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

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.

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 Engines (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.

METHOD

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 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)).

EXAMPLE: Suggested keyword spread

Webpage optimised for keyword: "search engine"

REFERENCES


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.