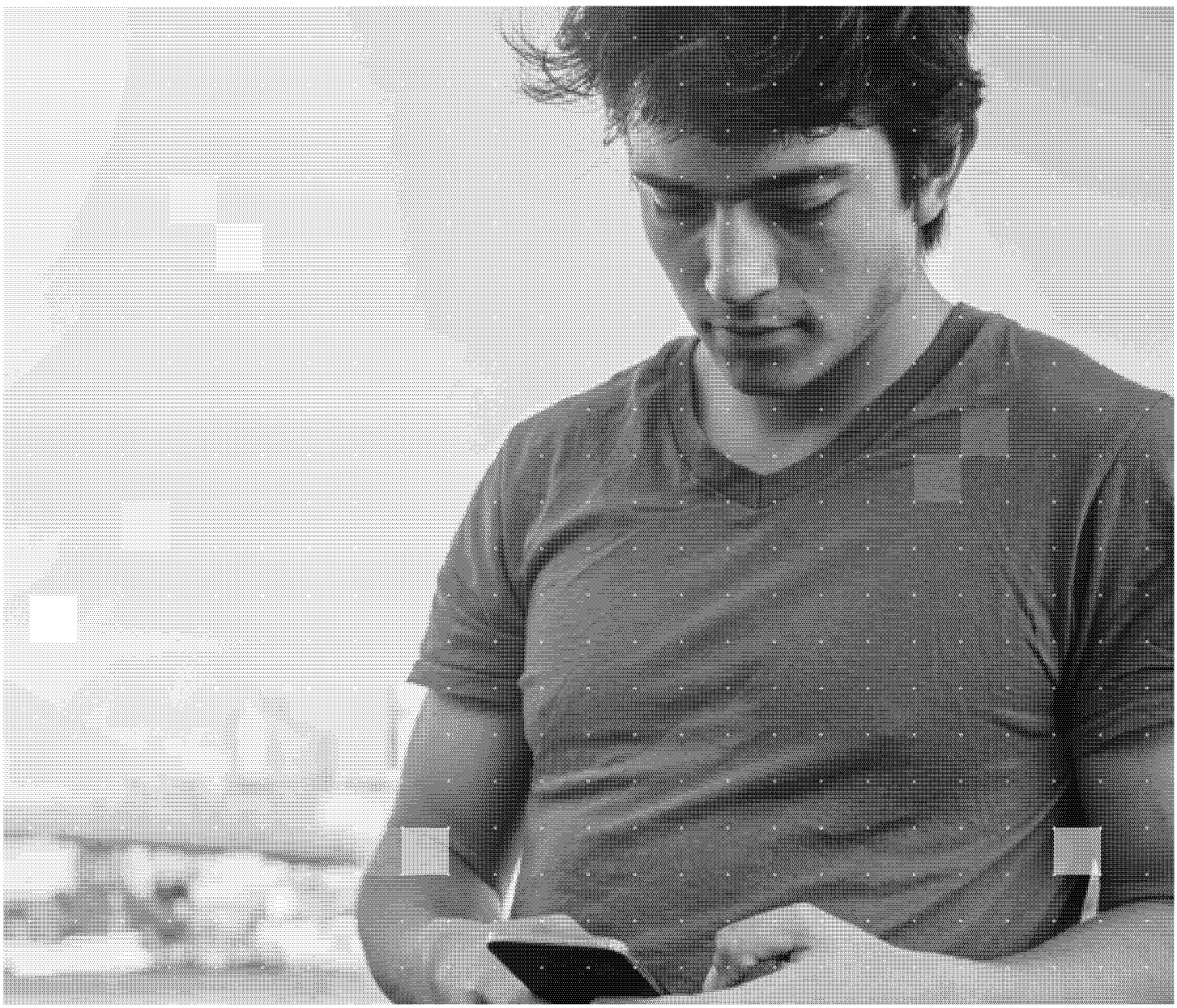
Optimizing Direct Response Campaigns across Facebook, Instagram & Audience Network

December 2017



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Placement optimization helps advertisers reach their target audiences and optimize performance in real-time across Facebook, Instagram and Audience Network.

