

A METHOD FOR DYNAMIC IN-TEXT ADVERTISING

TECHNICAL BACKGROUND

- 5 The object of the invention is to provide a solution for keyword base advertising on a web page on relevant web sites.

BACKGROUND OF INVENTION

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At present banners have been employed for advertising on a web page. Where the banners are generally positioned at the top or sides of a web page. Furthermore, the contents of the advertisement may not be relevant to the contents of the web page. This brought about the introduction of contextual advertising.

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- One such solution to the contextual relevancy of an advertisement may be found in United States patent application US20090164949. The application discloses a technique for presenting information to a first end user via a first display of a client system, the client system being communicatively coupled to a computer network. In at least one embodiment, the method includes: displaying, at the first display, during a first time interval, a first portion of displayed content, wherein the displaying of the first portion of displayed content includes displaying a first portion of original web page content at the first display in accordance with instructions for modifying the displayed appearance of the first portion of original web page content; detecting a location of a cursor displayed at the first display being positioned over a first specific portion of the first portion of displayed content; and automatically displaying, during a second time interval and in response to detecting the location of the cursor being positioned over the first specific portion of the first portion of displayed content, a first overlay layer at the first display, wherein the display of the first overlay layer includes displaying, at the first overlay layer, first and second portions of contextually related information; wherein the first portion of contextually related information includes video content which is contextually
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related to the first portion of original web page content; and wherein the second portion of contextually related information includes a first portion of text which is contextually related to the first portion of original web page content.

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SUMMARY OF INVENTION

- Preferably, a method of presenting information to an end user via a display of a client system, the client system being communicatively coupled to a computer network, the method comprising embedding a code into a web page to call a script from a server via a link; analyzing content of a web page performed by the script; detecting keywords within a web page performed by the script; matching detected keywords with a keywords database with relevant content; converting detected keywords into hyperlinks, to link to an advertisement strip; embedding an advertisement strip into an existing web page script to provide a teaser advertisement; connecting matched relevant advertisement to the advertisement strip, wherein the advertisement strip comprises of push down advertisement; locating the advertisement strip as close as possible to the detected keywords.
- 20 The detection of keywords includes identifying negative keywords, wherein the negative keywords are compared with a list of keywords that an advertiser does not want to be associated with, and the advertisement strip is not displayed when a negative keyword is detected.
- 25 Preferably, a method, wherein the push down advertisement of the advertisement strip self triggers when a cursor hovers above the advertisement strip for a preset time without an active selection. The push down advertisement of the advertisement strip may be triggered by an active selection, and may comprise of video and/or animated content and/or static content and/or audio content. The advertisement strip may be located at the bottom of the web page when relevant keywords are not found on the page.
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Preferably, a method, whereby the push down advertisement automatically adjusts its size according to the proportion of the web page in which it is triggered. Whereby, the script inserts a dummy advertisement that provides feedback of the appropriate size for the web page.

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Preferably, a method, further comprising logging the number of advertisement impressions; logging the number of unique advertisement impressions; logging the number of advertisement engagement; logging the number of unique advertisement engagement. Wherein the logging of the number of advertisement impressions, the number of unique advertisement impressions, the number of advertisement engagement, the number of unique advertisement engagement allows for the derivation of metrics to track the effectiveness of an advertisement.

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Preferably, a system of presenting information to an end user via a display of a client system, the client system being communicatively coupled to a computer network, the system comprising a code embedded into a web page calls a script from a server via a link; content of a web page is analysed; keywords detected within a web page; a keywords database is compared with matched keywords to provide relevant advertisement; detected keywords are converted into hyperlinks to link to an advertisement strip; an advertisement strip is embedded into an existing web page script to provide a teaser advertisement; the advertisement strip comprises of push down advertisement connecting matched relevant advertisement to the advertisement strip; the advertisement strip is located as close as possible to the detected keywords.

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The detection of keywords includes identifying negative keywords, wherein the negative keywords are compared with a list of keywords that an advertiser does not want to be associated with, and the advertisement strip is not displayed when a negative keyword is detected

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Preferably, a system, wherein the push down advertisement of the advertisement strip self triggers when a cursor hovers above the advertisement strip for a preset time without an

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active selection. The push down advertisement of the advertisement strip may be triggered by an active selection, and may comprise of video and/or animated content and/or static content and/or audio content. The advertisement strip may be located at the bottom of the web page when relevant keywords are not found on the page.

