



Rocket Fuel

For TaskaBella



At **\$9**

1000 -> **14.5M** impressions

14423 of 564577
converted after being shown real ad

1. Was the ad campaign effective? Did add'l consumers convert as a result of the campaign?

The advertising campaign was effective because TaskaBella initially expected 1000 impressions at a CPM of \$9 but it reached 14.5M impressions. Out of 564577 users shown the real ad based on the case's spreadsheet, 14423 users converted. This means 14423 additional users purchased a handbag after seeing the ad.

Each converting user worth = \$40.

Converted users = 14843

$\$40 \times 14843 = \mathbf{\$593,720.}$

** This is excluding the costs incurred from users that did not convert

2a. How much more money did taskabella make by running the campaign excl. advertising costs?

This is calculated by seeing who among the uniquely identified users have a conversion (1) by being exposed to the campaign.

Here we are calculating for the profit by running the campaign ad. We can obtain this by multiplying the number of converted users by the difference of the price per bag and cost per converted user, which is the worth of each converted user.

In addition, this value does not include costs incurred in total, and from non-converters.

Fixed (advertising costs)	\$9
+	
<u>Variable/ marginal costs x no. of converters (\$100-40) x 14843</u>	
Cost of the campaign	\$890,589

*Assuming we don't include the variable costs of the manufactured bags that weren't sold.

* Assuming cost of the campaign includes fixed and variable.

2b. Cost of the campaign

The cost of the campaign includes fixed and variable costs. Fixed costs refer to the advertising costs which \$9 for the entire campaign. The variable cost is obtained from the difference of the bag price and the worth of the converting user as it mentions that the worth of the user is obtained from the difference of the bag price and the variable or marginal costs. Then variable cost is multiplied by the number of converters (those who bought a bag). Hence, the cost of the campaign is \$890,589.

Campaign profit = $(14843 \times 100) - 890,598 = \mathbf{593,702}$

Campaign cost:

Fixed	9
+ Variable	<u>890,589</u>
	890,598

ROI = campaign profit/ campaign cost = $593702/890598 = 0.6666 = 0.67 = \mathbf{67\%}$

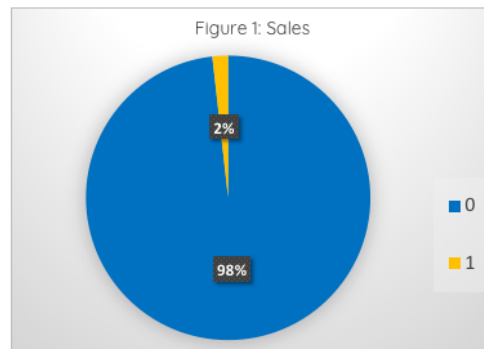
2c. ROI of campaign. Was the campaign profitable?

The ROI of the campaign is 67% and indicates that the campaign is indeed profitable, expecting a return of 67%.

Total users shown control ad = 23524

98% or 23104 users did not convert.