Executive summary

With 56% of store purchases being influenced by digital interactions and 66% of those interactions happening on mobile[1], marketers today continue to try and answer the question: "How do I capture people's attention and drive action on mobile?"

With more people using Facebook and our family of apps and services than any other platform, there is an opportunity for marketers to allow our ad delivery system to optimize their campaign across our platforms according to their objectives.

In 2016, the Faebook Marketing Science team published research proving the value of running placement optimized campaigns across Facebook and Instagram for brand advertisers. For direct response advertisers, running campaigns across digital platforms should also extend reach and drive incremental conversions in a more cost-effective manner.

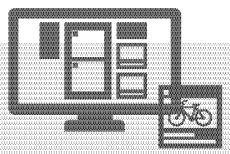
To explore this hypothesis, the Marketing Science team studied 11 campaigns within retail (5), g aming (3), financial services (2) and charity (1) from August 2016 to March 2017 using randomized control trial methodology. Through this study, we saw that placement optimized campaigns were effective in: efficiency in reach, audience activity and cross-platform impact.

- Eight of the 11 campaigns were found to have statistically significant incremental lift when optimized across Facebook platforms.
- Reach in the placement optimized campaigns were as much as 7% higher than Facebook-alone and generated 1.67x incremental converters with 3.45x incremental conversions.

We hope by reading our expanded discussion of this analysis including methodology, results and what it all means for marketers you are inspired to test extending your campaign into additional placements to increase the business outcomes of a campaign.

[1] Deloitte Digital, The New Digital Divide, September 2016

Introduction



Automatic Placements Across Facebook Platforms

The current default in the ads creation flow is called "automatic placements", but advertisers could also edit placements manually. We use a general term "placement optimization" to refer to running campaigns on more than one platform (excluding Right Column).

In today's expanding media landscape, reaching consumers and driving business objectives requires strategically planning and executing multiplatform campaigns. The Advertising Research Foundation found that advertisers were able to increase their ROI 19% by extending campaigns from one platform to two, with each additional platform (up to five) improving overall ROI up to 35%.[2]

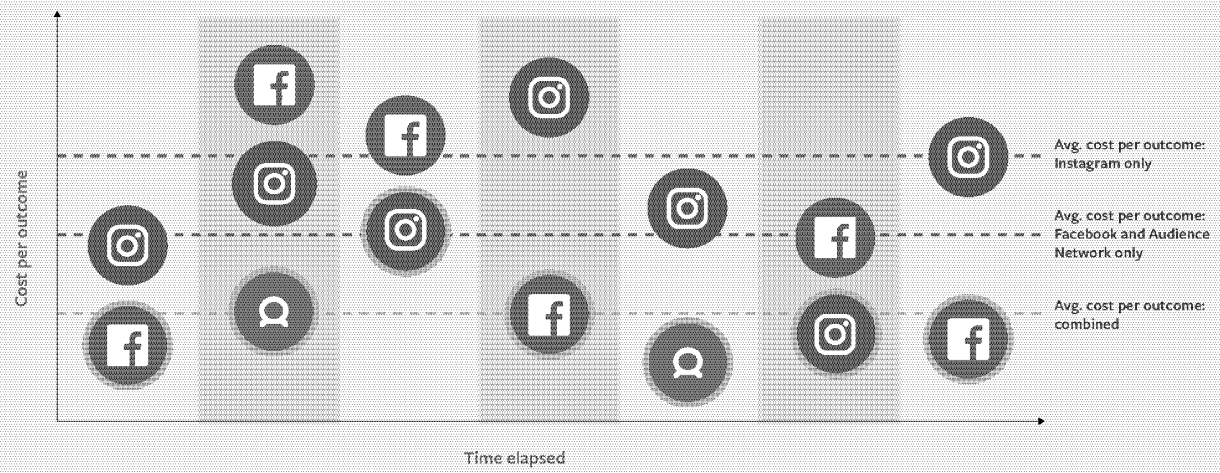
A large reason why marketing budgets are not spread across platforms is simply due to planning. Many marketers lack sufficient tools and resources to plan successful multiplatform campaigns, and most traditional planning tools do not take into account multiplatform opportunities. Looking at the same ARF study which included over 5,000 campaigns globally, 29% of them relied on just one platform, and about 40% relied on only two.

