

AN EMPIRICAL STUDY ON THE RELATIONSHIP BETWEEN BODY KEYWORD LOCATION AND SEARCH ENGINE RESULT RANKING



<META name="KEYWORDS" content="BACKGROUND">

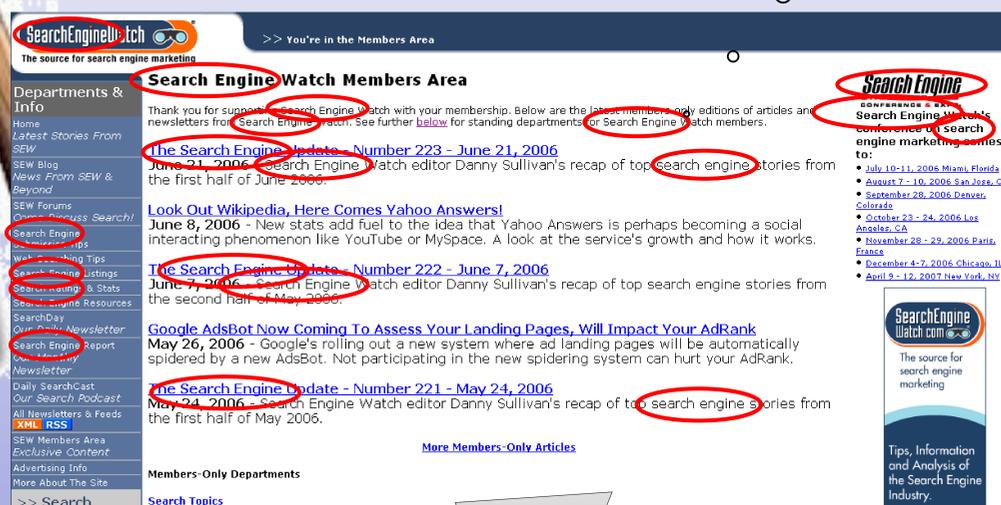
- DotComs have a poor success record (Ritchie).
- Poor promotion and website errors are amongst some of the reasons (Bazac).
- Being listed in a search engine index serves as no guarantee that a user will be able to find the website (Weideman *et al*).

RESEARCH PROBLEM

- **No empirical evidence that keyword location inside a webpage has any effect on search engine rankings could be found.** This knowledge is of value to any e-Commerce concern.

Webpage optimised for keyword: "search engine"

EXAMPLE: Suggested keyword spread



<META name="KEYWORDS" content="LITERATURE REVIEW">

- The WWW creates unparalleled opportunities for user access to products (Hämäläinen *et al*).
- Approximately 80% of all Internet traffic is generated by Search Engine queries (Zhang *et al*).
- It follows that website owners should ensure that their websites are accessible to search engine crawlers.
- Webpages could use Meta Tags to increase visibility, but abuse have reduced their value.
- It is claimed that relevant webpage content is more important than search engine optimisation (Clay).
- Keyword prominence plays an important part in website visibility (Konia) – however, no evidence was found to prove this claim.
- Short of paying for increased webpage rankings (using paid inclusion or PPC), **it was clear that keyword placing is one of a number of methods to increase visibility.** However, its value was not known. This was the motivating factor for this research.

<META name="KEYWORDS" content="METHODOLOGY">

Method: A single-word search was conducted on seven search engines. The top ten websites from each of seven search engine result pages were evaluated. Text in the 'body area' of the source code within the first webpages was divided into three equal areas. The keyword was then counted in each of the three areas and an occurrence percentage was calculated. This percentage was then compared to the ranking of that webpage.

Hypothesis: The location of keywords in the body text of a webpage does have a measurable effect on website visibility to search engines.

Type: Empirical field/natural experimental research.

Software: Web Position Gold was used as webpage crawling and inspection tool.

Statistics: Spearman rank correlation was used as statistical confirmation of empirical results.

Search engines: AltaVista, AOL, AskJeeves, Google, Lycos, MSN and Yahoo! were chosen (97% of all web searches are performed on these seven search engines (Nielsen, 2004)).

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<META name="KEYWORDS" content="CONCLUSION">

Webpage keywords should be concentrated towards the top and diluted towards the bottom of a webpage.

One anomaly was found: whenever Yahoo! is involved, no location preference was evident. The reason is that Yahoo! uses human editors as opposed to automated crawlers. Human editors are unlikely to measure keyword density in an attempt to rank a webpage.

Care must be taken not to raise the spam alarm with an unnaturally high density of keywords – many search engine algorithms specifically check for this phenomenon.

The hypothesis was proven to be true.

<META name="KEYWORDS" content="RESULTS">

Search Engine	Top	Middle	Bottom
Yahoo!	-	-	-
Google	-	-	Negative
MSN	-	-	Negative
AskJeeves	-	-	Negative
AOL	-	-	Negative
Lycos	-	-	Negative
AltaVista	-	-	Negative
Yahoo! and Google	-	-	-
Yahoo! and MSN	-	-	-
Yahoo! and AskJeeves	-	-	-
Yahoo! and AltaVista	-	-	-
Yahoo! and AOL	-	-	-
Yahoo! and Lycos	-	-	-
Google and MSN	-	-	Negative
Google and AskJeeves	-	Negative	Negative
Google and AltaVista	-	-	Negative
Google and AOL	-	-	Negative
Google and Lycos	-	-	Negative
MSN and AskJeeves	-	-	Negative
MSN and AltaVista	Positive	-	Negative
MSN and AOL	-	-	Negative
MSN and Lycos	Positive	-	Negative
AskJeeves and AltaVista	-	-	Negative
AskJeeves and AOL	-	Positive	Negative
AskJeeves and Lycos	-	-	Negative
AltaVista and AOL	-	-	Negative
AltaVista and Lycos	Positive	-	Negative
AOL and Lycos	-	-	Negative

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