Why mobile marketing is a missed opportunity — And how you can optimise it on behalf of your brand

Received (in revised form): 9th June, 2016

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Abstract
Mobile marketing has quickly become an important priority for marketers, primarily because of the seismic shift that it has caused in consumer behaviour. Yet, there is still very limited evidence about the return on investment (ROI) of mobile as a marketing channel, especially in relation to other more established media tactics. In response to this need, the Mobile Marketing Association initiated a series of cross-marketing effectiveness studies, aiming to place mobile on an equal footing with other media and help marketers make the right media investment allocations. Our paper provides five recommendations based on these studies, with the ultimate goal of helping marketers optimise their mix for mobile, understand the value of different mobile formats and targeting approaches and maximise the value of mobile in their mix.

Keywords
mobile advertising, cross-media effectiveness, media optimisation, media ROI, mobile formats

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INTRODUCTION

There is no doubt that mobile adoption is driving one of the most dramatic transformations in recent history. It is a transformation as wide as it is deep, shaping all aspects of culture, cutting across all population groups and pushing the limits of what is possible in marketing, allowing brands to build a deeper and closer connection with their consumers.

Marketer	*Campaign focus*	*Main campaign goals*			
		Awareness	*Image*	*Store visit*	*Sales*
AT&T	Moto X launch	X			
MasterCard	Travel Campaign		X		
Walmart	Back-to-school grocery			X	X
Walmart	Savings Catcher		X		
Coca-Cola	Gold Peak Tea	X	X		X
Coca-Cola	Chinese New Year		X		X
Coca-Cola	United Kingdom				X
Coca-Cola	Brazil				X

Figure 1 SMoX, marketers, campaigns and objectives

Despite the seismic shift in consumer behaviour brought by mobile devices, however, most marketers have yet to aggressively respond; their mobile marketing investments are still mired in the single digits of overall spend and have in no way caught up with the behaviour of the consumers they need to reach.

The main reason for this delay is that, up until now, it hasn't been possible to measure the value of mobile in the mix and put it on an equal footing with other media. Also, given that mobile innovation has created an increasing number of formats, platforms and targeting methods, it has been extremely difficult for marketers to decide what share of their overall advertising spend should be allocated to mobile and how to use the mobile toolkit more efficiently to maximise the performance of that investment.

This need is what drove the Mobile Marketing Association (MMA) to launch the research we detail in this paper. Called SMoX (Smart Mobile Cross Marketing Effectiveness Studies), it is an ongoing series of case studies—initially launched in 2014—aimed to help marketers prioritise and fully leverage their mobile investments to both innovate and drive business growth.

With the participation of leading marketers including AT&T, Coca-Cola, MasterCard and Walmart and the support of important MMA members,[1] eight studies have been conducted so far (five in the United States, one in China, one in the United Kingdom and one in Brazil) using a methodology which leverages real-world measurement and individual-level data as the basis for analysing mobile's role in the mix (Figure 1).

Although the campaigns thus far analysed by SMoX cover a cross-spectrum of products, objectives and mobile formats, there is one important observation that unifies our learnings: *mobile marketing is a strong driver of campaign performance and brands are currently not fully leveraging its power to improve their results.*

HOW THE SMOX METHODOLOGY QUANTIFIES THE VALUE OF MOBILE IN THE MARKETING MIX

The research applies a cross-media attribution modelling approach and leverages new approaches to provide a granular read for mobile. The methodology has been developed by Marketing Evolution and has been independently reviewed by the Advertising Research

Foundation through two separate official reviews.

In brief, the approach focuses on creating individual-level datasets for analysis, which contain important information on the respondent (demographic, psychographics), their media exposure to all elements of the campaign and the key performance indicators (KPIs) under consideration. These KPIs can be either survey based — awareness and other brand metrics — or behavioural, based on sales or store visitation data. In essence, unlike time series (like marketing mix modelling), which aggregates data across a country or regions within, this approach focuses on individuals, and models how all media touch points and demographic characteristics interact to influence marketing outcomes.