One solution to this issue is placement optimization, a new ad product allowing advertisers to easily run their advertising campaigns across Facebook's family of apps and services. Placement optimization helps advertisers reach their target audiences and optimize performance in real-time across Facebook, Instagram, Audience Network and Messenger.[3]

[2] This study spanned through 5,000 campaigns for 1,000 brands in 41 countries with a total of $375 billion in global ad spending.

[3] The current default in the ads creation flow is called "automatic placements", but advertisers could also edit placements manually. We use a general term "placement optimization" to refer to running campaigns on more than one platform (excluding Right Column).

See https://www.facebook.com/business/help/965529646866485 for the definition of a placement.



The principle behind placement optimization, illustrated in the graph below, is straightforward: During the course of a campaign, the ads delivery system continuously evaluates campaign performance and delivers media on the platforms most likely to produce efficient results. Depending on a specific audience and time period, there might be more potential converters on one specific platform than the others. Allowing the ad delivery system to actively search across platforms and find users who may be more likely to convert drives better business outcomes for the majority of campaigns.

In the 2016 Facebook IQ study "Optimizing Audience Buying on Facebook and Instagram," we found that, given the same budget, campaigns that opted for placement optimization outperformed Facebook-only campaigns. Placement-optimized campaigns benefited from larger reach and a lower cost per lift.

This initial study was brand-focused and did not include Audience Network. With the additional placements we now have available, like Instant Articles and Messenger, we continued our research to understand the impact of placement optimization for direct response advertisers across Facebook, Instagram and Audience Network.

For this new analysis, we began with the following hypothesis:

Direct response campaigns that use placement optimization (versus placement on Facebook alone) are more likely to see larger reach and more effective outcomes.

We used a similar approach to the first study, comparing how well a combination of placements performed using placement optimization compared to Facebook alone. This setup was designed to directly address the business question:

"Instead of committing advertising budget solely to Facebook, what happens if it could be freely distributed across Facebook family of apps and platforms wherever the system identifies potential converters?"

Based on our analysis of 11 campaigns, we found as much as a 7% increase in reach and 1.67x incremental converters (3.45x incremental conversions). This suggests that placement optimization has the potential to improve the efficiency of campaigns. While this is based on just a small number of studies, it does suggest that placement optimization reaches larger audiences, possibly generating more incremental converters and conversions. Based on these preliminary test results, we suggest placement optimization as a way to improve campaign efficiency.

Methodology

For this analysis, we used a randomized control trial (RCT) methodology to study the effectiveness of placement optimization. More specifically, for each campaign in the study we split the budget equally into a Facebook-only test cell and a placement-optimization test cell prior to the campaign launch.

The only difference between the two test cells was that people in the placement optimization cell had the opportunity to be reached across both Facebook and other platforms in the Facebook family of apps, whereas people in the Facebook-only test cell could only be reached on Facebook.[4] Apart from that important difference, every other campaign feature—including campaign objectives, bidding strategy, audience targeting, and creative assets—were exactly the same across both test cells.[5]

[4] Everyone in these campaigns have Facebook accounts and hence are eligible to see the campaigns on Facebook even though they actually got exposed on other platforms in the placement optimization test cell.

[5] Placement Optimization offers the possibility for advertisers to customize their creative assets. However, we use the same creative assets here to reflect a common use case of the product as well to rule out any effect coming from the creative side.

Placement optimization lift test design

Note: Campaign budget, target audience, Creativeincampaign durations are hold constant for both cells.