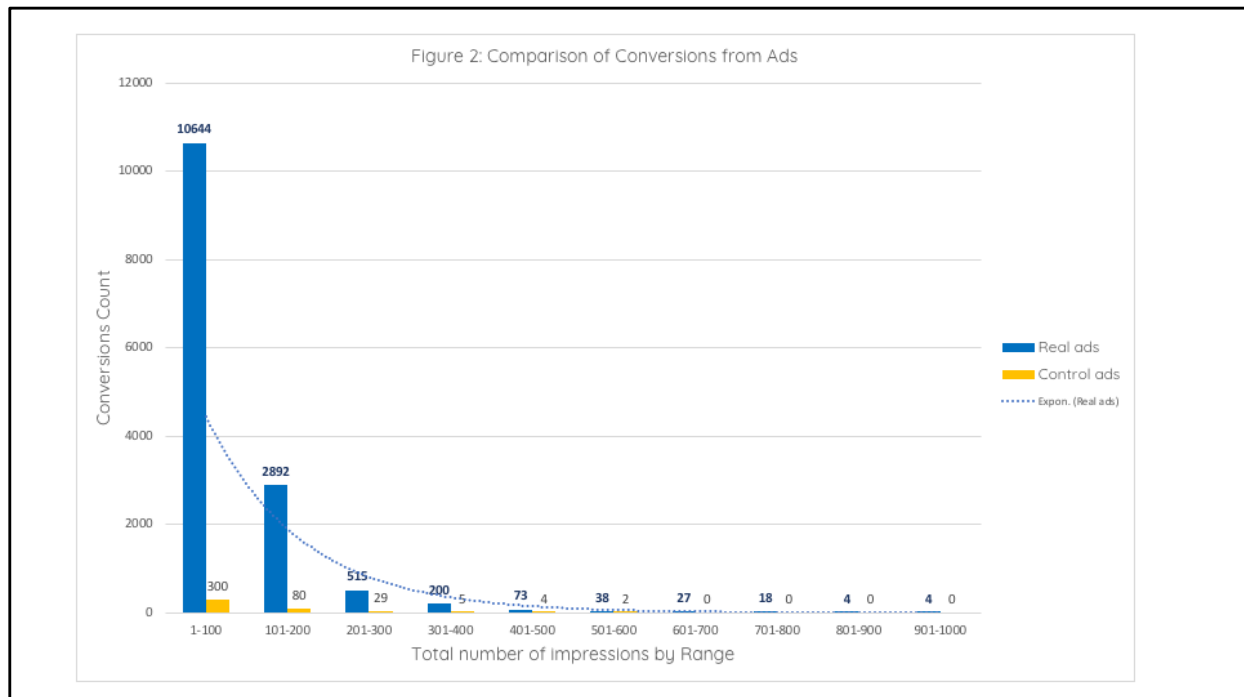
Opportunity cost = 23104 x \$40 = **\$924,160.**



* Assuming all of the users shown the real ad purchased.

2d. What was the opportunity cost of including a control group; how much more could have taskabella made with a smaller control group or not having a control group at all?

Approximately 4% of all the users have been shown the control ad and this is equivalent to 23524 users. 2% of these users converted, while 98% did not. The 98% is the number of users that could have converted had they seen the ad. Hence, this is the opportunity cost. Here, we assume that all users who seen the ad would have purchased.



3a. Create a chart of conversion rates as a function of the no. of ads displayed to users. Plot conversion rates for those who were in the control group and for those who were exposed to the ad. Group together no. of impressions as necessary to obtain a meaningful plot.