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Preferably, a system, whereby the push down advertisement automatically adjusts its size according to the proportion of the web page in which it is triggered. Whereby, the script inserts a dummy advertisement that provides feedback of the appropriate size for the web page.

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Preferably, a system, further comprising the number of advertisement impressions being logged; the number of unique advertisement impressions being logged; the number of advertisement engagement being logged; the number of unique advertisement engagement being logged. Wherein the logging of the number of advertisement impressions, the number of unique advertisement impressions, the number of advertisement engagement, the number of unique advertisement engagement allows for the derivation of metrics to track the effectiveness of an advertisement.

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20 **BRIEF DESCRIPTION OF DRAWINGS**

Figure 1 illustrates the general process of the system.

Figure 2 illustrates the triggering of the push down advertisement.

Figure 3a illustrates the keyword search pattern.

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Figure 3b illustrates the keyword search pattern with graphics.

Figure 4 illustrates the matching of keywords with the keyword database.

Figure 5 illustrates an example of an analysis report.

DETAILED DESCRIPTION OF EMBODIMENTS

Described below are preferred embodiments of the present invention with reference to the
5 accompanying drawings. Each of the following preferred embodiments describes an
example in which the system dynamically performs contextual in-text advertising with
push down advertisement.

In as much as the present invention is subject to many variations, modifications and
10 changes in detail, it is intended that all matter contained in the foregoing description or
shown in the accompanying drawings shall be interpreted as illustrative and not in a
limiting sense.

Referring to figure 1a, a process flow of an embodiment of the invention is illustrated. It
15 provides an example of the steps involved in how it inserts an advertisement strip into a
web page. The embodiment of the main processes is described by figure 1b.

Referring to figure 1b, an embodiment of the invention is illustrated. For information to
be presented to an end user via a display of a client system, whereby the client system is
20 communicatively coupled to a computer network, a code is embedded into a website
and/or web page. The embedded code (101) calls a script from a server which analyzes
the content of the website and/or web page to detect keywords that match those in a
keywords database (102). The keywords (103) are compiled into a keyword database
(102). The advertiser may select the keywords for an advertisement campaign published
25 on the Internet. The keywords are then stored into the database (102).

The script scans the main content on the web page. The area may be pre-defined by the
owner of the web page. When the content area is detected, the script will start analyzing
each word of the content for a word that matches any of the words in the keyword
30 database (102).

When a detected keyword (103) is found to be unfavourable, the script may skip to the end of the web page, and not display any advertisement content. Unfavourable keywords may be called negative keywords. Negative keywords are words that advertisers do not want to be associated with. For example, an airline advertiser may not want their advertisements shown on news related to accidents.

When no negative keyword (103a) is detected, the script may continue to search the content for a match.

When there is a match for the keywords, the advertisement contents are associated with the matched keywords (103). The matched keywords (103) on the website and/or web page, are converted into in-text hyperlinks (104). The in-text hyperlinks (104) may link to an associated advertisement strip (105) bearing the advertisement contents associated with the keywords (103) in relation to the context of the content of the web page. The advertisement strip (105) provides a teaser advertisement to capture the attention of the end user. The teaser advertisement comprises of text that is limited to a predefined maximum number of characters. For example, the maximum may be 60 characters.

An advertisement area analysis is performed when a keyword is matched with the content of the web page. The script performs a check for an appropriate size for the advertisement content by inserting a dummy advertisement (105a) that provides feedback of the appropriate size for the web page.

The advertisement strip (105) is placed as close to the associated keyword (103) as possible. The script (101) automatically adjusts the size of the advertisement strip (105) according to the proportion of the contents of the web page in which it is embedded.

However, it may not always be possible to locate the advertisement strip (105) as close as possible to the keyword (103). In such case, the advertisement strip (105) is located at the next best location on the web page statically.

Statically locating the advertisement strip (105) at the next best location on the web page, places the advertisement strip (105) at a location on the web page, where it remains visible to the end user.

- 5 However, if no keywords or space are matched on the web page, the advertisement strip (105) may be position at the bottom of the web page.

Figure 2, illustrates the expansion of the advertisement strip (105) to reveal a push down advertisement. The push down advertisement (202) may be triggered by hovering a
10 cursor for a statistically derived period of time over the advertisement strip (105). Typically, an interested user's cursor would hover over an advertisement for at least 0.6 seconds. The content strip may be passively triggered when a cursor hovers for a predetermined time delay. Typically, an interested user's cursor would hover over an
15 advertisement for at least 0.6 seconds. Furthermore, having a trigger time delay minimizes involuntary triggering of the advertisement (202) when a cursor momentarily hovers over the advertisement strip (105), which may enhance the end users' enjoyment.

