

Case Study

An Enterprise case study from Nabler

Identifying The Mole When Google Analytics Data Does Not Match With In-house Reporting Data

About Nabler

Nabler is a solutions-focused digital analytics consulting firm that assists enterprises and media agencies in leveraging the best out of their digital infrastructure by playing a consultative role throughout their digital maturity journey.

Founded in 2004, with offices in Charlotte (USA) and Bangalore, Nabler has consulted some of the top 100 global brands and Fortune 500 firms.

To talk more about your needs, write to info@nabler.com

Introduction

HomeShop18, a leading ecommerce site in India, noticed a major inconsistency between its in-house reporting data and Google Analytics data and contacted Nabler. Our Google Analytics experts formed various hypotheses and conducted tests to identify the root cause of the issue. A minor error in coding was noticed and after rectification, the transactional discrepancy dipped to 11.6%.

The Need

HomeShop18 is one of the leading ecommerce sites in India selling consumer products across several categories. The client reported a discrepancy of more than 25% between its in-house transactional reporting system and Google Analytics reporting system and decided to engage Nabler to find the root cause for this understatement of transactions data in Google Analytics.

Approach

At Nabler, we have experienced these kinds of issues with multiple ecommerce clients over the years, and if we look at the industry average, there is approximately 32-36% difference in the transactional numbers reported between in-house transactional reporting system and external web analytics solutions. If we go deeper into this issue, there are multiple contributing factors and some of the common ones that we have encountered are:

- **Alternative Payment Methods** offered on the website such as PayPal, Google Checkout, Cash on Delivery, etc.
- Non-tracking of Shipping Charge, Taxes, Promotional Discounts, and Gift Wrap Cost data.
- Offline orders via Phone and POS

In the case of HomeShop18, we validated all the above common factors but unfortunately, none of the factors turned out to be an issue. So, we created a few hypotheses to nail down the issue. This is how we approached the problem and found the root cause:



Hypothesis 1: Are we seeing differences between the in-house transactional reporting system and Google Analytics on a daily basis, or does it occur inconsistently?

To validate this hypothesis, we trended the differential data at the day level, but we found the difference spread across all days, so, this possibility was ruled out.

Hypothesis 2: Does the disparity between both solutions happen at a particular hour(s) of the day?

To validate this hypothesis, the differential data was categorized by the time of day and then trended. Again as expected, the disparity was seen to be occurring at all times.

Hypothesis 3: Is there any particular Seller(s) on HomeShop18 whose transactions are not getting tracked on Google Analytics?

To validate this hypothesis, the differential data was segmented by the Seller Name but we found no particular seller(s) causing this deviation in the numbers.

Hypothesis 4: Are there any products or product types which are not getting captured?

To validate this hypothesis, we compared the Product IDs of the differential data against the Product IDs which were successfully captured by GA. This test revealed that several of the products in the differential data have been tracked by GA at some point.

Next, we created several advanced segments on Google Analytics interface to find the root cause and one of the segment showed some interesting information. Here is the rule behind that segment:



This segment provided us with the visits in which the confirmation page was rendered but transaction data didn't get tracked. The client confirmed that it was not possible as per the architecture.

Upon looking at the page report under this segment, we recorded all the product pages which were viewed during such conditions. Next, we randomly purchased different products discreetly and noted if they fired the transactional code or not. During one such purchase, we noticed that the necessary ecommerce tags did not fire for one particular product.

```
<script type="text/javascript">  
try{  
  _gaq.push(['_addTrans','930099599','HomeShop18','1099','0','0','Bangalore','Karnataka','India']);  
  _gaq.push(['_addItem','930099599','30027679','Actin A Papaya Facial + Fruit Bleach + Manicure Pedicure Kit','3497','1099','1']);  
  _gaq.push(['_trackTrans']);  
}catch(e){}
```

We closely looked at the source code of the confirmation page and spotted that an APOSTROPHE (') within the product name was breaking the integrity of the ecommerce JavaScript code because COLON is considered as a valid delimiter by Google Analytics. This was causing the 47% of the total discrepancy reported by the client in the above-stated business problem.



The Results

- Post fix, the transactional discrepancy dipped to 11.6%.



- Google Analytics was able to capture several other products, which were not getting tracked earlier.

The Perfect Digital Analytics Partner

Nabler enables marketers take advanced data-driven decisions and boost the effectiveness and success of their digital properties including websites, social media, online platforms, digital devices, web or mobile-based applications, and more. Combining progressive analytics practices, technology, and domain expertise, our custom solutions help clients connect data and insights with business decisions.

