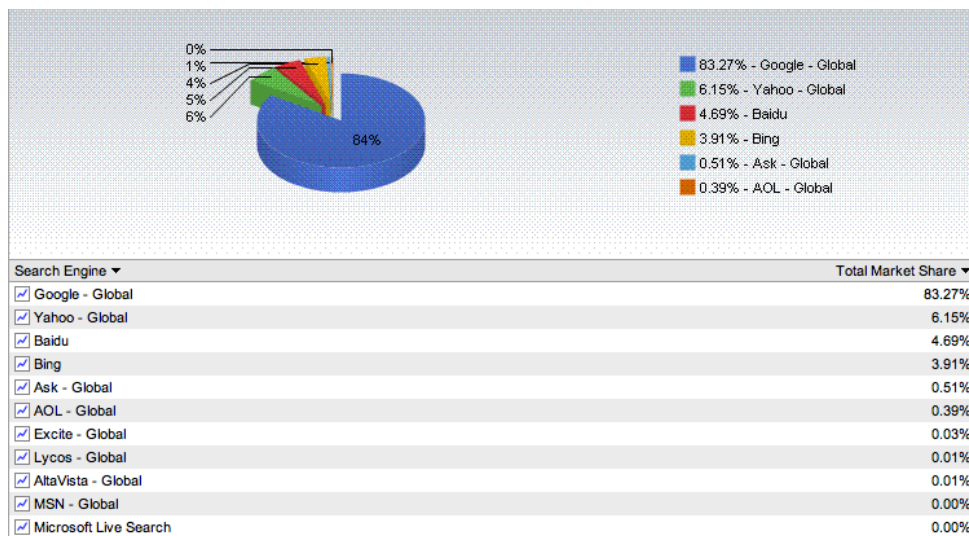
Ask.com 3.6% down 0.1% from the previous month;

and AOL 2.1%, down from 2.3%.



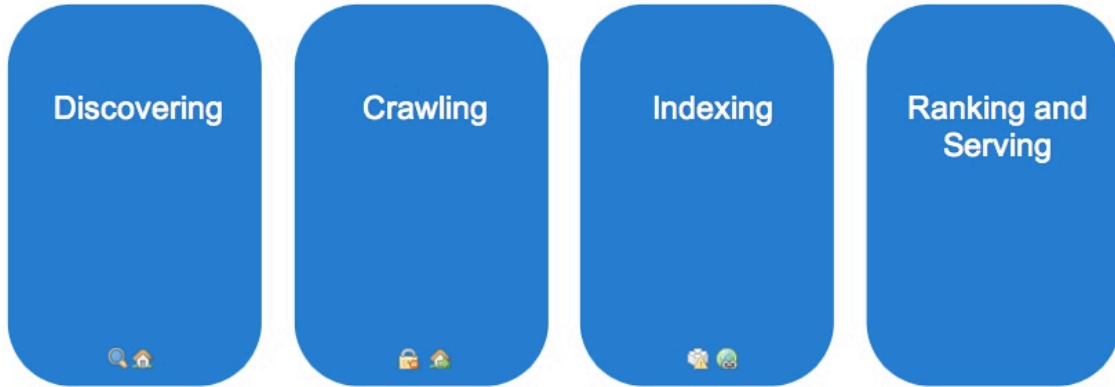
<http://www.bgr.com/2010/11/17/october-search-engine-numbers-google-bing-up-yahoo-ask-aol-down/>

Global search engine market



<http://marketshare.hitslink.com/search-engine-market-share.aspx?qprid=4&qptimeframe=Q>

Google search engine operation overview



<http://support.google.com/webmasters/bin/answer.py?hl=en&answer=70897>



search engine optimization tutorial recommended on youtube

Search

[Advanced Search](#)

Web [Show options...](#) Results 1 - 10 of about 30,300,000 for search engine optimization tutorial recommended on youtube. (0.31 seconds)

Video results for search engine optimization tutorial ...



[Search Engine Optimization SEO Tutorial ...](#)
9 min - 29 Jun 2008
www.youtube.com



[Search Engine Optimization Secrets](#)
2 min 24 sec - 6 Dec 2006
www.youtube.com

SEO YouTube

Get thousands of views to your movie through YouTube SEO(Search Engine ... 'gainer' a very specific search term for a trick... and lastly 'tutorial' because ...
www.seoyoutube.com/ - [Cached](#) - [Similar](#)

US ENGLISH YOUTUBE SEO TUTORIAL. SEARCH ENGINE OPTIMIZATION ...