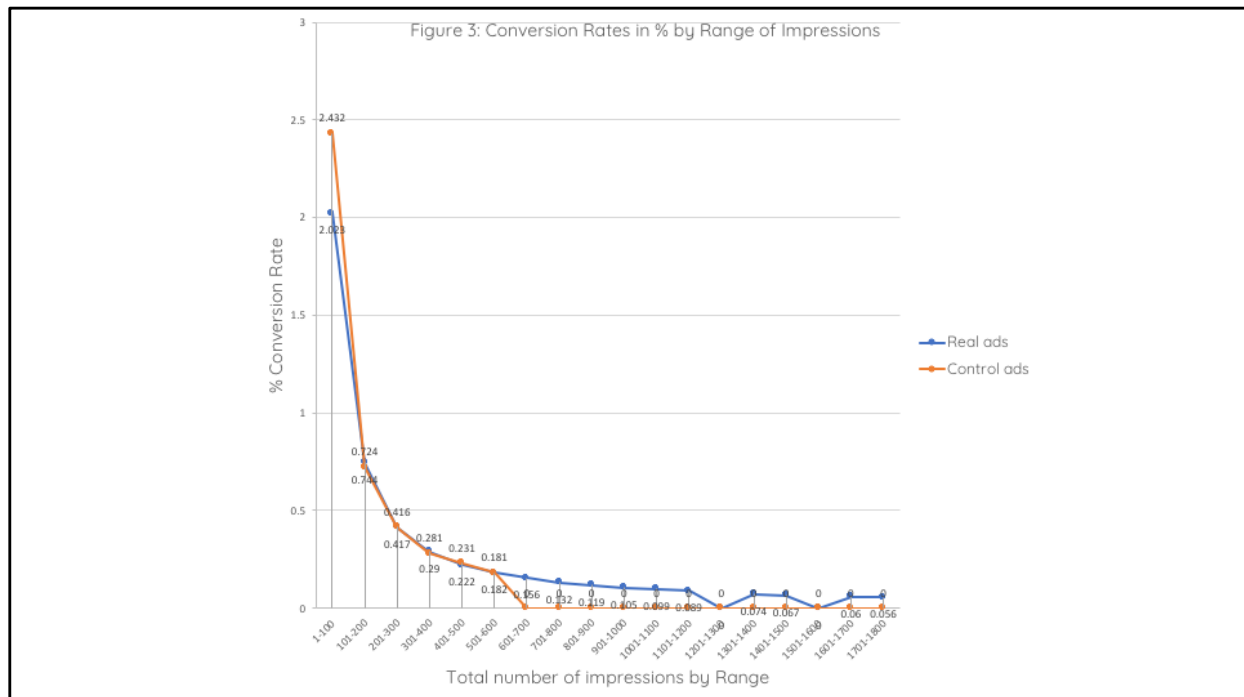
This chart shows the count of converters given real and control ads respectively. The total number of impressions was also grouped into hundreds.

It shows that the most conversions were made in 1-100 number of impressions or times the ads were shown to the audience. 10844 of the the entire audience who participated in the ads converted within 100 times of seeing the ad. The discrepancy with those shown the control ads may be far at 300, however, it is also leading within the first 100 impressions.

Conversion rates as a function of the no. of ads displayed to users

Conv. Rate = conversions/clicks=15000/590000=2.54%=conversion/total ad interactions

Conversions/ no. of ads displayed to users



3a. Create a chart of conversion rates as a function of the no. of ads displayed to users. Plot conversion rates for those who were in the control group and for those who were exposed to the ad. Group together no. of impressions as necessary to obtain a meaningful plot.

The number of ads displayed to users or the total number of impressions are grouped by hundreds. The conversion rate is calculated by dividing the total number of conversions of each range by the sum of impressions within the range. The numbers displayed above are in % conversion rate. The same trend still holds that as the number of impressions increase, the conversion rates drop. Conversions within the first 100 impressions remain leading. The main difference is that the conversion rate of control ads within the first 100 impressions seem to be **leading by 0.4%**. The succeeding trend remains similar to Figure 2 that rates of real ads are greater than or equal to that of control ads’.

Within the first 100 impressions.

As the impression increases, the number of converters significantly decrease.

Goal: To make the ads appeal to the audience **within the first 100 times** it was shown to them.

3b. What can you infer from the charts? In what region is advertising most effective? The most effective region to advertise is within the first 100 impressions. As the impression increases, the number of converters significantly decrease. Hence, it is a goal to make the ads appeal to the audience **within the first 100 times** it was shown to them. The conversion is also highly concentrated within the first 400 impressions.*

* Highly concentrated refers to a number at least in the hundreds number of impressions.

Trend: Conversion decreases as the number of impressions increase.

Key goal: Time is of the essence.

Strategy: Get the audience to act as quick as possible upon seeing an ad.