Directly comparing the overall performance between the placement optimization and the Facebook-only test cells might offer a quick overview regarding the relative effectiveness of the two ad solutions.

However, it would be difficult for us to understand the *true incremental value* of an advertising campaign running through placement optimization. For example, the delivery system keeps updating and optimizing action signals during the ads ranking and delivery stage, resulting in exposing the campaign to very different audiences.

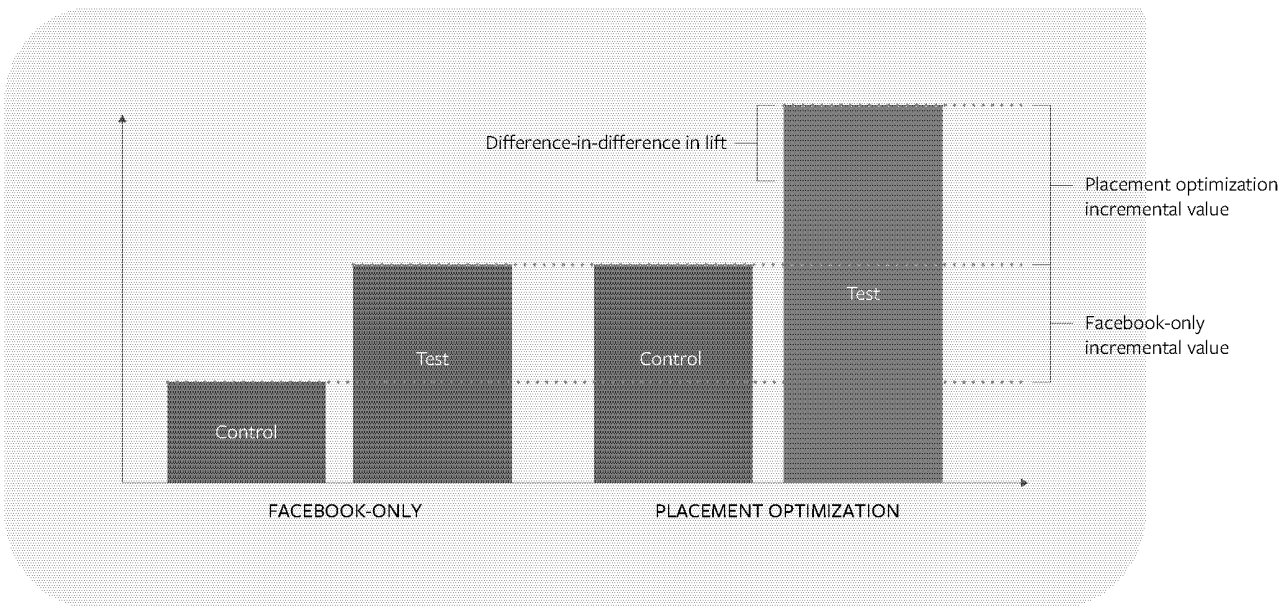
These new audiences, however, could be existing users of the product and hence likely to convert regardless of the campaign. So, it could be the case that placement optimization just finds likely converters without generating incremental value to advertisers.

Understanding if placement optimization drives incremental value is, of course, the primary question. To measure incremental value, we turn to a lift-testing framework, which holds out a certain percentage of the audience. Since the holdout audience could have seen the campaign if they were in the test group, their underlying characteristics should be highly similar to those who were exposed to the campaigns.

Subtracting the baseline conversion rate directly provides the incremental value using placement optimization. In addition, comparing the organic conversion behavior for the two controlled audiences also allows us to identify to what extent the total effect comes from the audience.

Under the lift framework, we define success by comparing the *incremental* conversion rate the campaign is optimized towards relative to control across placement optimization and Facebook-only. This statistical technique is called "the difference-in-difference" (or DID) approach (see illustration below). For instance, an advertiser who runs a campaign only on Facebook may observe a 20% increase in conversion rate (incremental lift) compared to organic converters in the control group. If we see a 30% incremental lift in the conversion rate among the placement optimization test cell, then we conclude that directionally, the placement optimization test cell conversion rate appears to be 1.5x that of the FB-only test cell.