English US YouTube SEM Google SEO Video Tutorial is provided by www.BLUMADVISORY.com - Marketing SEM. YOUTUBE ENGLISH USA GOOGLE SEO Part 1 of Google SEM.
www.discountwebdesigner.com/seo.../us-english-youtube-seo-tutorial-search-engine-optimization-googlech-google-ch/ - [Cached](#)

Adobe Flash Tutorials, Flash CS4, CS3 Professional, CS4 Tutorials ...

Adobe Flash Search Engine Optimization (SEO) Tutorials, Articles ... Author is a Flash engineer at Google working on YouTube. ... Links to Flash-related Web sites recommended and provided by the Flash discussion list, Flasher. ...
websitesitips.com/graphics/flash/ - 11 hours ago - [Similar](#)

SEO - YouTube - Search Engine Optimization SEO Tutorial - WebBizIdeas

Making money online - Yahoo! India News Blogging in India has now become a profession from a casual writing hobby and this is mainly because of the money.
kevinsjones.com/seo-youtube-search-engine-optimization-seo-tutorial-webbizideas/ - [Cached](#)

Search Engine Optimization Seo Tutorial Webbizideas - Youtube

Search Engine Optimization Seo Tutorial Webbizideas - Youtube - Noolmusic.com. ... Playboy YouTube Search Winner Ashton Verrengia ...
noolmusic.com/youtube/search_engine_optimization_seo_tutorial_webbizideas.php - [Cached](#)

Title

Description

Web page basics

```
<head>
```

```
<title>Strategic Content Alliance MORE: About us</title>
```

```
<meta name="Description" content="The aim of this web site
to create a useful resource for all participants of the SCA
MORE 2010 workshops." />
```

Appropriate content management system

logged in as super administrator George Munroe | [my details](#) | [logout](#) | [contact us](#)

[About us](#) | [Material](#) | [News](#) | [Library](#) | **[Sections](#)**

Sections

[view and manage all sections]

Editing section About us

Display name for this section:

Web page title for this section:

Description metainformation:

Keywords metainformation:

Sub title for this section:

Position in menu:

Sidebar:

Highlighted news in sidebar:

Who can access this section: public, anyone accessing this web site can see this section
 private, only registered users (qualified by group permissions)



Google's webmaster guidelines

- Make sure all the sites that should know about your pages are aware you're online
- Think about keywords and make sure that your site actually includes them
- Use text instead of images to display important names, content, or links
- Make sure that <title> elements and ALT attributes are descriptive
- Use a text browser to examine your site and check that JavaScript, cookies, session IDs, frames, DHTML, or Flash don't prevent access to essential content
- Use robots.txt to prevent crawling of pages that don't add much value
- Test your site to make sure that it appears correctly in different browsers
- Make pages primarily for users, not for search engines; don't deceive your users or present different content to search engines than you display to users, which is commonly referred to as "cloaking"
- Avoid hidden text or hidden links
- Don't load pages with irrelevant keywords
- Don't create multiple pages, subdomains, or domains with same content

<http://www.google.com/support/webmasters/bin/answer.py?answer=35769>

Keywords in content

Google webmaster guidelines

Keyword stuffing

"Keyword stuffing" refers to the practice of loading a webpage with keywords in an attempt to manipulate a site's ranking in Google's search results. Filling pages with keywords results in a negative user experience, and can harm your site's ranking. Focus on creating useful, information-rich content that uses keywords appropriately and in context.

Matt Cutts, Google webmaster central blog

Google does not use the keywords meta tag in web ranking



<http://www.google.com/support/webmasters/bin/answer.py?answer=66358> <http://www.youtube.com/watch?v=jK7IPbnmVU>

Keywords in filenames

Using your keywords in URL filenames—tested with results

Xpirt Design, April 2009

Using your target keywords in your filenames separated by hyphens helps your site to be seen by Google as more relevant for your given keywords than a filename using no keywords. This, I believe, is a fact.



<http://xpirtdesign.com/search-engine-optimization-tips/using-your-keywords-in-url-filenames-tested-with-results/>

XML sitemaps

Confirming what should be indexed

Sitemaps are an easy way to inform search engines about pages to be indexed, submitted to Google when a site is added via Webmaster Tools.

