

Two thin blue lines intersect on the left side of the slide. One line is vertical, and the other is diagonal, extending from the top left towards the top right.

Introduction to evaluation of websites and online services

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3 November 2011

Outline of presentation

1. Introduction (very brief)
2. Seven questions for evaluating websites and online services
3. Methods and tools
4. Examples: online counseling services
5. Questions and discussion

Disclaimer

1. I am not an IT expert
2. You don't need to be a mechanic, but what if you never learnt to drive?
3. This presentation is an introduction: great thing about the web is the VAST amount of information—many links are provided in this presentation to useful information, tools and tutorials.

Introduction

Variety of social services now delivered online—information self-help, counselling, crisis services

A website can serve a number of different purposes:

1. Attract and convert potential clients into actual clients
2. Engage and retain existing clients

Online social services may also be trying to

1. engage people that do not access other types of service (e.g. face to face and phone counselling)
2. provide a cost effective means of providing a service (for customers and government).



*“Well, J.B., we’re not a successful Internet company
because we’re not an Internet company.”*

Seven questions

1. Can people find the website?
2. Can people access the website?
3. Is the website content easy to read?
4. Who visits the website?
5. Are people engaged with, find credible, and satisfied with the website?
6. Could the service help people?
7. Does the service help people?

} Not covered in this presentation

Can people find it?



Can people access it?



♦ *The Garden of a Thousand Stairs* ♦



Who are they and are they satisfied?



Overview of methods

- Checklists (conformists)
- Conversionistas (the qual)
- The metrics people (the quants)
- Expert opinion and experimental testing (RCTs?)
- The enlightened mixed methods evaluators (us!)

What is a website?

- Web pages are text documents that are “marked up” with HTML tags that determine formatting (e.g. font, size, colour etc.).
- When you open up a webpage in a web browser, the web browser interprets the HTML tags to display what you see on the screen.
- HTML contains additional information not show on-screen.
 - Examples of meta tags include tags that indicate the page title, a brief description, and keywords.

Question 1: Can people find the website?

1. 'Search Engine Optimisation' or SEO
2. Websites are crawled by search engine robots and they harvest WORDS from your site.
3. There are many places where words are used on a website (visible or not)
 1. In the URL
 2. In headings and text on the page
 3. In ALT tags and uploaded files
 4. BUT words in graphics are not words to search engines

Question 1: Can people find the service

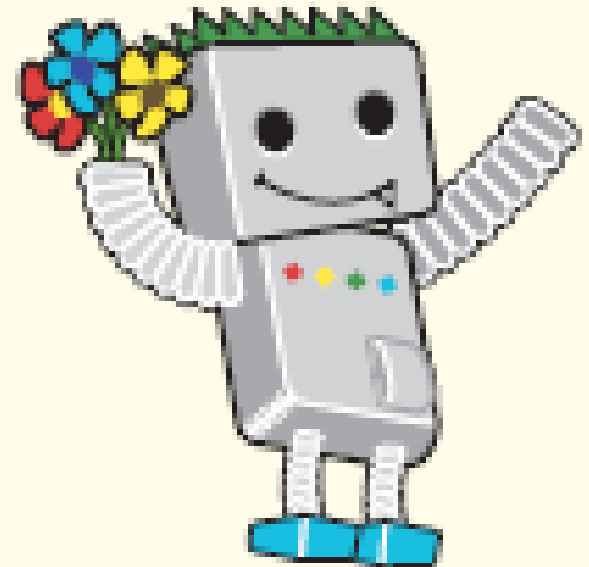
Meet Googlebot

Likes:

- short simple key words
- clear descriptions
- getting instructions
- simple structures & hierarchy
- not working too hard (obviously)

Turn offs:

- images without ALT text description
- text without meaning /fdg/img/2d342z ??



Googlebot

Crawling content
on the Internet for
Google's Index
every day, every
night, non stop.

Question 1: Can people find the service?

Google webmaster central

- Step 1: give yourself a chance to get traffic.
- Crawling errors: can Google read your website?
 - Does it take too long to load etc
- Content analysis/ HTML suggestions: can the content be understood?
 - Duplicate title tags, long title tags
- Statistics: *potential* visitors, where you are in a result
- What Googlebot sees: connections to other pages on the web, broken links
- Take Control: prioritise locations, robot txt files etc, sitemap.

Question 1: Can people find the service?



