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TARGETING BRAND ADVERTISEMENTS IN CONTENT FEED

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ABSTRACT

A brand advertisement system targets brand advertisements in a content feed. The brand advertisement system identifies a media item in the content feed. If the system detects a brand mark in the media item, the system identifies an advertisement associated with the detected brand mark. The system can modify the ranking of the media item and present the media item based on the modified ranking in the content feed. Further, the system places the advertisement adjacent to the media item in the content feed.

PROBLEM STATEMENT

Content feeds are a fast and entertaining way for users to ingest content coming from one or multiple sources. Social networks, in particular, use feeds to display social news coming from sources of interest to the user. These sources can be user's friends or entities that the user follows on the social network. Advertisements are selected based on a relevance metric, primarily based on the user's browsing history, and then randomly placed in the user's content feed. Since more and more content gets consumed in feed format, efficiently placing advertisements in the feed and effectively monetizing the feeds is essential. There are opportunities to develop a method and system for placing advertisements in a content feed.

DETAILED DESCRIPTION

The systems and techniques described in this disclosure relate to a brand advertisement system that places brand advertisements in a content feed adjacent to media items in the content feed. The system can be implemented for use in an Internet, an intranet, or another client and server environment. The system can be implemented locally on a client device or implemented across a client device and server environment. The client device can be any electronic device such as a mobile device, a smartphone, a tablet, a handheld electronic device, a wearable device, etc.

Fig. 1 illustrates an example method 100 to place advertisements adjacent to media items in a content feed. The system identifies 102 a media item in a content feed. The content feed is a sorted list of feed items, each of which includes media items and metadata describing the media items. The content feed can be a social feed, news feed, etc. In the social feed, the feed item may include a poster's identity and social context such as a comment or endorsement associated with the poster. The system analyzes one or more feed items in the content feed to identify the media item. The identified media item can be an image, an audio, or a video.

The system determines 104 whether there is a brand mark in the media item. The system can use known image recognition techniques or image detection algorithms to detect the brand mark in the media item. The system parses the media item and applies the image recognition techniques or image detection algorithms to detect the brand mark. In an embodiment, the brand mark can be a brand logo. The brand mark can be associated with any brand pertaining to any item such as a movie, a food item, a company, a character, a team, etc.

When the system determines that there is a brand mark in the media item, the system identifies 106 an advertisement associated with the detected brand mark. The system may identify an advertisement associated with the detected brand mark by matching the brand mark in the advertisement. Based on the matching, the system identifies at least one advertisement associated with the detected brand mark. The data related to advertisements yet to be placed in a content feed is available in a repository accessible by the system. In an embodiment, the system checks the data related to advertisements yet to be placed in the content feed to identify an advertisement associated with the detected brand mark. There may be instances when the system could not identify an advertisement associated with the exact identified brand mark. In such a scenario, the system would identify another advertisement that is somewhat related to the brand mark, however, might not be having the exact brand mark in it. For example, the system may determine a brand mark associated an airline carrier "American Airlines" in a media item. Further, when the system is not able to identify an advertisement associated with "American Airlines," the system identifies another advertisement associated with another airline carrier "United Airlines."

Optionally, the system modifies 108 the ranking of the media item in the content feed. The system modifies the ranking of the media item among a plurality of other media items based on detecting the brand mark in the media item. In an embodiment, the system ranks the media item higher than other media items in the content feed so that media item is more likely to be viewed by the user. The media items in which no brand mark is identified can inherently be ranked lower than the media items in which the brand mark is detected.

Furthermore, the system presents 110 the media item based on the modified ranking in the content feed. In an embodiment, the system presents the media item higher in the content feed to enhance visibility to a user. The system also places 112 the associated advertisement adjacent to the media item in the content feed. The system may reposition the advertisement with the brand mark adjacent to the media item including the same brand mark. The advertisement can be placed anywhere in proximity to the media item e.g., above the media item, below the media item, towards the left of the media item, towards the right of the media item, etc. Because the media item is already ranked higher, the advertisement visibility also increases.