Alternatively, the push down advertisement (202) may be triggered actively by clicking the push down button (201) in the advertisement strip (105) or by clicking the keyword
20 in-text hyperlink (104).

When the advertisement is engaged (i.e. triggered) the advertisers may be charged a fee when the end user engages an advertisement strip (105). A cost-per-engagement (CPE) information relating to one or more monetary values that the advertiser will pay for each
25 user click on the advertisement.

The push down advertisement (202) automatically adjusts its size according to the proportion of the web page and/or the window in which it is engaged.

The appropriate size of the advertisement for the web page may be determined by having the script insert a dummy advertisement (105a) on to the web page to provide feedback of the appropriate size.

- 5 When the appropriate size is determined, the actual advertisement (202) may be inserted into the web page.

10 The push down advertisement (202) may contain at least one of the following: video, static pictures, animated content, audio content, text, hyperlinks (203) to an associated site.

15 The contents for the push down advertisement (202) are provided by an advertisement provider, such as advertisement service providers, website operators providing online content. The push down advertisement (202) contains links to external websites to provide the end user with further information.

20 A limit may be set for the frequency of the advertisement (202) to be made available to an end user for a preset period of time. The frequency of views per end user is tracked by placing a cookie in the terminal used for viewing the website. When the viewing limit is reached for an advertisement for the preset period of time, the subsequent view of the page may display a new advertisement. Thus, allowing another end user on another client system can be viewing the same web page simultaneously but with different advertisement content on the same web page.

25 Thus, by collecting data of an end user's viewership of an advertisement content, and advertisements engaged by the end user, new advertisement presented may be based upon the end user's preference.

30 Referring to figure 3a, the analysis of the contents of a web page are scanned based on a statistically derived pattern (301). The statistically derived pattern (301) analyses the area of the web page where end users would typically look at as they scan a web page.

Typically, this results in a P-like or F-like pattern. Whereby, the areas most focused by an end user tend to be biased towards the left of a screen. During the analysis of the web page, keywords are being detected and matched based on a pre-selected set of words.

- 5 Referring to figure 3b, if graphics fall within the area of the search pattern (301), the graphics may be ignored while the analysis of the web page is performed to detect and match keywords.

10 An illustrative example is provided in figure 4, as the script performs the detection of keywords, it scans a web page in a P-like or F-like pattern (301) for graphics, keywords (103). The keywords (103) are compared against a database (102) of keywords for keyword matches. The script, furthermore, performs a cross check with the push down advertisement (202) for space to place the advertisement strip (105) with the provision for its expansion.

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Figure 5, illustrates a form of report and analysis of the website traffic. Data such as, advertisement impressions, unique advertisement impressions, advertisement engagements, unique advertisement engagements are compiled by the system (501). The system collects and stores the data . The data may be tabulated (502a) and/or presented graphically (502b) in a report (502) providing information to the website manager as to the effectiveness of the keywords (103), and/or contents of an advertisement strip (105), and/or the push down advertisement (202).

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Advertisement impressions are logged each time an advertisement is displayed on a web page. An impression is the number of times an advertisement is displayed. However, this does not provide the advertiser with accurate enough information. Thus, unique advertisement impressions are logged as well. Unique impressions count only the number of unique impressions on a website.

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30 For example, assuming each are viewing from separate terminals, if Paul views 5 pages on a website, while Simon views 3, and Andrew views 10, their visits would total 18

impression, but only 3 unique impressions. Unique impressions are usually counted by sending a cookie to the end users' browsers that may expire in 24 hours. As such, if Paul visits the site on Saturday morning and Sunday evening, it would count as two unique impressions.

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Likewise, for the case of advertisement engagements and unique engagements, Paul may engage an advertisement 21 times in a day; the total engagements would be counted as 21, but counts as one unique engagement.

10 The logged data of impressions and engagements are tabulated, which may be processed to be presented in an informative report. The number of impressions and engagements collected allows for the derivation of other metrics to track the effectiveness of an advertisement.

