



## Retended Views for Digital Content

Utkarsh Agrawal

Computer Engineering Dept.  
Thakur College of Engineering and Technology  
Mumbai, India

Nayan Jain

Computer Engineering Dept.  
Thakur College of Engineering and Technology  
Mumbai, India

Jhumpa Jain

Computer Engineering Dept.  
Thakur College of Engineering and Technology  
Mumbai, India

Shiwani Gupta (*Assistant Professor*)

Computer Engineering Dept.  
Thakur College of Engineering and Technology  
Mumbai, India

**Abstract:** Content creators require way too much money for advertisements and in general to market their content, most marketing and advertising platforms follow a CPM or CPC model. Wherein the creator is paying for impressions or clicks, but this clicks are counted even if they are unintentional, i.e. the user might not be actually interacting with the content and might have just the clicked the ad by mistake. This happens in abundance thus leading the creator to spend more money to get organic users. The Retended View Model will help the marketers track actual user interaction with the ads and not just unintentional clicks. Thus helping the creator gather a legitimate traffic that might be actually interested in the said content.

**Keywords:** Retended; Retention, CPM, CPC, CPA.

## I. INTRODUCTION

A Retended View Model will help creators to track user interaction on the content and the time the potential user spends on the ad of the content. This will create a fair playing field for the creators thus helping them to actually pay for user interaction and not just random clicks. The current platforms are based on Cost-per-Click (CPC) and Cost-per-Mille (CPM) models. The both these models charge customers based on impressions which might be unintentional and accidental. Now we want services to implement this model because this not only help them acquire users but also track retention, to know how many of them are really interested and are willing to come back to their product or service, in this case which is digital content. Customer/User retention basically means that the customer comes back to use the service or content [1]. We went ahead and molded it in a way that suits our purpose i.e. so by our ideology retention view means the user stays long enough on the content proving that he has some interest in it, similar to its conventional definition which stated that the user comes back.

Currently there are two performance-based pricing models that are widely used. The first model is called a CPC (cost-per-click-through) model. Under this model, the publisher receives a payment for each click-through that has occurred. Leading portals such as Google and Yahoo all sell their advertising spots linked to sponsored search results via the CPC model. The second model is known as a CPA (cost-per-action) model. Under this model, the publisher receives a payment from the advertiser for each action that has occurred and can be traced to advertisements delivered by the publisher. Such an action can be defined as either an

online registration, a sales lead generated, or an online purchase. The CPA model is now used by many publishers. Even Google has started to use this model on their AdSense advertising platform. There are many distinctions between CPC and CPA models. First, an action needs to be reported by the advertiser, while a click is measured by the publisher. Second, an action takes place outside the scope of control of the publisher. Third, a click happens instantaneously, while an action such as buying a product might take place days or even weeks after the consumer sees the advertisement. At the same time, neither the CPC model nor the CPA model is a perfect pricing model, and each model faces its unique challenges in industry practices. This is because there are a lot of uncertainties in the measurement of clicks as well as in the measurement of actions. In addition, using these pricing models may change the incentives for the publisher and the advertiser to make efforts that can improve the effectiveness of the advertising campaign. Thus, it is not clear which model should be used in the online advertising industry [2].

## II. RETENDED VIEW MODEL

What we are proposing is that the charges on the CPC and CPA model be not on the clicks on the content but rather on the interest of the user. Now this is where the Retended View Model comes into place, i.e. to track user interest, we are doing so by tracking the amount of time the user spends on the content page, or the amount of time he spends viewing the content hence the name 'Retended View'. Now the time we speak of can be tailored to the platform needs.

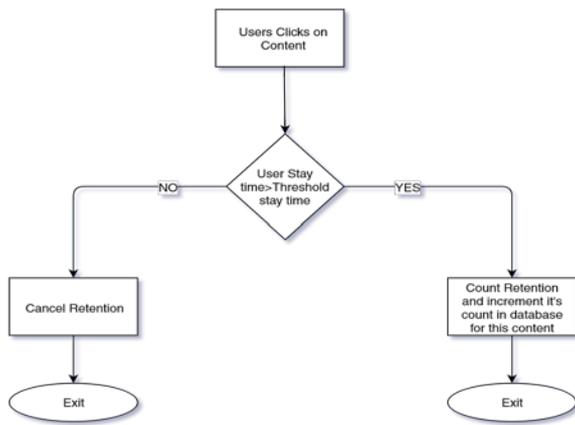


Figure 1: Flowchart of Retended View Model

The way this works for an advertising platform for digital content is that the content creators submit their content to this platform. So when a user visits a particular content page the time he/she spends there is tracked, if it passes a predefined threshold then that is counted as a retended view, which basically means the user has viewed the content for enough amount of time to make a decision whether to download the content or not.