A sitemap is an XML file that lists URLs for a site along with additional metadata about each URL—when last updated, how often it is likely to change, how important it is compared to all others.

```
<url>
<loc>http://www.example.com/section.html</loc>
<lastmod>2007-10-08T10:28:56+00:00</lastmod>
<changefreq>daily</changefreq>
<priority>0.64</priority>
</url>
```

Sitemaps can link discrete sections of a site together that may not have any direct links between them.

Sitemaps can be “hand written” or generated using a “tool” (and edited as appropriate).

Search engines can index the site more intelligently using a sitemap.

The sitemap 0.90 protocol is offered under the terms of the Attribution-ShareAlike Creative Commons License and has wide adoption, including support from Google and Microsoft.

<http://www.xml-sitemaps.com/> <http://www.sitemaps.org/protocol.php>

Common use of robots exclusion protocol

- **Most web sites have a robots.txt file in the document root**
Informs all “robot” software (spiders, crawlers, indexers) what files or directories should not be indexed
Very unhelpful if configured wrongly
Easily checked by viewing <http://website/robots.txt>
- **The same objective can be achieved using a <META> tag**
Applies to only the single web page containing the tag in document head

```
<META name="ROBOTS" content="NOINDEX">
```
- **Useful for preventing inappropriate indexing of parts of site**
e.g. files relating to administration of the site or similar
- **Can also be used to identify where a sitemap.xml is located**
Include line as follows
Sitemap: <http://www.mysite.com/sitemap.xml>



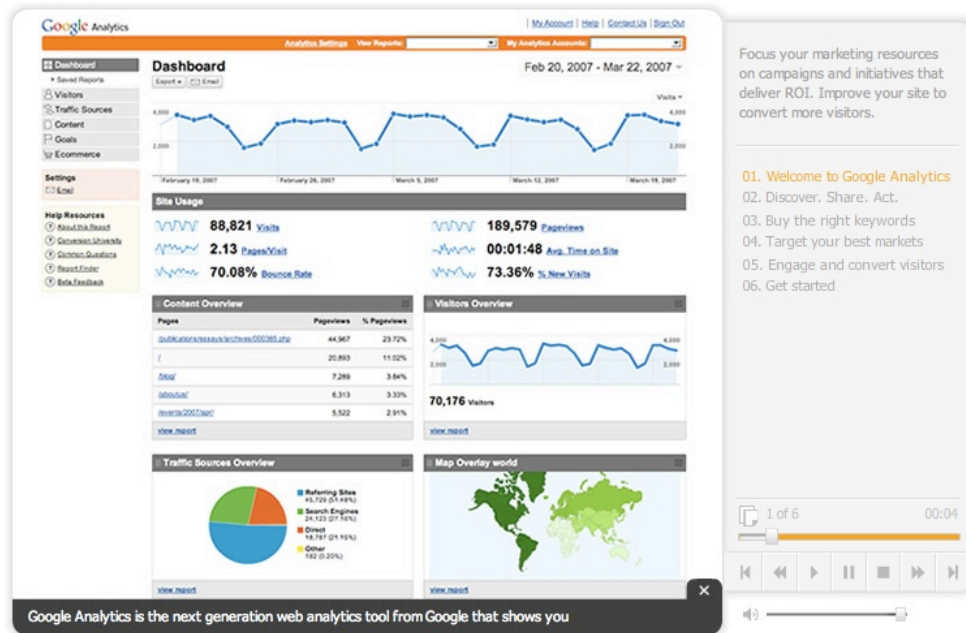
<http://www.robotstxt.org/> <http://more.netskills.biz/robots.txt>

Google analytics

Getting started with Google Analytics

- Create a Google account
- Identify your unique web ID
- Insert unique ID into Javascript tracking code and add this code to all pages (which links to JavaScript library on the Google servers)
- After logging in to your account you may select reports of interest from your Google Analytics dashboard