In an embodiment, in addition to recognizing the brand mark in the media item, the system may also facilitate recognition of a sentiment for the respective brand within the context of the feed item and only display the relevant brand advertisement when the sentiment is positive. This not only makes the advertisement relevant, but also particularly appropriate.

In an example, John's social feed includes a post from Jenny about a watch. The post has a video review of the watch, but the post sentiment is negative towards it, so the system would not show an advertisement associated with the watch next to this post. However, in the content feed, John has another post from a different friend, Melissa, about a hairbrush and the amazing results she got using it along with before and after pictures. This post contains media picturing a branded product and the sentiment is positive, so the system shows an advertisement for the brush in proximity with this post. Thus, the advertisement is relevant to the adjacent media item from a social media poster and also very opportune. John might more likely be convinced to buy the brush after Melissa's post, and the system can provide a convenient click target for

researching or purchasing the branded product by placing the appropriate advertisement adjacent to Melissa's post. Also, the system ranks Melissa's post higher to increase its visibility.

Fig. 2 illustrates an example content feed 200 implemented with the advertisement arranging system. The content feed 200 includes a media item 202. The media item 202 is part of a post about cupcakes by a person (John Dan). The media item 202 also includes a brand mark 204 associated with the cupcakes. The brand mark 204 is detected by using image recognition techniques or image detection algorithms. On detecting the brand mark, the system identifies an advertisement 206 with a brand mark 208 which is linked to the detected brand mark 204. In some instances, the advertisement's brand mark 208 and the detected brand mark 204 are the same brand mark. In other instances, the advertisement's brand mark 208 could be related to, but not the same as, the detected brand mark 204. The system further modifies the ranking of the media item 202 in the content feed and places the advertisement 206 adjacent to the media item 202.

Traditionally, content feeds are ranked by scoring each of the feed items or media items based on a variety of factors including timeliness, user affinity for social contributors, user affinity for content, and engagement of other users with the content. The present system inflates that scoring for the targeted media item based on brand mark detection and ranks it higher than other media items in the content feed.

Recognizing brands within media items (image, audio, or video files) and associating and displaying advertisements for these brands next to the media item will help make the advertisements more relevant to consumers of content feeds. A user can see a product brand pictured in an organic post and then see a related product in an advertisement in proximity to the

post. As the system allows an advertisement to be paired with a specific piece of content, and this can be used for monetizing videos and other types of media files.

Fig. 3 is a block diagram of an exemplary environment that shows components of a system for implementing the techniques described in this disclosure. The environment includes client devices 310, servers 330, and network 340. Network 340 connects client devices 310 to servers 330. Client device 310 is an electronic device. Client device 310 may be capable of requesting and receiving data/communications over network 340. Example client devices 310 are personal computers (e.g., laptops), mobile communication devices, (e.g. smartphones, tablet computing devices), set-top boxes, game-consoles, embedded systems. The client device 310 can show a content feed including a media item. The content feed can be via a webpage or an application. Another client device (or a server) can post the media item in the content feed. The other devices 310' that can send and receive data/communications over network 340 may include television sets, tablets, etc. Client device 310 may execute an application, such as a web browser 312 or 314 or a native application 316. Web applications 313 and 315 may be displayed via a web browser 312 or 314. Server 330 may be a web server capable of sending, receiving and storing web pages 332. The server 330 includes a database of advertisements. The system checks the database to identify an advertisement that is associated with a brand mark included in the media item. Web page(s) 332 may be stored on or accessible via server 330. Web page(s) 332 may be associated with web application 313 or 315 and accessed using a web browser, e.g., 312. When accessed, webpage(s) 332 may be transmitted and displayed on a client device, e.g., 310. Resources 318 and 318' are resources available to the client device 310 and/or applications thereon, or server(s) 330 and/or web pages(s) accessible therefrom, respectively. Resources 318'

may be, for example, memory or storage resources; a text, image, video, audio, JavaScript, CSS, or other file or object; or other relevant resources. Network 340 may be any network or combination of networks that can carry data communication.