The benefits of using this model is that the probability of conversion is more as we are counting only retended clicks, which means the interested users are been counted and not just normal clicks or unintentional click. The next advantage is that the content creators are paying only for retended views and not unintentional clicks.

“Half the money I spend on advertising is wasted. The problem is that I don’t know which half it is.” Attributed to Lord Lever, founder of Lever Brothers

### III. RESULTS AND DISCUSSIONS

It all comes down to conversions when it comes to any of these models i.e. what is their conversion rate, how much the advertiser is spending, what is the number of impressions, the number of clicks and finally how many of those clicks were actually converted to installs or downloads.

To illustrate, we compare ad campaigns ‘A’ and ‘B’ using these two models i.e. ‘A’ uses CPC model and ‘B’ uses the Retended View model. In both these campaigns the advertiser asks for 1000 clicks on his content ads and the rate for each click is \$0.09, but the difference is the advertiser is actually paying for retended views, in campaign ‘B’, and not for just unintentional clicks, what this does is increase the user acquisition rate at the same cost spent in both these campaigns. So, for the campaign ‘A’ at \$0.09/click for 1000 clicks the advertiser spent \$90, now the CPC model has a conversion rate of 1%, so that accounts to 10 users who actually downloaded or used the content. Thus the cost of acquiring each user is \$9. On the contrary in the campaign ‘B’ as the advertiser is paying for retended views the conversion is higher because those 1000 clicks he paid for are from those people who might be actually interested in his content thus decreasing the unintentional clicks. So, for the campaign ‘B’ at \$0.09/click for 1000 retended views the

advertiser spent \$90, now the Retended View model has a conversion rate of 5%, so that accounts to 50 users who actually downloaded or used the content. Thus the cost of acquiring each user is \$1.8, this is depicted with the following line chart:

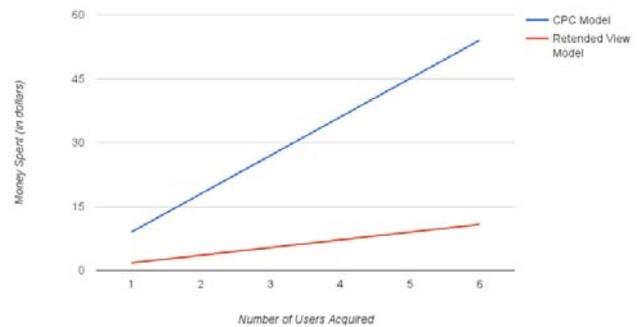


Figure 2: User Acquisition (CPC Model Vs. Retended View Model)

### IV. CONCLUSION

As the number of content creators increase so will the number of digital content and there is a need for a better model to advertise this content in way that benefits both the advertiser and the publisher. In this paper we have specified one way to do i.e. by using the Retended View Model which aims to give the advertiser a better conversion rate. This could be very useful when independent creators are concerned as they do not have abundance in funding and marketing requires a lot of it. This model can surely help them attain more users by spending the same amount of money they might on a platform using a CPC or CPM model. This also opens up ways in which publishing platforms can implement their marketing system leading to better incentives. This model also benefits the content creator to build a more legitimate user base which will improve the content’s customer retention.

There are many ways in which our research and proposed model can be applied or improved upon. This paper aims to provide other researchers the way to do so.

### V. ACKNOWLEDGMENT

We would like to thank our project guide, Mrs. Shiwani Gupta for her never-ending support in helping us develop this and letting us follow our vision.

### VI. REFERENCES

- [1] [https://en.wikipedia.org/wiki/Customer\\_retention](https://en.wikipedia.org/wiki/Customer_retention)
- [2] Y.Hu, J.Shin, Z.Tang, “Pricing of Online Advertising: Cost-Per-Click-Through Vs. Cost-Per-Action”, System Sciences(HICSS) 43<sup>rd</sup> Hawaii International Conference, pp. 1-9, 2010.