Mobile measurement methodology in detail

Cross-media mobile measurement is complicated by the fact that the mobile device has its own ID (mobile user ID (MUID)) and it has to be matched to other media exposure IDs, such as from digital, television, and so on. In addition, mobile campaigns are typically smaller, and therefore not easily measured by time series or attribution modelling techniques. While a number of methodological approaches have been developed to measure mobile, including laboratory experiments, self-reported measurements for the mobile or click-through recruitment to capture the value of the mobile, the MMA was committed to an approach that leverages real-world measurement and individual-level data as the basis for analysing the mobile's role in the mix. With this in mind, the SMoX research studies included extensive technical integrations with mobile media properties so that mobile ads could be delivered to consumers in the panel at the levels of frequency and exposure dictated by the research design. The approach includes matching the publishers' user base via their unique mobile device ID (free of personally identifiable information (PII)) with the panel platform used for fieldwork, which also collects these mobile device ID (panelists opt in to share this ID). This rather complex technical integration allows for natural in-market field experiments, and the observational research desired, thus enabling the collection of rich individual-level data for all media, including mobile. In essense, the publishers can target those panelists with predefined amounts of bonus impressions which allows the researcher to control the experiment, while also ensuring that the panelists get exposed naturally in their usage of the publishers' app or mobile site. Once panelists are exposed, the platform recognises this and sends them a survey invitation. Summarising, by targeting panelists directly, we have managed to significantly improve the mobile approach by having large sample sizes of full survey, incentivised respondents participate. Furthermore, their frequency of exposure is known as opposed to other methods that only recognise control versus exposed — allowing us to develop our lift to frequency response functions.

Analysis

For each consumer, the dependent variables include sales (measured through data appends to sales databases or sales panels) as well as branding metrics (measured through survey), foot traffic or other behavioural measurements such as downloads. The analysis leverages logistic regression models that isolate the contribution of exposure to various media activities to sales (or any other KPI). The model also controls for other factors, including behavioural characteristics and demographics of the individuals in the sample. Profile variables are appended at the individual consumer level including a wide range of data (2,000 digital behavioural data fields, geo-spatiotemporal data such as the distance they live from a store, the type of neighbourhood the individual lives in, the local weather condition, local economic conditions). All analysis connects back to individual media exposure patterns across all media. Individuals fall into exposed/control or heavier/lighter cells, making it possible to evaluate the incremental impact of each creative message in each media, across all the media in the mix. The analysis also allows for interaction and synergy effects across media.

FIVE WAYS TO IMPROVE CAMPAIGN RESULTS WITH MOBILE

The following detailed recommendations are based on consolidated findings across all studies and highlight the five largest opportunities that have come out of the SMoX research for these brands.

Mobile drives results across the purchase funnel, more efficiently than other media

Across a spectrum of campaigns and KPIs, mobile marketing emerged as a very efficient way to impact consumers and drive conversion compared to the average of other media. As stated earlier, our methodology allowed for full visibility into media exposure across all media; and by using a regression analysis approach, we were able to quantify the contribution of each media in terms of impacting consumers in the given KPIs. By analysing that in relation to the media spend that was invested in each media, the efficiency of each media was estimated.

Overall, as illustrated in Figure 2, mobile converted approximately two people to every person converted by the campaign average, on a dollar-to-dollar basis.

Arguably, the index for mobile efficiency hides some variability because it includes a variety of formats and targeting methods that are consolidated under the label 'mobile'. With that in mind, our empirical evidence illustrates that each mobile format has its own strengths and applications, suggesting that part of the mobile opportunity is to optimise within the platform itself, using each format to drive specific KPIs.

As a general rule, mobile banners — which were used in every campaign thus far studied — are a very efficient medium to drive *upper funnel metrics*, especially awareness and they work particularly well when they support a clear, single-minded message as part of a cross-marketing campaign.

Brands	*Campaign objective*	*People converted average campaign*	*People converted Just exposed mobile*
AT&T	Aware of MotoX Phone	1.0	1.9
Gold Peak Tea	Aware of Gold Peak Tea	Ú	4.8
MasterCard	Image: Use MasterCard when travel	Ú	1.7
Walmart	Sales in Store at Walmart	Ú	2.0
Coca-Cola (Brazil)	Sales	Ú	3.0
Coca-Cola (China)	Sales	Ú	2.0
Coca-Cola (UK)	Sales	Ú	2.0

Figure 2 Mobile Efficiency Index versus Cross-Media Campaign Average (Number of people converted on given KPIs/dollars invested in media)

Although, on average, they have a lower impact per exposure compared to other formats, mobile banners continue to build impact across a higher frequency, reinforcing messaging that consumers may have seen in other media. Within this context, mobile banners can work really well for continuity strategies, where the goal is to create a 'recency effect' and support *top-of-mind* awareness of a brand. At times, this strategy — especially when creative is aligned across the campaign — can drive tremendous efficiencies for a brand, as demonstrated by the results from Gold Peak Tea, which showed that mobile was almost five times more efficient in driving top-of-mind awareness compared to other media, for every mobile dollar spent (Figure 2).