The subject matter described in this disclosure can be implemented in software and/or hardware (for example, computers, circuits, or processors). The subject matter can be implemented on a single device or across multiple devices (for example, a client device and a server device). Devices implementing the subject matter can be connected through a wired and/or wireless network. Such devices can receive inputs from a user (for example, from a mouse, keyboard, or touchscreen) and produce an output to a user (for example, through a display). Specific examples disclosed are provided for illustrative purposes and do not limit the scope of the disclosure.
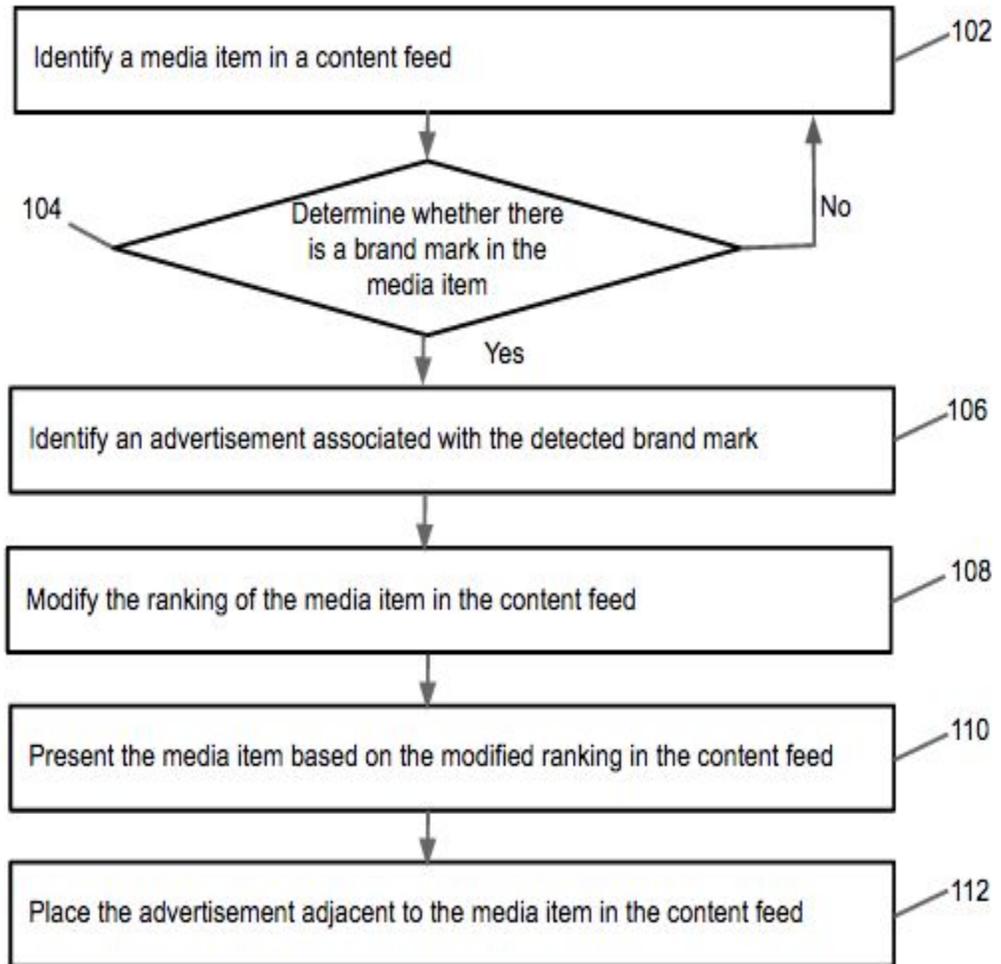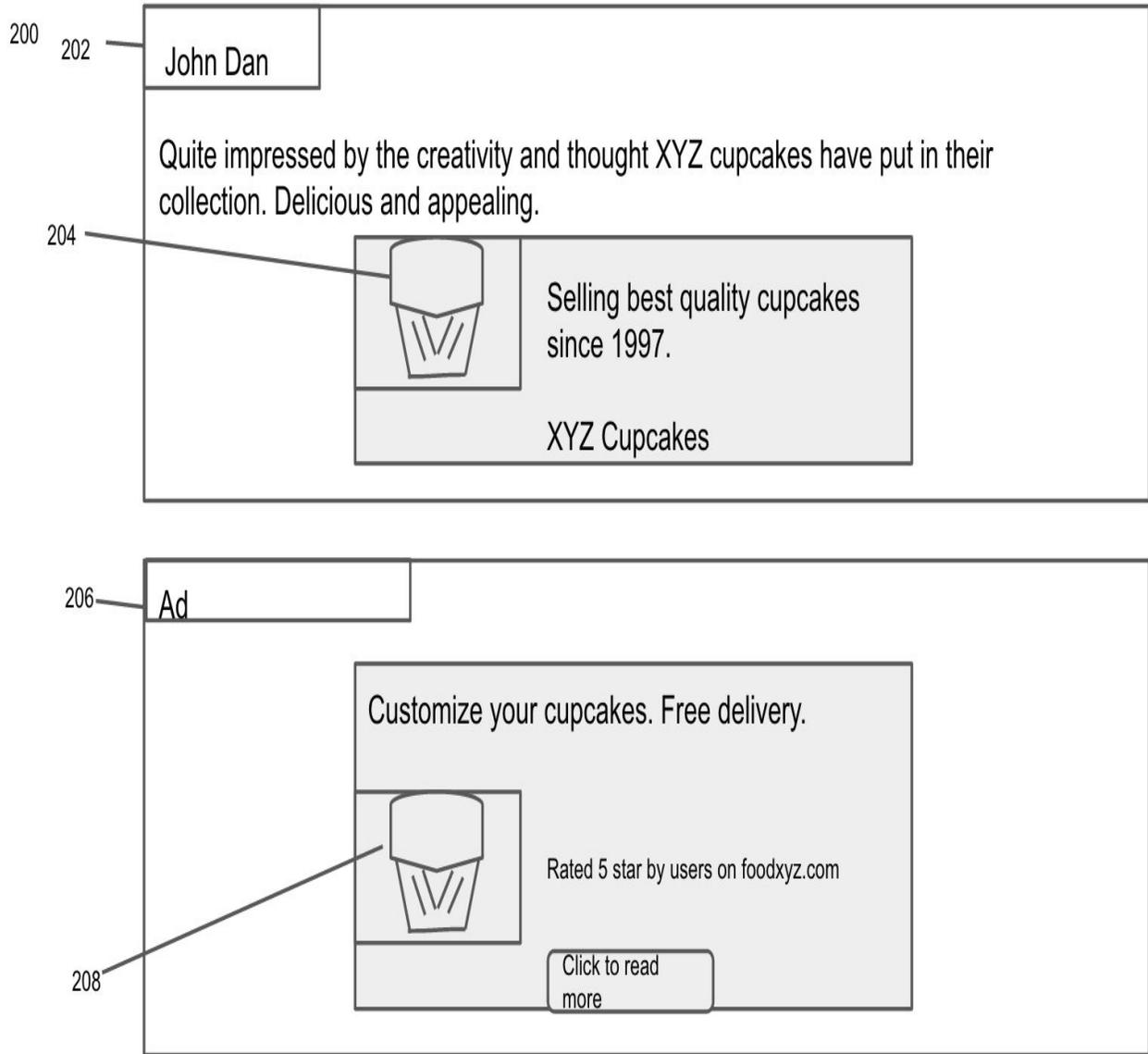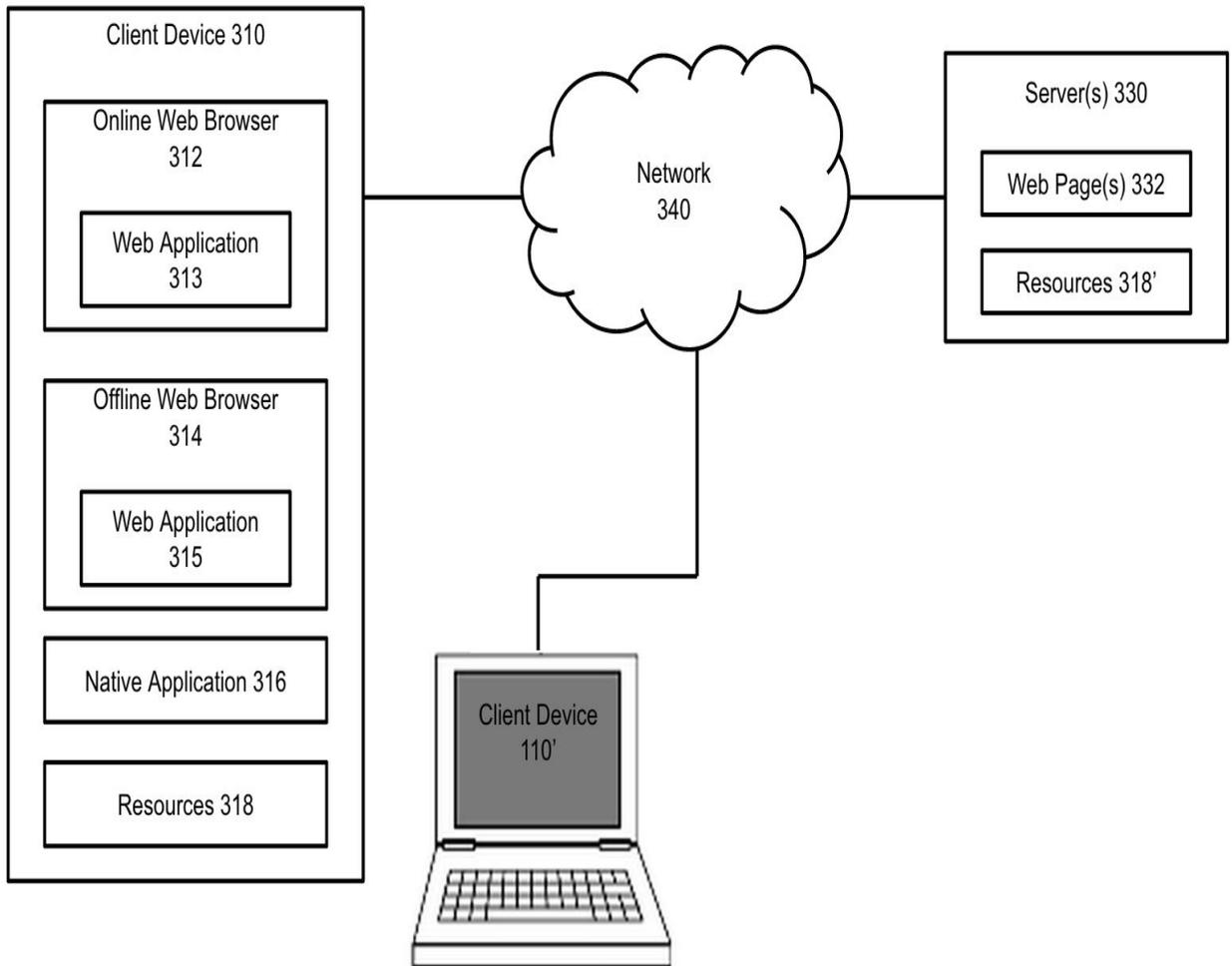
DRAWINGS

100

Fig. 1

200 202

John Dan

Quite impressed by the creativity and thought XYZ cupcakes have put in their collection. Delicious and appealing.

204

Selling best quality cupcakes since 1997.

XYZ Cupcakes

206 Ad

Customize your cupcakes. Free delivery.

Rated 5 star by users on foodxyz.com

Click to read more

208

Fig. 2

Fig. 3