SICS at iCLEF 2008: User confidence and satisfaction inferred from iCLEF logs

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Categories and Subject Descriptors

H.3 [Information Storage and Retrieval]: H.3.1 Content Analysis and Indexing; H.3.3 Information Search and Retrieval; H.4 [Information Systems Applications]: H.4.m Miscellaneous

General Terms

interactive information retrieval, cross-language information retrieval

Keywords

iCLEF, Flickr, log analysis, multilingual image search, user studies

Measuring User Confidence Implicitly

SICS has participated in this year's iCLEF cycle mainly with an eye on future experimental settings to work on measurement of searcher trust and confidence in the search process and its results, in keeping with previous experimental studies performed at SICS [2, e.g.]. SICS has used the Flickling interface [1] and the logs delivered by it to study how searcher actions can be interpreted as exponents of user confidence.

Variables under consideration for this purpose can be *indirect*, such as length of interaction, time spent on query formulation, and other measures which require non-trivial interpretation during the analysis phase. Other variables can be more *direct*, in that they more clearly indicate competence or confidence on the part of the searcher, such as observed edits and additions made to the user dictionaries by the searcher or the number of times a query is reformulated. A confident searcher can be assumed to be more likely to enter edits into the user dictionary and not to reformulate queries to the same extent. In Table 1 such measures are tabulated, with a distinction between sequences of actions that ultimately provide a successfully identified target image and sequences which terminate by the searcher giving up requesting another target. Both the given measures are statistically significant.

	Number of adds to dictionary	Ratio of reformulated queries
Successful searches	0.092	0.47
Unsuccessful searches	0.085	0.35

Table 1: Indications of user confidence.

For next year's cycle we will suggest more explicit measures of user confidence, as well as a task which better teases out differences between users' task termination decisions.

References

- [1] Peinado, Víctor, Artiles, Javier, Gonzalo, Julio, Barker, Emma, López-Ostenero, Fernando (2008): FlickLing: a multilingual search interface for Flickr. In this volume.
- [2] Karlgren, Jussi (2008): Changing the subject; one way of measuring trust in information. In ECIR Workshop on Novel Methodologies for Evaluation in Information Retrieval. Glasgow, Scotland.