On the other hand, richer forms of mobile media, especially audio, video and native can work across the funnel but really shine when it comes to driving image, consideration and even behavioural outcomes like store visitation and sales. Given the lower cost per mille (CPM) of mobile in comparison to traditional media like TV, these richer mobile formats can do a lot of the heavy lifting in terms of driving those KPIs, yet at a much lower cost, which explains the efficiencies that we observed in how mobile marketing performed compared to the campaign average in all of the studies (Figure 2).

Marketers should invest a double-digit share of their total advertising budget in mobile

In 2015, most brands allocate a small percentage of their total advertising dollars (not just digital) to mobile advertising, usually in the low single digits.[2] In line with this, most of the campaigns tested in SMoX had actual mobile allocations that were a small part of the total advertising budget. As discussed earlier, the findings from the SMoX studies show that mobile marketing was a strong driver of impact across the funnel, at the tested levels of spend for each media. Does that mean that brands would benefit from investing more into mobile, and how much?

To address this question, an optimisation analysis was conducted, providing recommendations about the optimal spend allocation for all media that participated in each campaign. For clarity, the SMoX methodology evaluates the impact of media by using logistic regression models that isolate the contribution of exposure to various media activities to a given KPI. The models generate a curve (frequency to lift response function), which maps out how much lift in sales (or other KPI) is driven at each frequency level. These curves are then matched with the cost (CPM) of each medium and its reach/frequency potential to provide a full picture of the ability of each channel to drive impact at any given level of spend. By combining these elements, a spend to impact response function (SIRF) is estimated, which allows for optimisation to not just measure ROI at a single point but to see how ROI changes at different investment levels, understand diminishing returns and scenario analysis.

Based on this analysis and leveraging data from the SMoX studies conducted to date, these marketers should be spending at least 8 per cent — and as much as 19 per cent — of their *total advertising budget* on mobile to maximise the impact of the tested campaigns. Given here are the optimal levels at which these advertisers would maximise the return of each advertising dollar, with mobile being a far more substantial part of the mix.

There are a lot of factors influencing the optimal allocation in each individual case, including the overall size of the campaign, the target, the type of category (high versus low involvement), the role of

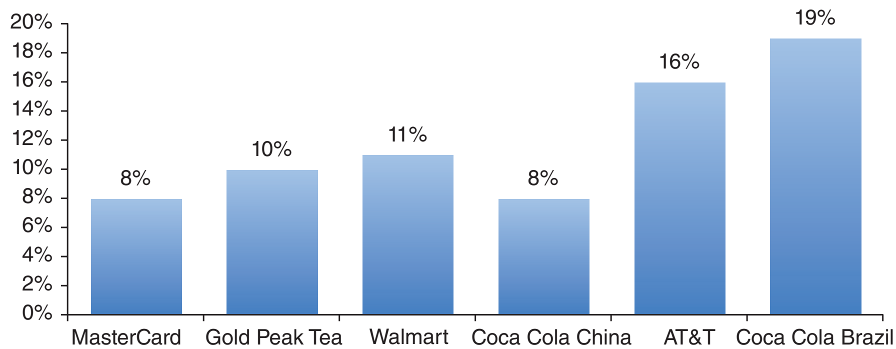

Figure 3 Optimal allocation for mobile

creative, and so on. More research needs to be conducted to quantify the exact contribution of each of these factors and provide more customised recommendations to brands across different sectors, campaign types and audiences.

Nevertheless, the main theme here is very consistent across all studies: brands are not investing nearly enough in mobile tactics and have an opportunity to increase the performance of their campaigns by optimising their media mix for it. If marketers can quantify the upside of optimising their budgets for mobile, they can better understand how it can become a competitive advantage now, and take advantage of this opportunity. We explore this topic next.

Getting mobile investment right increases the impact of your advertising budget

According to the results from SMoX, there is both a short-term and a long-term benefit when it comes to optimising an advertising budget for mobile and increasing its allocation to a double-digit percentage. As described earlier, the optimisation analysis generates SIRFs that allow scenario testing and quantify the ROI changes at different investment levels for each media. Based on this analysis, it is estimated that if marketers optimised their budgets for mobile they could improve the short-term results of the campaigns that were tested and drive incremental results *with the same budget*:

- For AT&T, this would mean 12 per cent **higher awareness** for the Moto X.
- For MasterCard, this would reinforce the **brand's image** by 7 per cent.
- For The Coca-Cola Company in the United States, it would drive 4 per cent **incremental sales** for Gold Peak Tea.
- For Walmart, this would mean a potential 6 per cent **increase in actual sales** for back-to-school groceries.
- For Coke in China, mobile could drive **an increase in profits** from the Chinese New Year campaign, of up to 16 per cent.