Difference-in-difference methodology



Exploring the Hypothesis

We sought to test the general premise that the majority of campaigns running through our placement optimization study would see some business outcome improvement and drive incremental business value.

From August 2016 to March 2017, we studied campaigns from 11 advertisers in 4 verticals: retail (5), gaming (3), financial services (2) and charity (1). The objectives of these campaigns fell within 4 categories:

1. Optimized for mobile app installs (MAI) (4)
2. Optimized for conversions (3)
3. Optimized for purchase (4)
4. Optimized for website clicks (1)

The campaigns within the tests were in English and primarily targeted US audiences, with the exception of two campaigns. One of those exceptions targeted audiences in English-speaking countries (Canada, Australia and New Zealand), and the other targeted in the UK. Depending on platform availability and the business needs, four campaigns opted in for Facebook and Instagram; five opted for Facebook, Instagram and Audience Network; and two opted in for Facebook, Instagram, Audience Network and Instant Article.

There were two commonalities in the campaigns we analyzed:

1. Most of the campaigns within the study targeted US audiences, meaning that other regions might observe different incremental levels.
2. Results from this study may be most relevant to larger advertisers, due to the large audience size and ad spend requirements necessary for running a randomized control trial.

In future studies, we will continue to study this topic to better understand how placement optimization performs for smaller businesses and advertisers across regions.

Results

Based on our analysis, we found that placement optimization is an effective tool for campaigns with direct-response objectives looking to extend placements across different channels.

Eight out of 11 campaigns within the study had statistically significant incremental lift for placement optimization. Compared to the Facebook-only test cell, placement optimization generated 1.67x incremental converters and 3.45x incremental conversions. Given the highly similar ad spend, this increase means that for placement optimization in the campaigns evaluated, the cost per incremental converters and incremental conversions are lower by 40% and 71%. For the three campaigns that optimized for sales, incremental ROAS was 1.12x for placement optimization.

The table below presents the key metrics and incremental comparisons between the Facebook-only and placement optimization test cells. It is important to note that these metrics vary substantially across campaigns due to variations in campaign spend and buying objectives. To reflect such heterogeneity and to account for campaign size, we report the weighted average across the metrics. Each row compares how much placement optimization outperforms its control (with no ads) relative to a Facebook-only test cell.

While more campaigns are necessary to shape conclusive results, the initial 11 campaigns are able to provide us with directional guidance for how each object performed when optimized.

We saw the four campaigns with MAI objectives had the largest improvement in reach (67% on average) and incremental converters (1.98x), while the three campaigns optimized for conversion had the largest drop in cost per incremental conversion (75%).

Comparisons between placement optimization and Facebook-only test cells

	Metrics	Compared to Facebook-only, the incremental value for placement optimization is ...
1	Lift	2.12x
2	Converters	1.67x
3	Cost per converter decrease	40%
4	Conversions	3.45x
5	Cost per conversion decrease	71%
6	ROAS	1.12x

