

A Survey of the Impact of Concept-Based Image Indexing on Image Retrieval via Google

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Received: 13th July 2013; Accepted: 16th February 2014

Abstract

Purpose: The purpose of the present study is to investigate the Impact of Concept-based Image Indexing on Image Retrieval via Google. Due to the importance of images, this article focuses on the features taken into account by Google in retrieving the images.

Methodology: The present study is a type of applied research, and the research method used in it comes from quasi-experimental and technology-based methods.

Findings: 900 images with concept-based characteristics were uploaded on iiproject.ir domain. Google retrieved 417 images of 900 ones that are used in this study. In 4 codes of "image title", "Alt text", "property", and images with "Q code", no images were retrieved, so the analysis is done on the rest of 5 codes, "image caption in English", "image caption in Farsi", "file name", "Controlled language" and "free language". Paying attention to these components in uploading images on websites causes Google retrieve more images. The Chi-square test for difference of retrieved images in 5 Cods is significant, and revealed that, in different codes, significantly various numbers of images were retrieved. Caption allocation in English has the best effect on retrieving images in the study sample, while the assignation of the file name is less effective in image retrieval ranking. The Kruskal-Wallis test to assess the group differences in 5 codes is significant. It means the average of group differences across 5 codes is significant.

Originality/Value: This paper tries to introduce the main elements that a search engine such as Google may consider in the indexing and retrieval of images.

Keywords: Image indexing, image storing and retrieval, Concept-based Image Indexing, and Google search engine.