Google analytics



http://www.google.com/intl/en_uk/analytics/tour.html

Google analytics

How Google Analytics works

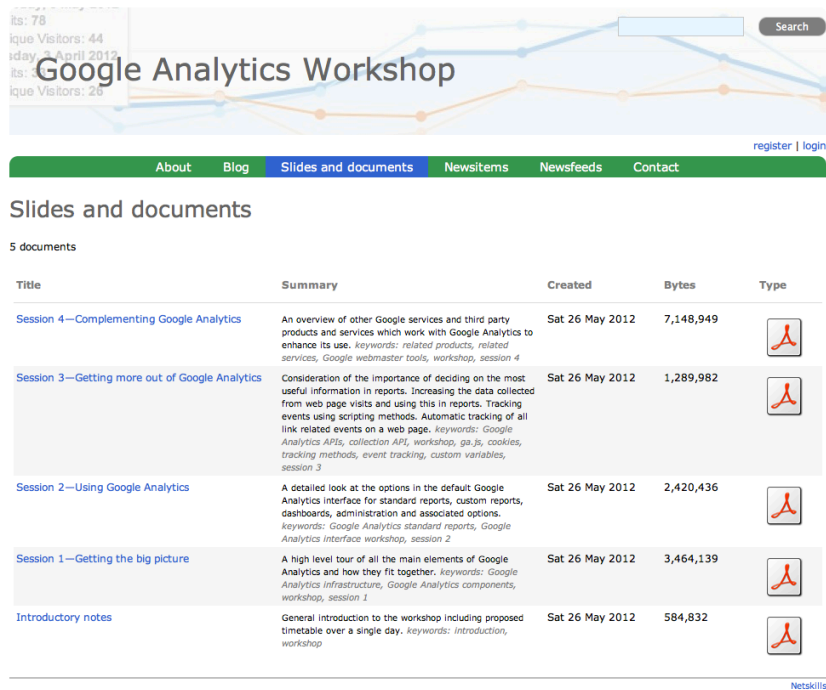
- When a page is accessed the “track page view” script referred to in the tracking code runs
- This collects HTTP and browser data, reads and writes a cookie on the user's machine, and sends an update to a Google secure server (via parameters on an ordinary web request)
- All parameters relating to the page access are then stored in the logs of the Google secure server and from there used to compile reports on the Google servers






Implications

- Requires Javascript on client machine
- Must use cookie
- Results not available immediately
- Records use of cached and reloaded pages



Google Analytics—workshop materials



Title	Summary	Created	Bytes	Type
Session 4—Complementing Google Analytics	An overview of other Google services and third party products and services which work with Google Analytics to enhance its use. <i>keywords: related products, related services, Google webmaster tools, workshop, session 4</i>	Sat 26 May 2012	7,148,949	
Session 3—Getting more out of Google Analytics	Consideration of the importance of deciding on the most useful information in reports. Increasing the data collected from web page visits and using this in reports. Tracking events using scripting methods. Automatic tracking of all link related events on a web page. <i>keywords: Google Analytics APIs, collection API, workshop, ga.js, cookies, tracking methods, event tracking, custom variables, session 3</i>	Sat 26 May 2012	1,289,982	
Session 2—Using Google Analytics	A detailed look at the options in the default Google Analytics interface for standard reports, custom reports, dashboards, administration and associated options. <i>keywords: Google Analytics standard reports, Google Analytics interface workshop, session 2</i>	Sat 26 May 2012	2,420,436	
Session 1—Getting the big picture	A high level tour of all the main elements of Google Analytics and how they fit together. <i>keywords: Google Analytics infrastructure, Google Analytics components, workshop, session 1</i>	Sat 26 May 2012	3,464,139	
Introductory notes	General introduction to the workshop including proposed timetable over a single day. <i>keywords: introduction, workshop</i>	Sat 26 May 2012	584,832	