Understanding the effectiveness of placement optimization

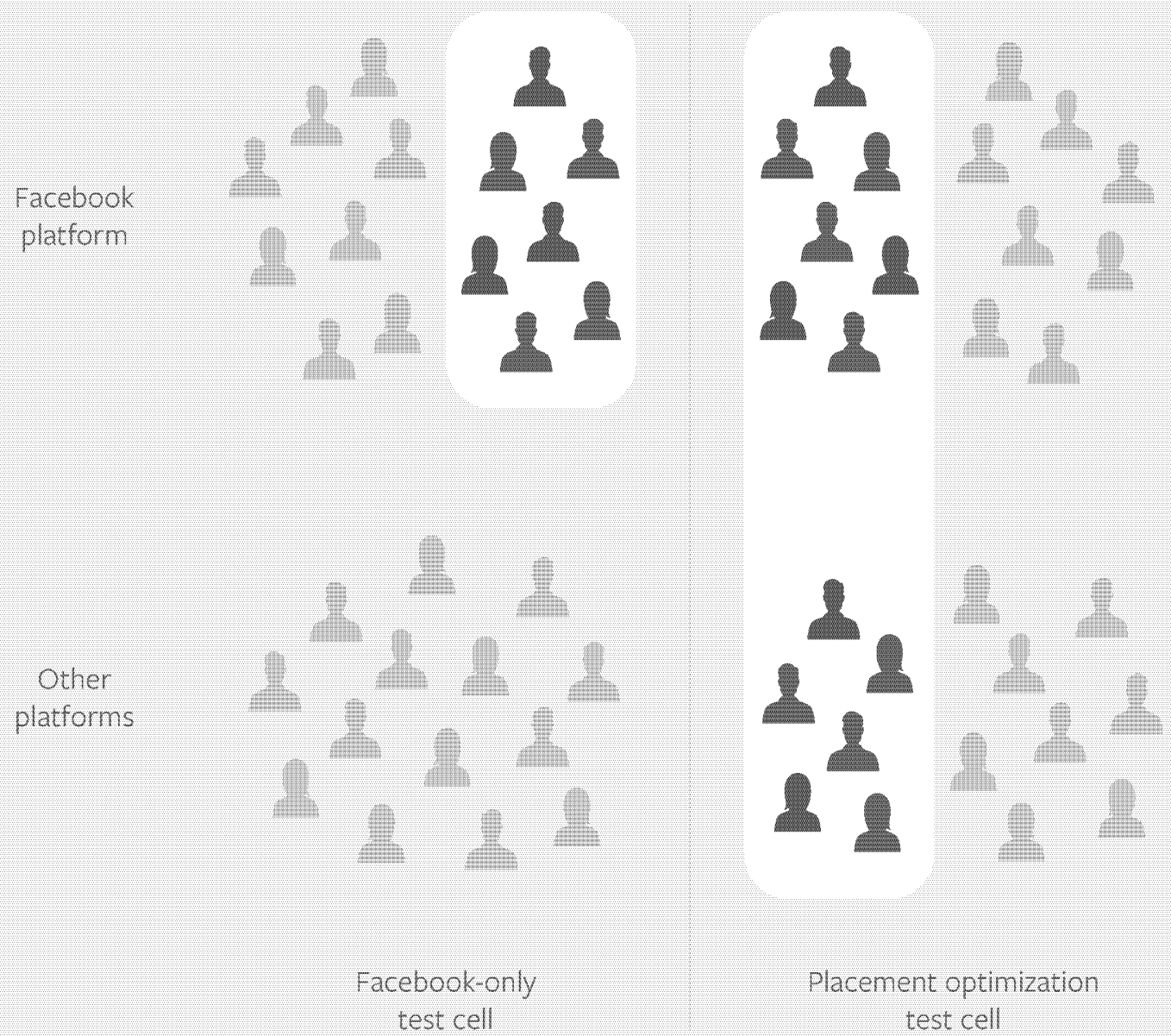
Evidence from our analysis supports our claim that placement optimization is effective. To explore why, we looked into 3 areas:

1. Efficiency in reach
2. Audience activity
3. Cross-platform effect

Efficiency in reach

Weighing in different audience sizes and budgets across the 11 campaigns, we found that the reach in placement optimization test cells was higher by 7% given the same campaign spend. That means with a larger audience base, the delivery system was able to identify potential converters not only on Facebook but also on other platforms in real time at the same cost, as illustrated below.

Effectiveness by placement optimization



Target audience

Potential convertors

Actual convertors

$$\text{Cost per incremental conversions} = \frac{\text{Campaign Spend} \rightarrow}{\text{Prob (Convert)} \uparrow * \text{Reach} \uparrow}$$

Audience Activity

To support this claim, we examine audience characteristics and activities based on the platform they were reached by a placement optimization campaign.