To get these outcomes, brands would need to reallocate underperforming parts of their existing budget from other media and shift it to mobile, using the optimal allocations shown earlier. Arguably, each of these findings is based on a given campaign for a specific brand, so the source of the reallocation varied and depended on which media were oversaturated or closer to the point of diminishing returns in each campaign. Nevertheless, they are consistent in the sense of showing a clear opportunity to improve marketing performance, allowing agile marketers to act analytically and do their own additional testing to embrace it.

In addition to these, a meta analysis was conducted to quantify the long-term impact of taking advantage of this reallocation opportunity across the organisation. Using actual revenue and spend data for a number of major companies and taking into account the contribution of marketing to sales overall, the meta analysis also looked at the relationship between revenue and market capitalisation. Based on these, a large marketer who decides to apply the insights companywide will get significant benefits in terms of incremental revenue and share shift. For leading advertisers, this can mean hundreds of millions of dollars in sales and significantly more in terms of market capitalisation, in some cases the equivalent of an entire new and successful brand in their portfolio.[3]

Mobile video is priced under its value

Video has already become primarily mobile in many markets, especially in the Asia-Pacific, where people use smartphones and tablets to watch long-form video content, such as TV episodes and movies, adding up to almost half of the time they spend every day watching video. (The remaining half is allocated between desktop and TV.[4]) In the United States, TV still has the largest share of time, but video is growing fast, consistently doubling every year as a share of the time spent per day.[5]

Therefore, mobile video advertising has emerged as a promising platform to engage consumers and has already established significant premiums in terms of CPM compared to mobile banners. Many marketers have asked whether this premium is worth it; the answer is a big 'Yes'. Because of its efficacy — and advertiser underinvestment in mobile overall — our data suggest that each mobile video impression is still significantly 'discounted' in relation to its effectiveness, in many cases by as much as 50 per cent compared to mobile banners.

Mobile video also presents a unique value among *all video*, being significantly more efficient compared to not only desktop video but also TV. As one example, the mobile video used in Walmart's Savings Catcher campaign drove stronger results with fewer exposures as compared to cable TV at a much lower cost per impression.[6] But while mobile video is seriously underpriced, unlocking its full value is only possible for marketers who understand its mechanics. Because mobile video is so effective, it builds impact a lot faster, with a smaller number of exposures compared to mobile display, as can be seen in Figure 4.

Even though it is more than triple the price of mobile display, at low frequency its effectiveness is 6.5 times higher than display.

On the other hand, because of its strong impact, mobile video hits diminishing returns at higher frequencies compared to display, so marketers need to monitor average frequency during a campaign. They can also further improve mobile video ROI by using rotating creative when they have more than one video asset, ensuring the content is kept fresh even at a higher number of exposures.

The value of context in mobile is powerful

Mobile marketing brings the promise of increased relevance and personalisation for marketing, primarily due to the ability to create experiences that match what a person needs at a given moment. There are a lot of factors influencing this, from time

Figure 4 Video builds impact faster than display; ROI, return on investment

of day to location; but, generally speaking, a consumer's 'need state' is significantly influenced by context. Here are some examples:

Time of day

Marketers can use a number of channels to target people by time of day, but mobile really excels in this area because people carry their phones with them all of the time. For some categories — like groceries — targeting shoppers at specific days of the week can produce lifts in impact of up to 30 per cent. For other categories that are *really* time-sensitive, such as products associated with a given day part and a specific physical location, the upside can be significantly higher. In one of our tests, targeting consumers with a mobile ad from a quick service restaurant (QSR) immediately before lunchtime increased its impact by a factor of 12. Given this aspect, marketers should invest time and resources to map the customer journey and identify the important moments that matter in their categories, to take advantage of this opportunity.

Location

Targeting consumers using their location data — either current or in retargeting based on store visits — unlocks an entire new part of the toolkit that allows brands to significantly improve the relevance and impact of their advertising. Here are two important opportunities to use location targeting:

Audience retargeting

Data about the past location of people and the frequency with which they are in a certain location — such as an upscale spa or a music venue — can help brands define those audiences at scale and improve the relevance of their advertising. According to SMoX research, audience targeting used by Walmart to engage past shoppers — in this case, those who have visited the retailer in the past month — increased the impact of the same ad unit by at least 50 per cent.