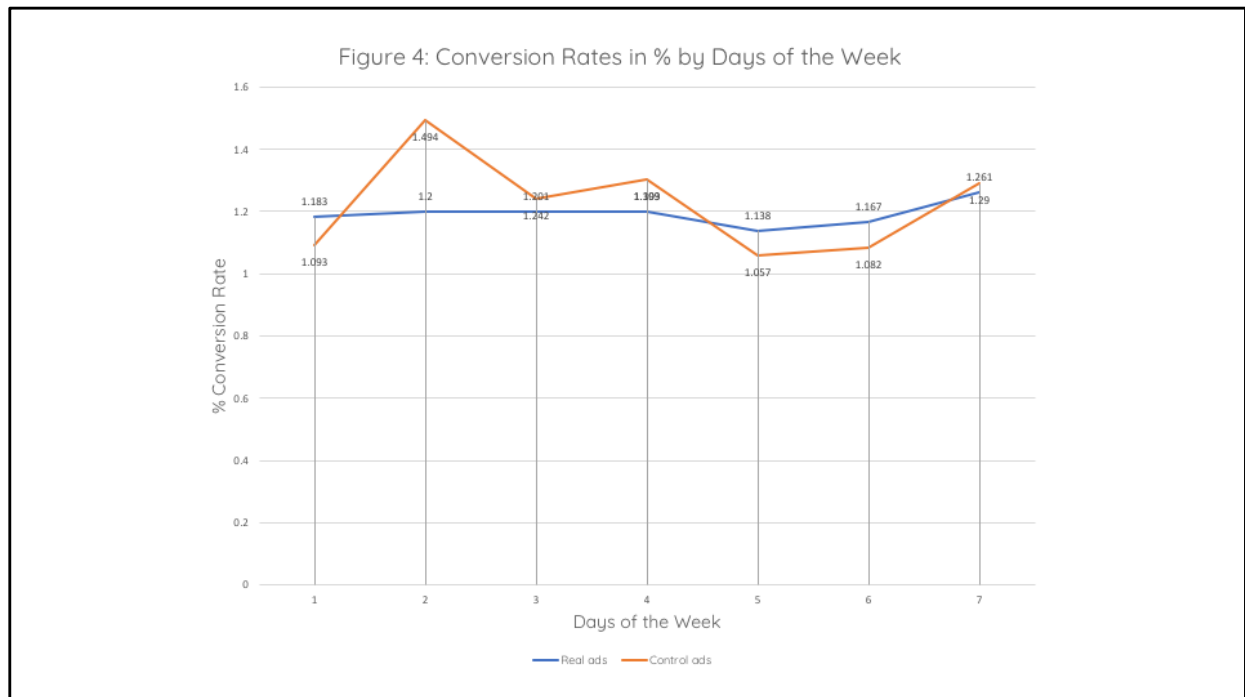
Implementation:

- 1) Course of action involved in the ad i.e. direct links, QR codes
- 2) Incentives for early purchasing i.e. discounts/ bundles for a limited amount of time.

3c. What do the above figures imply for the design of the next campaign assuming that consumer response would be familiar?