Let's take a look at the largest campaign within this study, which ran across Facebook, Instagram and Audience Network. Without using placement optimization, the advertiser would have likely missed opportunities if the campaign launched only on Facebook.

- Audiences who only saw the campaign on Instagram (0.29% of the total reached population) and Audience Network (7.76% of the total reached population) were, in general, less active on Facebook compared to those who saw the campaign only on Facebook.
- Audience characteristics differ across platforms. In this example, the Instagram-only audience skewed younger, while the Audience Network audience skewed older.

The third piece of evidence is highly related to the previous two. When we compared the two groups of organic converters who were created to control for the characteristics of the audiences who had seen the campaign, we found that the percentage of converters among all people who could have seen the campaign was 10% higher for the placement optimization cell. For the campaigns in the study, the ad delivery system correctly identified the additional opportunities and the audiences who had seen the campaign were more likely to convert.

Cross-platform effect

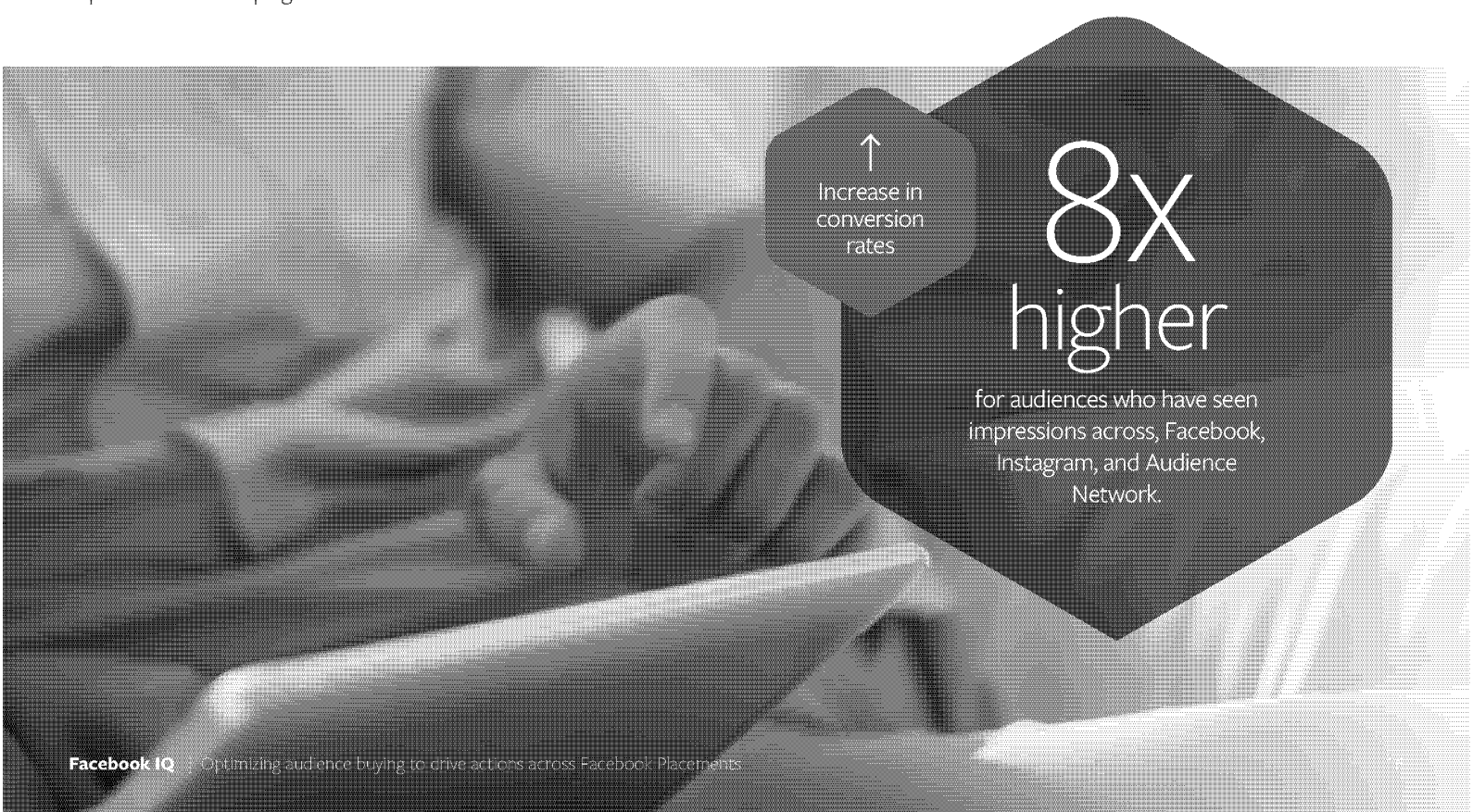
Placement optimization outperformed the Facebook-only campaigns even when controlling for audience differences, which was done by comparing how audiences convert organically without seeing any ad.