15 In as much as the present invention is subject to many variations, modifications and changes in detail, it is intended that all matter contained in the foregoing description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

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CLAIMS

1. A method of presenting advertisement to an end user via a web page, the method comprising:

5 embedding a code into a web page to call a script from a server via a link;
 analyzing content of a web page performed by the script;
 detecting keywords within a web page performed by the script;
 matching detected keywords (103) with a keywords database (102) with
 relevant advertisement;
10 converting detected keywords (103) into hyperlinks, to link to an
 advertisement strip;
 embedding an advertisement strip into an existing web page script to provide a
 teaser advertisement;
 connecting matched relevant advertisement to the advertisement strip, wherein
15 the advertisement strip (105) comprises of push down advertisement (202);
 and
 locating the advertisement strip (105) as close as possible to the detected
 keywords (103).

- 20 2. A method according to claim 1, whereby the detection of keywords includes
 identifying negative keywords (103a), wherein the negative keywords are
 compared with a list of keywords that an advertiser does not want to be associated
 with, and the advertisement strip (105) is not displayed when a negative keyword
 (103a) is detected.

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3. A method according to any one of claims 1 to 2, wherein the push down
advertisement (202) of the advertisement strip (105) self triggers when a cursor
hovers above the advertisement strip (105) for a preset time without an active
selection.

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4. A method according to any one of claims 1 to 3, wherein the push down advertisement (202) of the advertisement strip (105) is triggered by an active selection.
- 5 5. A method according to any one of claims 1 to 4, wherein the push down advertisement (202) comprises any one or a combination of video, animated content, static content, or audio content.
- 10 6. A method according to any one of claims 1 to 5, wherein the advertisement strip (105) is located at the bottom of the web page when relevant keywords are not found on the page.
- 15 7. A method according to any one of claims 1 to 6, whereby the push down advertisement (202) automatically adjusts its size according to the proportion of the web page in which it is triggered.
8. A method according to claim 7, whereby the script inserts a dummy advertisement (105a) that provides feedback of the appropriate size for the web page.
- 20 9. A method according to any one of claims 1 to 8, further comprising:
 - logging the number of advertisement impressions;
 - logging the number of unique advertisement impressions;
 - logging the number of advertisement engagement; and
 - logging the number of unique advertisement engagement.
- 25 10. A method according to claim 9, wherein the logging of the number of advertisement impressions, the number of unique advertisement impressions, the number of advertisement engagement, the number of unique advertisement engagement allows for the derivation of metrics to track the effectiveness of an
- 30 advertisement.

11. A system of presenting advertisement to an end user via a web page, the system comprising:

a code embedded into a web page calls a script from a server via a link;

5 advertisement of a web page is analysed by the script;

keywords detected within a web page by the script;

a keywords database (102) is compared with matched keywords (103) to provide relevant advertisement;

10 detected keywords (103) are converted into hyperlinks to link to an advertisement strip (105);

the advertisement strip (105) is embedded into an existing web page script to provide a teaser advertisement;

the advertisement strip (105) comprises of push down advertisement (202) connecting matched relevant advertisement to the advertisement strip (105);

15 and

the advertisement strip (105) is located as close as possible to the detected keywords (103).

12. A system according to claim 11, whereby the detection of keywords includes
20 identifying negative keywords (103a), wherein the negative keywords are compared with a list of keywords that an advertiser does not want to be associated with, and the advertisement strip (105) is not displayed when a negative keyword (103a) is detected.

25 13. A system according to anyone of claims 11 to 12, wherein the push down advertisement (202) of the advertisement strip (105) self triggers when a cursor hovers above the advertisement strip (105) for a preset time without an active selection.

14. A system according to any one of claims 11 to 13, wherein the push down advertisement (202) of the advertisement strip (105) is triggered by an active selection.
- 5 15. A system according to any one of claims 11 to 14, wherein the push down advertisement (202) comprises any one or a combination of video, animated content, static content, or audio content.
- 10 16. A system according to any one of claims 11 to 15, wherein the advertisement strip (105) is located at the bottom of the web page when relevant keywords are not found on the page.
- 15 17. A system according to any one of claims 11 to 16, whereby the push down advertisement (202) automatically adjusts its size according to the proportion of the web page in which it is triggered.
- 20 18. A system according to claim 17, whereby the script inserts a dummy advertisement (105a) that provides feedback of the appropriate size for the web page.
- 25 19. A system according to any one of claims 11 to 18, further comprising:
 the number of advertisement impressions being logged;
 the number of unique advertisement impressions being logged;
 the number of advertisement engagement being logged; and
 the number of unique advertisement engagement being logged.
- 30 20. A system according to claim 19, wherein the logging of the number of advertisement impressions, the number of unique advertisement impressions, the number of advertisement engagement, the number of unique advertisement engagement allows for the derivation of metrics to track the effectiveness of a advertisement.