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# Selective activation of call ads based on advertiser availability

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# Selective activation of call ads based on advertiser availability

# **ABSTRACT**

Some formats of online advertisements permit users to call the advertiser directly by clicking on the ad. Such ads can result in customer dissatisfaction when the advertiser is busy or unavailable to answer calls placed through the ad. The techniques described herein employ selective activation of call ads to improve the likelihood that calls made by customers to advertisers are answered. Contextual factors such as location, time, activity that an advertiser is engaged in, etc. for which an advertiser provides consent are utilized to predict advertiser availability. The techniques improve customer satisfaction and can reduce wasteful ad expenditure.

#### <u>KEYWORDS</u>

- call ads
- click to call
- online advertisements
- phone ext ads

#### BACKGROUND

Businesses can use online ads that include an interface to enable potential or existing customers (customers) to call the advertiser (call ads). For example, the ad may be designed so that, when a customer clicks on the ad, a call is initiated to the advertiser. In another example, an ad can lead to a website or landing page that includes a link to call the advertiser. However, if advertisers forget to turn off the display of such call ads during times of unavailability, the advertisers miss customer calls made via such call ads, thereby losing money and customers.

# **DESCRIPTION**

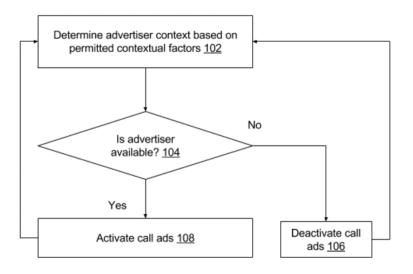


Fig. 1: Selective activation of call ads

The described techniques predict that an advertiser may miss a customer call from a call ad during a certain time period or at a specific location, and proactively turn off s call ad. Referring to Fig. 1, with the advertiser's express consent, context data (e.g., location, activity information, time, motion, speed, etc.) is obtained from advertiser's mobile device(s) (102). The context data is analyzed to predict advertiser availability to receive calls from a call ad customer (104).

If the advertiser is predicted to be unavailable, then the call ad or the call extension in the ad is deactivated (106), either automatically or by providing the advertiser a prompt that enables the advertiser to deactivate the ad. For example, deactivation of the ad can include turning the ad off, graying out or omitting UI elements that are used to initiate a call, displaying a message to customers that try to click on the ad, etc.

Referring again to Fig. 1, if the advertiser is predicted to be available to answer customer calls, the call ad is displayed (108). When a customer clicks on the call ad or the call extension within the ad, a call to the advertiser is initiated.

Context information, such as activity information from an advertiser's mobile device, is obtained and used specifically upon the advertiser's express permission. For example, based on motion, orientation and location information, it may be determined that the advertiser is driving. If the advertiser is driving, the call ad is turned off automatically, or the advertiser is prompted to turn the call ad off. If the advertiser doesn't provide permission, such context information is not used.

In another example, with the advertiser's express permission, it is determined that the advertiser is currently on a call, e.g., based on activity information such as audio signals from the advertiser's mobile device. Based on the determined context, call ads are deactivated.

When the advertiser provides consent, mobile device data such as location, Wi-Fi status, and device usage trends are used to predict the advertiser's availability to receive customer calls. For example, a determination can be made as to whether the advertiser typically accepts calls received from call ads when the advertiser is in certain locations. For example, it may be determined that, based on analyzing patterns and previous behavior (e.g., whether the advertiser accepted a call in this location before), that advertisers are available to answer prospective customer calls at an office location during office hours but not at a home location or a gym location.

Further, when the advertiser permits, if an advertiser is detected as being currently engaged in a call, such context information is used for selective activation of call ads. Other advertiser activities, such as browsing a social media application, can also be detected with advertiser's permission for selective activation of call ads, e.g., based on past behavior regarding answering customer calls during such activities. Other factors such as whether the advertiser's device is on a known Wi-Fi network are used for selective ad activation, when permitted by the advertiser.

# Example

Alice is an advertiser that has placed a call ad. It is determined whether Alice is available, e.g., if Alice is at a movie theater location, it is determined that Alice is unavailable. Based on this determination, the call ad placed by Alice is turned off. At a later time, when Alice is determined as available, the call is turned on. The activation/ deactivation of the ad can be automatic, or can be controlled by Alice.

If permitted by an advertiser, advertiser call answering patterns during various times of day are analyzed. For example, if the advertiser typically does not answer calls during particular time slots (e.g., when commuting to work, sleeping, etc.), prospective customer calls and the corresponding call ads are selectively turned off. Advertisers can choose to override or change ad activation settings for different locations and times.

Techniques disclosed herein are also applicable for online website and landing page ads. For example, certain online ads drive clicks to a website, where a call to action invites customers to make a call to the advertiser. If the call is unlikely to be answered, the corresponding online ads can be turned off. The techniques are also applicable in mobile operating systems, which can send a polite message (e.g., provided by the advertiser) to a calling customer when the advertiser is unavailable.

The techniques can be implemented by vendors of mobile phone software, content providers that host business pages, online advertising providers, messaging application providers, etc. Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable collection of user information (e.g., information about a user's social network, social actions or activities, profession, a user's preferences, or a user's current location), and if the user is sent content or communications from a server. In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user's identity may be treated so that no personally identifiable information can be determined for the user, or a user's geographic location may be generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.

#### **CONCLUSION**

This disclosure provides techniques to determine the availability of an online advertiser, e.g., that places call ads, to receive a call. The determination is made based on contextual factors such as location, time, activity, etc. as permitted by the advertiser. Based on the determination, call ads are selectively activated. Selective activation increases the likelihood that customer calls originating from call ads are answered. The selective activation is automatic and/or controllable by the advertiser. The techniques are also applicable on ads that lead to landing pages or websites that include a user interface that enables a customer to initiate a call to the advertiser. Selective activation improves the likelihood that the advertiser is available to respond to a call placed through a call ad and reduce wasteful advertising expenditure.