Webmaster Tools

www.artd.com.au ▼

140k

Dashboard

Messages

- Site configuration
- Your site on the web
- +1 Metrics
- Diagnostics
- Labs

Help with:

[Crawl errors](#)

[Search queries](#)

[Links to your site](#)

[About Sitemaps](#)

[Additional support](#)

[Help center](#)

Dashboard

Search queries

Query	Impressions	Clicks
artd	600	70
art d	250	<10
hcwa	150	<10
margaret thomas	60	<10
chris milne	60	<10
kerry hart	50	<10
drugs and alcohol	50	<10
human services housing nsw	35	<10
andrew hawkins	35	<10
art-d	35	<10

Sep 30, 2011 to
Oct 30, 2011

[More »](#)

Crawl errors

Not found 10

Updated Nov 2, 2011

[More »](#)

Keywords

Keyword	Significance
evaluation (5 variants)	<div><div></div></div>
nsw (2 variants)	<div><div></div></div>
artd (2 variants)	<div><div></div></div>
projects (3 variants)	<div><div></div></div>
families (2 variants)	<div><div></div></div>

[More »](#)

Ok, so the space is filled with short, old and clear key words– but Googlebot doesn't like images or spam!



Question 2: Can people access the service?

- The power of the internet is its universality: limited by accessibility Tim Berners-Lee, W3C Director and inventor of the World Wide Web
- 290 million people in the US population in 2005, 54 million (19 percent) had some level of disability and 35 million (12 percent) had a severe disability
- the UN Convention on the Rights of Persons with Disabilities recognizes access to information and communications technologies, including the Web, as **a basic human right**.
- Section 508 of the US Rehabilitation Act of 1973
- WCAG 2.0 has 4 principles & 12 guidelines
- Each guideline has testable *success criteria*, which are at three levels: A, AA, and AAA.

Question 2: Can people access the service?

- **Perceivable**
 - Provide **text alternatives** for non-text content.
 - Provide **captions and other alternatives** for multimedia
 - Make it easier for users to **see and hear content**.
- **Operable**
 - Make all functionality available from a **keyboard**.
 - Give users **enough time** to read and use content.
 - Do not use content that causes **seizures**.
 - Help users **navigate and find content**.
- **Understandable**
 - Make text **readable and understandable**.
 - Make content appear and operate in **predictable** ways.
 - Help users **avoid and correct mistakes**.
- **Robust**
 - Maximize **compatibility** with current and future user tools.

Question 2: Can people access the service?

To really oversimplify

- use 'alternative text' for images (you want this for SEO anyway)
- be careful with colour
- ensure keyboard functionality
- provide transcripts
- And always KISS

Question 2: Can people access the service?