<http://googleanalytics.netskills.biz/>

Avoid Search Engine Optimisation mistakes

Nine common SEO campaign mistakes

Jaamit Durrani, 25 March 2010

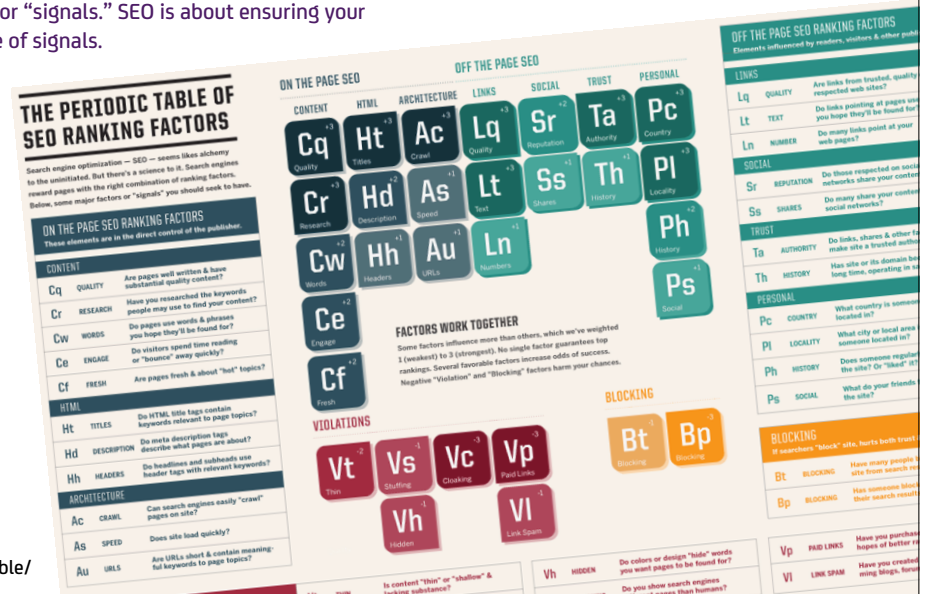
- Obsessing over onsite SEO
- Forgetting about the foundations
- Worshipping the false idol: the homepage
- Fawning over 'BigHead' keywords
- Ignoring conversion and analytics
- Obsessing over analytics
- Tweakophobia
- The Premier League chairman factor
- Reading too many SEO blogs!



Getting the *helicopter* view

A periodic table of SEO ranking factors

Search engine optimisation may seem like alchemy to the uninitiated. But there is a science to it. Search engines reward pages with the right combination of ranking factors, or “signals.” SEO is about ensuring your content generates the right type of signals.