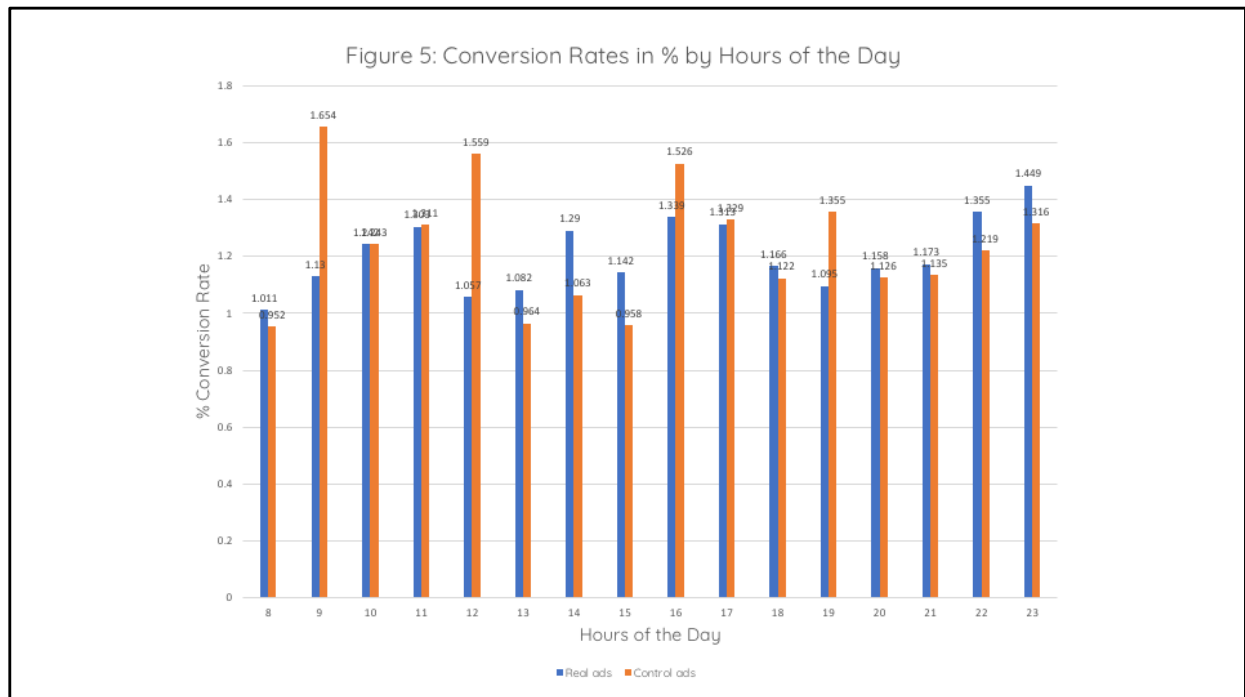
Because the conversion is higher the fewer the number of impressions, a campaign involving a course of action is needed. For example, a QR code or quick link that takes them directly to the purchasing page may be implemented. Incentives on acting quickly may also be a strategy.

Providing discounts for a limited period of time may entice the audience to purchase quickly. It is also a conclusion that there is no need to show the audience the ad beyond 400 times as the numbers succeeding are too low (less than 100) and would be an insignificant spending. In addition, no control ads are needed as the conversion is far from the real ad. This experiment has proven that the real ad is indeed effective, at certain number of impressions, and that control ads may be spent on real ones instead.




4a. Create a chart with the conversion rates for the control group and the exposed group as a function of the day of week when they were shown the most impressions.

The conversion rates as a function of the day of the week does not have a leading type of ad. Sometimes, the real ad has a higher conversion rate, the other times, the control ad. No significant difference may be noticed. It is prominent that conversion rates are the highest on Tuesdays (2) for the control ads, while the real ads have the highest conversion rate on Sundays(7).



4b. Create the same chart for hours within a day excl. the period between midnight and 8am

Figure 5 shows that sometimes control ads have higher conversion rates, while it is the real ads at certain times. The peak hour of control ads is at 9:00 am while it is at 11:00 pm for the real ads. There is not much difference between the conversion rates of real and control ads, except at 9 am and 12 nn, where control ads is leading.



Day of the Week

Control ads: Monday, Friday, Saturday

Real ads: Friday, Saturday

Hour of the Day

Control ads: 8 am and 1 pm to 3 pm

Real ads: 8 am and 12 nn to 1 pm.

4c. What days/ hours is advertising most/ least effective?

The least effective day or hour of the day are different for real and control ads.

For days of the week where ads are least effective, both control and real ads drop in rate on Fridays and Saturdays, and an addition of Monday for control ads.

It can be inferred that these are the days where people go out with friends and families to dine, shop or go on a trip. Hence, checking social media is lessened.

For hour of the day, the least effective ones lie around 8 am and 1 pm to 3 pm. For those exposed to control ads, conversion rates hit the lowest within this time frame, while for those exposed to real ads, it is the least effective from 8 am and 12 nn to 1 pm.

It can be inferred that the reason must be because most audience who have purchasing power or that the ad targets are at work and occupied with other tasks.