Different documents for different purposes

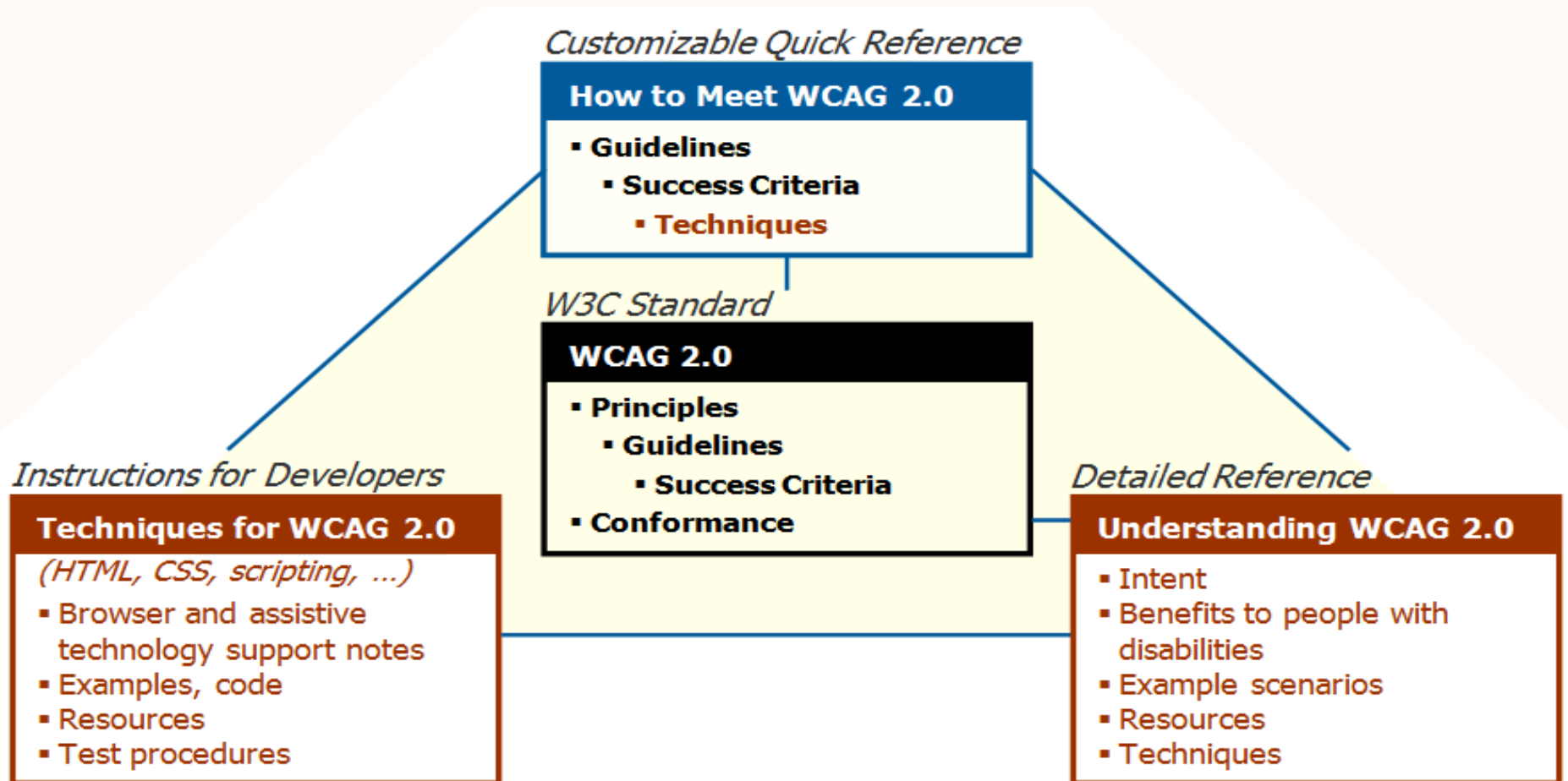


Figure 1: WCAG 2.0 documents

Question 2: Can people access the service?

- Evaluation types
 - Preliminary Review of Websites for Accessibility
 - Describes an approach to quickly identify some potential accessibility problems on a website.
 - Conformance Evaluation of Websites for Accessibility
 - Describes an approach for determining if a website meets accessibility standards, such as the Web Content Accessibility Guidelines (WCAG).
 - Also; monitoring approaches, user involvement, tools, setting up expert teams and report templates
 - <http://www.w3.org/WAI/eval/Overview.html>

Question 2: Can people access the service?

- Preliminary review
 - Select a representative page sample
 - Examine pages using graphical browsers (e.g. Explorer Firefox, Chrome)
 - Examine pages using specialized browsers (e.g. Voice browser)
 - Use automated Web accessibility evaluation tools
 - Summarize obtained results
- Conformance Evaluation
 - Similar to above but more in-depth
 - Evaluations that combine technical assessment and usability testing of accessibility can be called *comprehensive evaluations*

Question 3: is the website readable?

- Also about accessibility—but more universally.
- Readability formulas reward short sentences made up of short words.

Evaluation Questions	Methods	
- Flesch Reading Ease Formula (FREF)	Scores from 0 to 100, where 100 is the easiest to read. Aim for a score between 60 and 70 (easily understandable by 13 to 15 year old students).	- $206.835 - 84.6s - 1.015w$ - w =average number of words per sentence - s =average number of syllables per word
- Flesch Kincaid Grade Level (FKGL)	Maps ranges of readability scores to the number of years of education required to understand the text. Ideal score is between 8 and 10.	- $(0.39w) + (11.8s) - 15.59$ - w =average number of words per sentence - s =average number of syllables per word
- Fog Index (Gunning Fog Readability Formula)	Ideal score is 7 or 8: above 12 is hard for most people to read.	- $0.4 [w + 100(PHW)]$ - w =average number of words per sentence - PHW =percentage of hard words

Question 3: is the website readable?