SEO actions for a specific web site

This exercise should be done as individuals, with group consultation

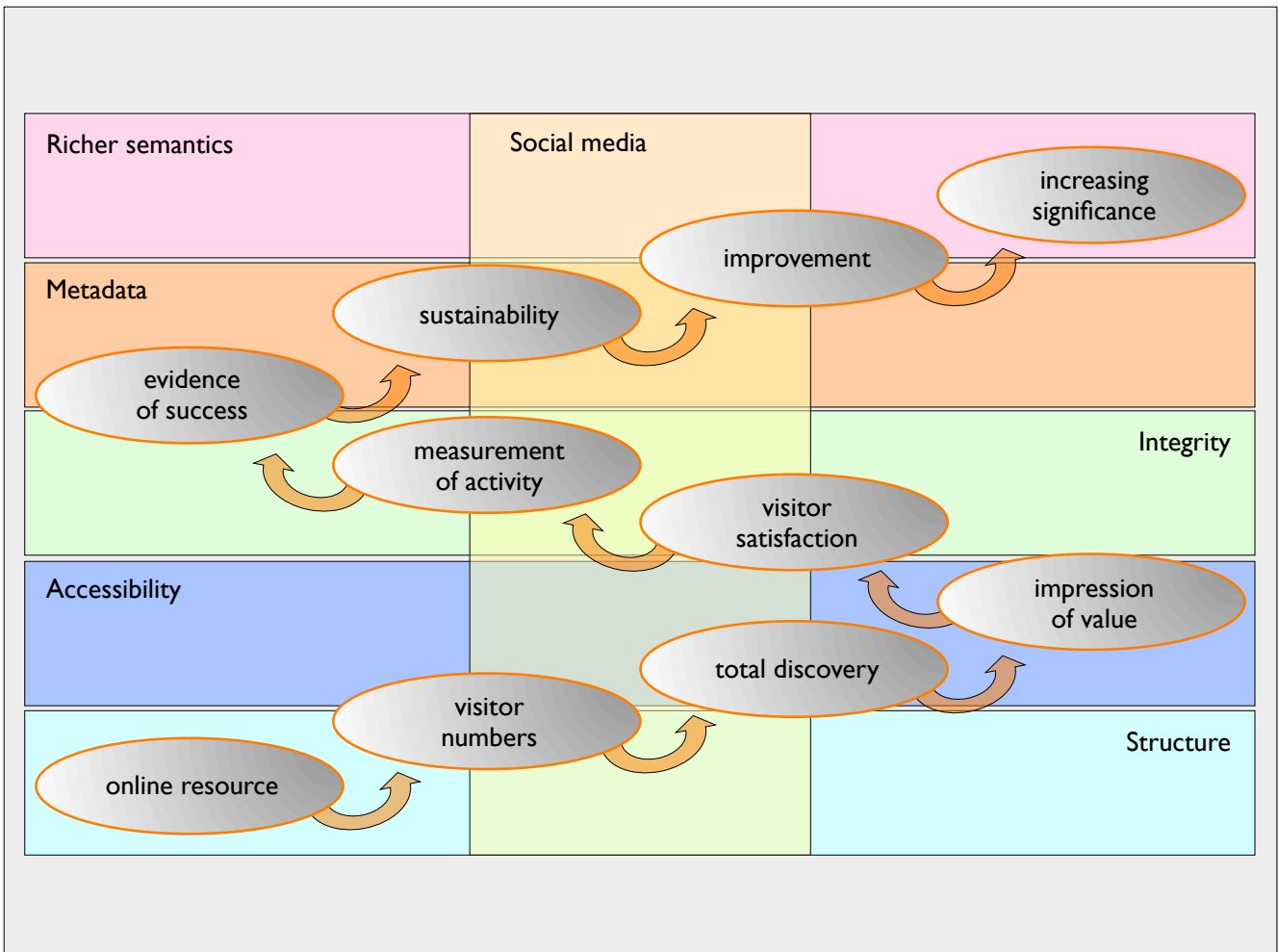
Consider your web site

1. Identify any actions that you believe you should take to ensure that all basic SEO guidelines are satisfied
2. For each action identify how urgently it should be addressed
3. For each action identify anyone you need to discuss the matter with in order to have it resolved properly
4. Estimate when each action is likely to be completed



SEO actions

Action	Urgency	Others who need to be involved	Target date for completion



Implementation of standards

HTML5 and CSS3

Eric Meyer, "A more tangled web", Belfast Build conference, November 2009 (summary by Charlie Neely, FRONT)

The web's relative simplicity has made it so successful. Basic web tools, HTML, CSS and Javascript, have all found their way into many products and services we use today.

However HTML5 wont be fully implemented until an estimated 2022 and CSS3 is likely to be in development far beyond that.

But this doesn't stop us from using elements of it already. Developers are ingeniously using Javascript to emulate methods and functions of HTML5 and CSS3, for example, Alexis Deveria created a jQuery plug-in which provides support for CSS3 Template Layout Module.



<http://vimeo.com/7863592> <http://a.deveria.com/?p=236> <http://en.wikipedia.org/wiki/JQuery>

Video and audio with HTML5 on all browsers

HTML5 video and audio for everyone

Google, March 2010

HTML5 video and audio tags make embedding media into documents as easy as embedding an image. All it takes is a single <video> or <audio> tag. Unfortunately, not all browsers natively support these HTML5 tags.

To enable HTML5 video and audio tags in all major browsers, simply paste the following code into the <head> of your document:

```
<script src="http://api.html5media.info/1.1.5/html5media.min.js"></script>
```

This will allow you to embed video and audio into your document using the following easy syntax:

```
<video src="video.mp4" width="320" height="240" controls preload></video>  
<audio src="audio.mp3" controls preload></audio>
```



<http://html5media.info/>

Using new technologies with IE

Google Chrome Frame

- An open source plug-in that seamlessly brings Google Chrome's open web technologies and speedy JavaScript engine to Internet Explorer
- Start using open web technologies right away, even technologies that aren't yet supported in Internet Explorer 6, 7, or 8
- Take advantage of JavaScript performance improvements to make your apps faster
- Add a single tag to your pages and detect whether your users have installed Chrome Frame
- If not installed, you can direct your users to an installation page
- If installed, it detects the tag you added and works automatically



<http://code.google.com/chrome/chromeframe/>

Google Chrome Frame



Setting up an RSS feed

```
<?xml version="1.0" ?>
<rss version="0.91">
<channel>
  <title>Web Designer Help</title>
  <link>http://www.webdesignerhelp.co.uk</link>
  <description>Latest Tutorials/Articles</description>
  <language>en-us</language>
  <copyright>Copyright 2008-2009 WebDesignerHelp</copyright>
  <lastBuildDate>Tue, 6 Jan 2009</lastBuildDate>

<image>
  <title>Web Designer Help</title>
  <url>http://www.webdesignerhelp.co.uk/images/rss.gif</url>
  <link>http://www.webdesignerhelp.co.uk</link>
</image>

<item>
  <title>Setup an RSS Feed</title>
  <description>A basic tutorial on how to setup an RSS feed</description>
  <link>http://www.webdesignerhelp.co.uk/how-to-setup-an-rss-feed.html</link>
  <author>thomas@thomashardy.me.uk</author>
  <pubDate>Tue, 6 Jan 2009</pubDate>
</item>

</channel>
</rss>
```