This suggests there might be other reasons for this result. One potential explanation could be the impact of campaigns running across platforms. We can infer that seeing ads across different channels is more memorable for audiences than seeing ads on a single platform.

In the largest campaign in this study, we found that audiences who have seen impressions across Facebook, Instagram and Audience Network have conversion rates 8x higher than audiences only exposed to the campaign on Facebook.

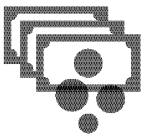
Even accounting for total frequency of exposure via regression analysis, this result still holds true in that cross-platform campaign exposure positively correlates with a consumer's likelihood to convert.

We found that seeing the campaign on more than one platform, controlling for other factors including the total number of impressions, does appear to correlate positively with a higher likelihood to convert. These finding also align with a 2015 Facebook IQ study "Priming Across Screens: The Cross-channel Impact of Mobile and TV," in which we noted that the "teaser effect" finds higher levels of brain activities among participants who first saw a brand ad on Facebook followed by seeing the same brand ad the following day on TV, compared to those who saw the brand ads two times on TV.



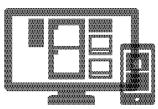
Conclusion:

Placement optimization provides advertisers with an opportunity to make their campaigns deliver against their direct-response objectives. When marketers consider running a placement optimization campaign, there are several considerations:



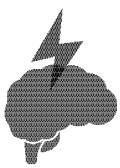
Determine budget, audience size and campaign length based on conversion cycle.

The more infrequent an event (e.g., low-funnel objectives, such as sales), the more time and audience needed for a placement optimization campaign to fully explore the value across the different platforms. Setting expectations for rare conversion events is necessary.



Review creative—and how it displays across placements—during set up.

After setting up a campaign, make sure to use "ad preview" to check how the creative is rendering on all platforms. When an advertising campaign runs via placement optimization, it is important to make sure all the formats are supported by all platforms and render correctly. Otherwise, the system will not be able to deliver an impression to a given platform, even if it identifies an opportunity.



Use a power analysis to decide on audience size and campaign flight prior to running a study.[6]

In this study, when conversion events were rare for placement optimization campaigns, ten days to two weeks were generally needed before results stabilized and placement optimization pulled ahead of a Facebook-only placement. In other words, when advertisers running placement optimization campaigns optimize for very rare events, they may not see much difference relative to a Facebook-only campaign unless they have a large enough budget, audience and campaign length.

Focus attention on overall business goals instead of delivery goals on each platform as a metric of success.

A successful placement optimization does not mean equal delivery across platforms. Indeed, even small amounts of delivery on a different platform may help to deliver increased value. For instance, despite the fact that one of the campaigns studied only had 1.6% reach on Instagram, placement optimization still resulted in more incremental converters compared to those achieved via Facebook-only. That also means from a reporting perspective, we see need to improve platform attribution UI to better help advertisers understand these results.[7]

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[6] Understand how to run campaigns across Facebook placements

[7] Learn more about testing placement optimization campaigns on Facebook: *https://www.facebook.com/business/help/965529646866485*