Accessing
Support
PS: 7%, FRE:
50.9, FKGL:
10.0

Online counselling

PS: 4%
FRE: 59.9
FKGL: 8.3

Telephone support

PS: 0%
FRE: 29.2
FKGL: 13.5

Face to face counselling

PS: 0%
FRE: 52.3
FKGL: 9.6

Group and peer support

PS: 0%
FRE: 53.0
FKGL: 9.4

Self exclusion

PS: 31%
FRE: 42.4
FKGL: 12.3

What is live counselling? PS: 0%, FRE: 58.9, FKL: 7.8

What is email support? PS: 12%, FRE: 71.4, FKL: 6.0

Benefits of online PS: 9%, FRE: 56.3, FKL: 10.4

Benefits of registration PS: 0%, FRE: 42.1, FKL: 11.1

Anonymous access PS: 0%, FRE: 49.4, FKL: 10.4

Gambling counselling PS: 0%, FRE: 58.7, FKL: 9.0

Financial counselling PS: 0%, FRE: 38.3, FKL: 11.1

Non English speakers

PS: 0%
FRE: 24.6
FKGL: 15.7

Question 3: is the website readable?

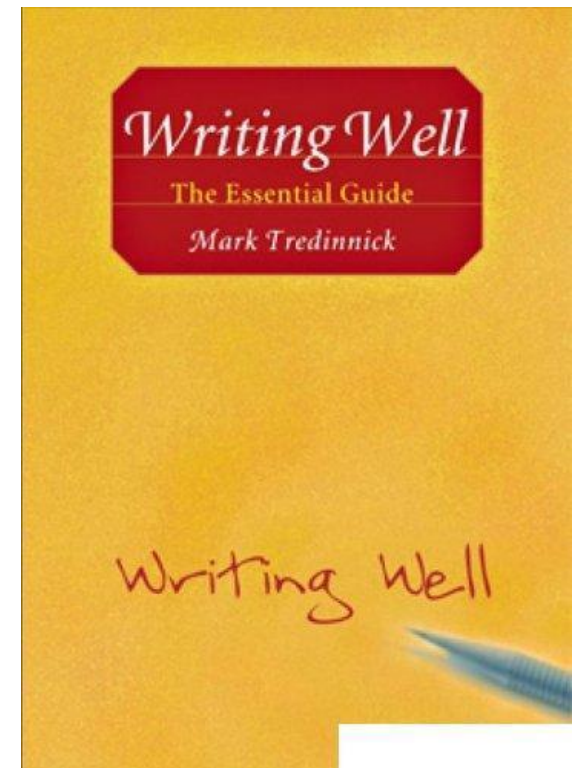
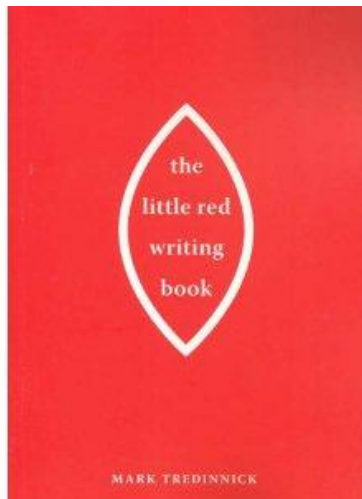
- CLOZE testing
- 'The underlying assumption in ____ testing is that a ____ relationship exists between reading ____ and writing skill. The ____ measures the student's ability ____ select appropriate words if ____ gaps occur in a passage....'

Question 3: is the website readable?

- What can readability tests be used for?
 - 'early warning' or 'screening devices'
 - show measurable improvement in written documents
- Good score but....
 - 'Fall Humpty had Dumpty great a.'
- They can't tell you
 - how complex the ideas are
 - whether or not the content is in a logical order
 - whether the vocabulary is appropriate for the audience
 - whether there is a gender, class or cultural bias
 - In short; Readability formula are not guides to writing well.

Question 3: is the website readable?

- We use Mark Tredinnick's work
 - 'Short old words are best'
- <http://www.marktredinnick.com.au/>



Question 4: Who visits the website?



- See whose coming to your site and how they engage with your site: 'visits', 'page views', 'time on site' and 'bounces rate'
- Track advertising campaigns and test any changes to your site
- Set up goals and funnels.