Proximity targeting

If using historical location data can increase the impact of mobile advertising, targeting people based on their current location really brings the promise of capturing consumers at the right moment and further improves results. Indeed, our studies suggest that proximity targeting, when combined with audience targeting, boosted impact by 2.5 times for Walmart, in terms of positive perception of its image. We also found that location targeting drove *verified foot traffic*, producing a significant lift in store visitation. The strongest impact came from the combination of expandable ad units and proximity targeting, driving significantly more impact compared to standard 'pencil' banners.

CONCLUSION

What SMoX proves now and learning agenda for the future

Our series of SMoX studies provide solid evidence that brands will improve their results by optimising their budgets for mobile. The research illustrates that the benefits of doing so can be significant, driving incremental results across the purchase funnel, including a significant lift in actual sales.

But taking advantage of this opportunity is not only about shifting money into mobile. There is also an opportunity to optimise *within* mobile and take advantage of some price inefficiencies that currently exist in the market. While mobile CPMs are still low overall, not only in some areas such as mobile video but also in native and audio, they are disproportionately low in relation to their value, presenting opportunities for marketers to make immediate gains in terms of ROI. But time is limited. As more marketers take advantage of these pricing inefficiencies, the inefficiencies will lessen.

In summary, the SMoX research helps us quantify the value of mobile and sheds light on some of the biggest opportunities in this space. The MMA is planning to expand the scope of this research in an effort to cover the full range of mobile capabilities and address deeper questions across more use cases and product categories.

Figure 5 outlines our learning agenda framework and some of the most pressing needs for additional insights. Specifically:

Studying more sectors and markets

Our studies so far cover a cross section of sectors and campaign goals, including financial services, consumer packed goods (CPG), telecoms and retail. But what about higher ticket/higher involvement categories, like automotive or travel, that are also being heavily disrupted by the mobile? Similarly there is a need to understand

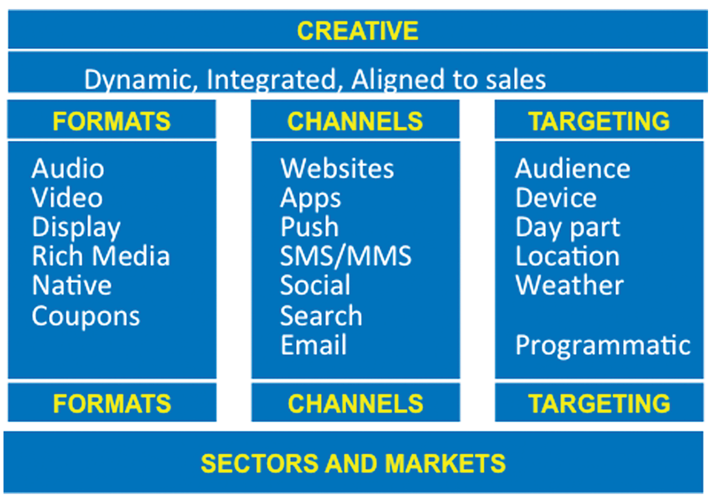

Figure 5 SMoX learning agenda framework; SMS, short message service; MMS, multimedia service

how mobile performs in other product categories (over the counter (OTC) and pharma, entertainment, QSR) and expand our perspective by conducting more studies globally.

Expanding the mobile toolkit

SMoX has already tested a number of mobile tactics but there is an opportunity to cover additional formats, such as different types of video or native advertising, and new targeting methods that further leverage context, such as weather conditions. We also need to dig deeper into the role of creative and understand how designing for the mobile context and using new approaches like dynamic creative optimisation impacts results.

The MMA will strive to address these questions through upcoming SMoX research in 2016 and beyond.

Notes

(1) The MMA thanks the companies that have funded SMoX: Vodafone, TWC, Pandora, InMobi, xAd, Tremor Video, Facebook, Turkcell, Millennial Media, Verve, Urban Airship, Yahoo!, WEVE, MXM, Meredith, Videology, Twitter, Hello World, Avea and AT&T Adworks.

(2) Most analysts estimated that about 10 per cent of total advertising spend was allocated to mobile media in 2015. A large share of this comes not from brands but from app developers who want to incentivise app downloads. Mobile search is also estimated to be around 50 per cent of the total mobile spend, suggesting that mobile display advertising spend coming from brands was still in the low single digits in 2015.

(3) MMA The Value of Mobile Report, 2014.

(4) https://www.millwardbrown.com/AdReaction/video/

(5) Emarketer, April 2015, Average time spent per day on mobile video, CAGR 91.8 per cent (2011–2015).

(6) Similar insights were captured in our SMoX study in China, where mobile video was about three times more effective compared to both TV and digital video, illustrating that brands can profit from distributing their video advertising assets in mobile channels.