<http://www.webdesignerhelp.co.uk/index.php/2009/01/how-to-setup-a-rss-feed/>

RSS feeds

RSS feed aggregators are very useful for keeping up with news from many sources

Google reader probably most popular

- Content from lots of sites syndicated in one place

Lots of iPhone and other mobile apps serve same purpose

- Very convenient to use

Make sure visitors know if you have RSS feed

- Include RSS icon in address bar (e.g. at <http://bit.ly/9hf917>)
- Add single line in HTML document head

```
<link rel="alternate" title="This news feed" href="address"
type="application/rss+xml" />
```



<http://www.google.com/reader/>

Providing access for everyone

Official accessibility guidelines

How people with disabilities use the web

Addressing various scenarios

Web content accessibility guidelines (WCAG) overview

Four principles and corresponding checklist points

Perceivable | Operable | Understandable | Robust



<http://www.w3.org/WAI/intro/people-use-web/Overview.html> <http://www.w3.org/TR/WCAG20/>

Usability

- **Simple clear navigation**

Don't confuse user with multiple routes to same place

3 clicks to anywhere

Ideally 5 choices at any stage

- **Consistency of layout**

- **Make every word count**

- **Make every image count**

- **Use *fancy stuff* for the enhancements not the essentials**

- **Common sense!**

<http://www.useit.com/alertbox/20020512.html>

Use of Javascript to enhance UX

- Avoid unnecessary user inconvenience or time wasting
- Form validation
- AJAX—to prevent frequent page loads from server
- Increase response times for web site visitors

<http://www.w3.org/standards/webdesign/script>

Javascript—AJAX example

- Update user interactively
- Provide visual feedback
- Check details at server
- Reduce necessary pages

1 Choose any of our houses to book

Selected property: **1 Wee Bothy**

2 Select your arrival and departure dates

Date of arrival: select from calendar on right
Date of departure: select from calendar on right
Estimated arrival time: **16:00**

3 Provide details of your stay

Total number in party: **1**
Number of children (15 years old or younger) in party: **0**
Dog (£40/week, only one allowed):
Any special requirements or requests:

4 Provide billing contact details

Amount paid so far: **£0.00**
Email address:
Confirmation of email address:
First name:
Last name:
Telephone number:
Address:

Wee Bothy
One bedroom with double bed
Three star rating

Arrival date

April 2010						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
-	-	-	-	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	-

Departure date

April 2010						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
-	-	-	-	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	-

Payment breakdown

Both arrival and departure dates must be selected before cost can be calculated..

<http://www.mcshanealen.com/cgi-bin/bookings>

Can your content be delivered adequately?

- Underpowered server
- Network connectivity
- Server configuration
- Content management system configuration
- Use of too many separate image/CSS/JS resources
- Every resource has bandwidth overhead
- Consolidate where possible

Integrity—“tools” of the trade

Google Analytics

- <http://www.google.com/analytics/support.html>
- <http://www.google.com/support/conversionuniversity>

Checking word maps

- <http://www.wordle.net/>

Identify suitable keywords and see popularity

- <https://adwords.google.com/select/KeywordToolExternal>

Compare keyword phrases, see trends over time and country

- <http://www.google.com/trends>

Make sure all links are working

- <http://validator.w3.org/checklink>



Added SEO value from metadata

- Vertical search engines—it becomes easier for search engines to differentiate the subject-matter of the pages, and so offer specialised views on their data
- Search accuracy—authors can make pages unambiguous
- Improving display of results—such as Google's rich snippets with layouts helping users get more done faster, web site owners getting more click throughs, and search engines becoming more popular than competitors



<http://markbirbeck.com/blog/2009/12/16/rdfa-and-seo/>

Richer semantics

- Globally understood metadata
- Computable data drawn from different sites and combined
- Use in new interfaces and visualisation services
- Many possibilities and worthwhile outcomes

An introduction to the semantic web

An introduction to the Semantic Web

http://www.youtube.com/watch?v=OGg8A2zfWKg&feature=player_embedded

Social media

- Where the users are!
- Where connection and engagement can happen very effectively with two way communication
- Where communities form
- Where trust and respect develops
- Permeating all walks of life and forming significant part of all public media activities

Build resources well



photo: ©GM 2010