2 Paste this code on your site

Copy the following code, then paste it onto every page that you want to track immediately before the closing </head>tag. [Learn more](#)

```
<script type="text/javascript">

var _gaq = _gaq || [];
_gaq.push(['_setAccount', 'UA-26506549-1']);
_gaq.push(['_trackPageview']);

(function() {
  var ga = document.createElement('script'); ga.type = 'text/javascript';
  ga.src = ('https:' == document.location.protocol ? 'https://ssl' : 'http')
  var s = document.getElementsByTagName('script')[0]; s.parentNode.insertBefore(ga, s);
})();

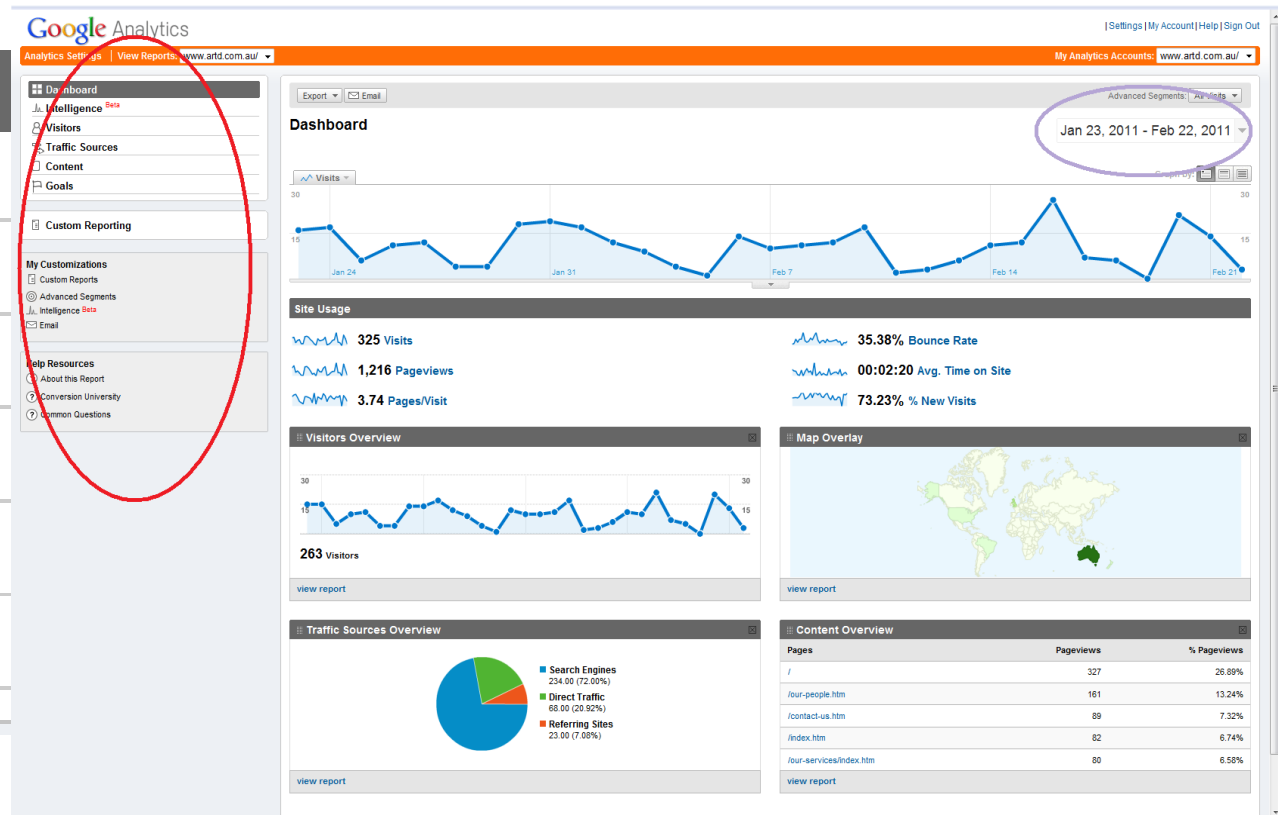
</script>
```


Question 4: Who visits the website?

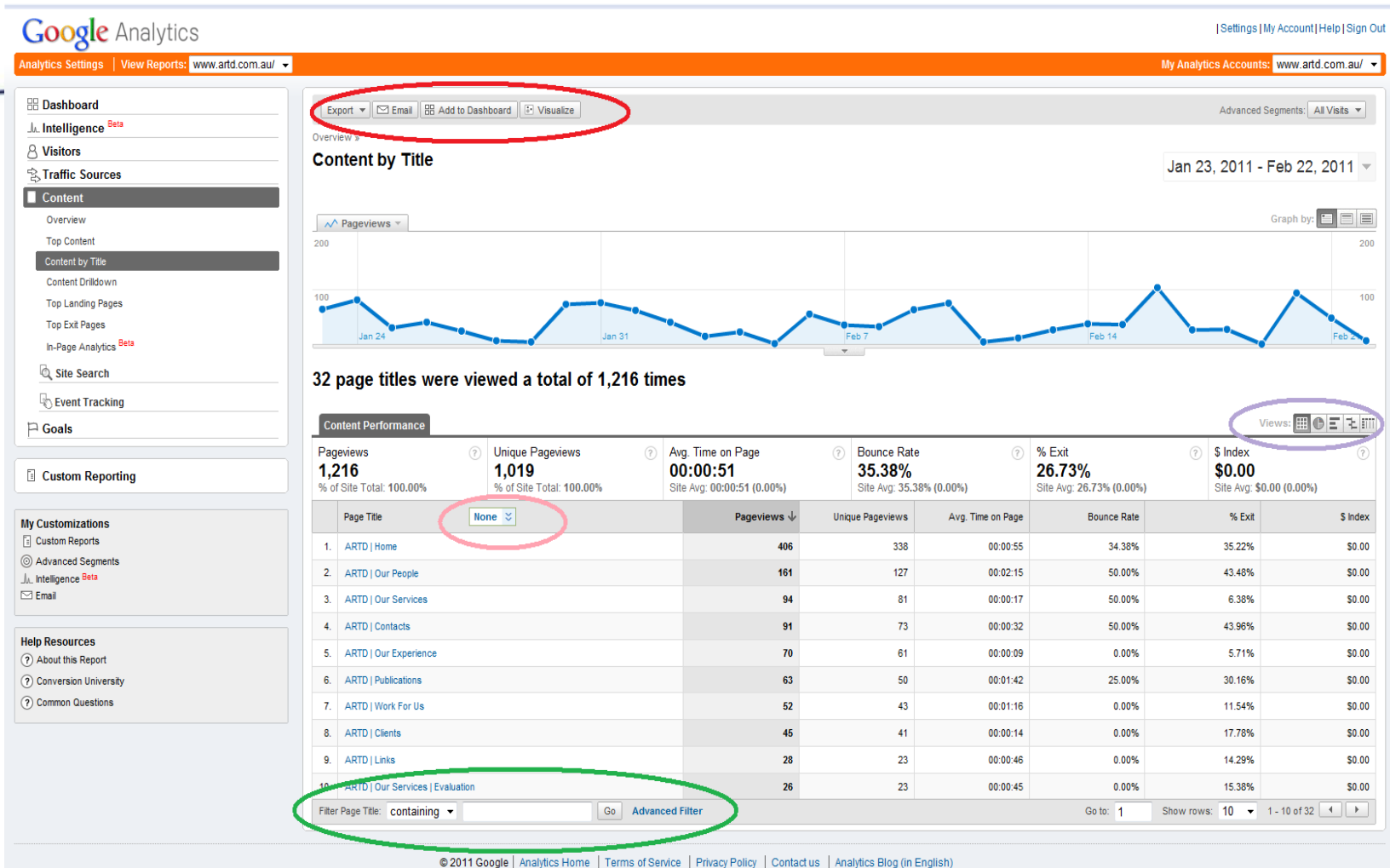
Term	Definition
Visit	A visit occurs when an individual initiates a session on (i.e. views) the website. Users that leave the site and return within 30 minutes will be counted as part of the original session.
Page view	A page view occurs when a user visits a site that is being tracked by the Analytics tracking code. If a user reloads a page, that counts as an additional page view. If a user navigates to a different page and then returns to the original page, a second page view is counted as well.
Pages per visit	Average number of page views in a single visit to your website. Repeated views of a single page are counted.
Average time on site	The average length of time a user spends on a visit to your website.
New visit	A visit by a user who has never visited your website before.
Bounce	A bounce occurs when a visitor views a single page on the website without visiting any additional pages.

Question 4: Who visits the website?

- Dashboard
- Intelligence ^{Beta}
- Visitors
- Traffic Sources
- Content
- Goals
- E-commerce



Question 4: Who visits the website?



Question 5: Are people engaged with the website?

- **Quantitative user testing**

- Aladwani and Palvia (2002) 25 item scale of perceived
 - Technical adequacy (alpha 0.92)
 - Specific content (alpha 0.94) , content quality (alpha 0.88)
 - Web appearance (0.88)—NB accounts for 46% of user credibility assessment!
- Website credibility – Stanford persuasive technology lab

- **Qualitative user testing**

- Similar to a focus group or cognitive interview

- **Experimental design**

- What if you want to test alternatives/ validate surveys?

Question 5: Are people engaged with the service?

Google Website Optimizer

- When you want to test and implement changes
- Before and after: looking at metrics—we all know the limitations of pre and post testing-attribution problem
- So set up an experimental design! (you'll need some one to do the HTML for this one!)
 - Users go to a random allocated version(s) of the website!
 - Which version gets most conversions!
 - Allows for statistical testing
 - Copy and paste a few tags to version A and B
- Even the geniuses at Google uncover better solutions than they could guess at!

Question 5: Are people engaged with the service?

What type of experiment would you like to create?

Not sure which type of experiment is right for you? [Learn more about Website Optimizer experiments](#)



A/B Experiment - The simplest way to start testing fast

This method compares the performance of **entirely different versions of a page**. Use it if the points below describe your desired experiment.

- You are able to publish a new page to test against an existing page
- You want to test a new layout or overall look of a page



Multivariate Experiment - The most robust way to test lots of ideas

This method compares the performance of **content variations in multiple locations on a page**. Use it if the points below describe your desired experiment.

- Your page receives more than ~1,000 views a week
- You want to try multiple content changes in different parts of the page simultaneously

Question 5: Are people engaged with the service?

1. Name your experiment

The experiment name will help you to distinguish this experiment from others; your users won't see this name.

Experiment name:

Example: My homepage test #1

2. Identify the pages you want to test

Add as many variations as you like, naming them so you can easily distinguish them in your reports. At least two (including the original) are required. These URLs could be bookmarked by your users, so after your experiment finishes, you may want to keep these URLs valid. [Learn more](#)

Name:	Original page URL: ?
<input type="text" value="Original"/>	<input type="text"/>
	Example: http://www.example.com/webpage.html
Name:	Page variation URL: ?
<input type="text" value="Variation 1"/>	<input type="text"/>
	Example: http://www.example.com/webpage1.html

[+ Add another page variation](#)

3. Identify your conversion page

This is an existing page that users reach after completing a successful conversion. For example, this might be the page displayed after a user completes a purchase, signs up for a newsletter, or fills out a contact form. [Learn more](#)

Conversion page URL:
<input type="text"/>
Example: http://www.example.com/thankyou.html

In a nutshell

- Check for short descriptive words *everywhere* for search engines and those using assistive technologies
- The full range of evaluation methods and tools can be applied to test website AND online service effectiveness: qual, quant and RCT
- There are many high quality free tools that are pretty easy to use– there is a lot of information available
- Online services generate a lot of data and waiting list control group designs are possible
- It can be hard to follow up with users of anonymous services—think about the reasons they chose online!

Links

- The Google Trifecta
 - <http://www.youtube.com/watch?v=9yKjrdcC8wA>
 - www.google.com/webmasters
 - www.google.com/analytics
 - www.google.com/websiteoptimizer
- SEO & performance monitoring
 - http://static.googleusercontent.com/external_content/untrusted_dlcp/www.google.com/en/us/webmasters/docs/search-engine-optimization-starter-guide.pdf
 - <http://www.seomoz.org/>
 - <http://www.seoworkers.com/tools/report.html>
 - www.siteuptime.com.
 - <https://addons.mozilla.org/> look for Firebug

Links

- **Accessibility**

- <http://www.w3.org/standards/webdesign/accessibility>
- <http://www.w3.org/WAI/eval/>
- <http://www.gawds.org/>
- <http://www.contentquality.com/>
- <http://chrispederick.com/work/web-developer/>

- **Readability**

- <http://juicystudio.com/services/readability.php>
- <http://plainlanguage.com/newreadability.html>
- <http://www.marktredinnick.com.au/>
- <http://checkdog.com/> (For Spellchecking)

- **Credibility**

- Stanford persuasive technology lab <http://captology.stanford.edu/>