PubMatic

CRAFTING MOBILE MOMENTS

The Union Between Creativity and Automation

mPOV #3

The Third in PubMatic's Mobile White Paper Series

FOREWORD

It's incredible to think that over a third of the world's population—nearly 2.5 billion people—currently access the internet from their mobile phones.[1] From a societal perspective, that level of information democracy at our fingertips fundamentally changes the way we behave and interact with one another. Further, it has transformed the media industry from a "mass media" model to an on-demand, personalized, "pull" model, where consumers are in control of not only what content they consume, but also where, when and how they consume it. This on-demand environment enables the seemingly mundane concept of "mobile moments"—touchpoints between content creators and consumers.

This influx of technology into the media landscape also raises an important question around the relationship between creative endeavors and automated technology: Do creatively-driven media and advertising companies need to become technology companies in order to compete in this new environment? We think the answer to that question is "no," and we aim to answer why throughout this white paper.

At PubMatic, we work with some of the world's largest premium publishers and media buyers. We understand the unique challenges of media and advertising companies—from both a content creation and technology perspective—and we are committed to providing technology and services that provide control and value of publishers' digital assets and foster a transparent, high-quality media buying environment for advertisers and agencies. All of this equates to more meaningful media experiences for consumers. We also recognize that mobile is the future of media. In Q1 2016, 65% of total impression volume on our platform came from mobile, with over a third of that originating from mobile web (i.e. access through mobile browsers) and the remainder from mobile apps.[2]

Our mobile expertise is also rooted in ten years of product development experience. Our holistic platform supports all major sales channels, formats and devices to drive large-scale, targeted campaigns for any publisher and media buyer. Our global presence has also uniquely empowered publishers and advertisers from all over the world to reach consumers far outside their local markets, adding even more scale to their businesses. Our data integration capabilities help drive incremental inventory quality and value in mobile. On the buy-side, we are also enabling the shift to high-quality, transparent mobile private marketplaces (PMPs), which is also paying off for premium publishers.

Every mobile moment is an opportunity to tell a story. We hope this white paper is both illuminating and inspirational, shedding light on the mystifying creativity that goes into compelling mobile moments.

Rajeev Goel
Co-Founder & CEO at PubMatic

1 eMarketer (2016)
2 PubMatic Platform Data (2016)

THE FOUNDATIONS OF A MOBILE MOMENT

The world is generating a near infinite supply of mobile ad impressions. U.S. consumers, alone, are estimated to collectively generate eight billion "mobile moments" per day, which means an average of 46 glances at a mobile phone per consumer every day.[3] So what is a "mobile moment," and why should the world care about every single time one of us looks at a mobile device?

Simply put, a "mobile moment" is that instance in which a person pulls out a mobile device to get what he or she wants, immediately and in context. To a publisher or advertiser, this is a joint effort where a publisher helps define an environment for an advertiser with a specific objective, whether it be generating brand awareness or soliciting a specific response. The challenge is that a consumer's state of mind and intent during this ephemeral moment is far less predictable than when a consumer is on a desktop at work or on the couch watching television. In order for advertisers to serve relevant content and marketing messages on mobile devices, they need to understand these points in time and collaborate to target them more deliberately than on other platforms. This impression-level customization is obviously challenging, given the sheer volume and scale of mobile internet traffic, but that's where technology platforms can bridge this gap and combine data integration and scale to build that perfect mobile moment (more on that in the next section).

When building these moments, publisher and advertisers first need to understand the important dynamics between mobile app and mobile web usage. Since the advent of the smartphone, consumers have faced a simple decision every time they look at their phone: do I open an app or a mobile web browser to fulfill this activity? Research has shown that consumers overwhelmingly prefer apps most of the time and spend upwards of 80% of their mobile time on just five apps.[4] This is good news for advertisers who want to target the mobile app environment because of its rich audience data for use in targeting marketing messages. However, the app advertising market economics don't make it that easy.

The fact is, with very few widely successful apps, the limited supply of high-quality mobile app ad inventory prevents advertisers from effectively scaling marketing messages to a broad audience. As a proof point, PubMatic's Q1 2016 data from its Quarterly Mobile Index (QMI) report[5] showed that 80% of total monetized inventory on its platform came from mobile web, with the remaining 20% coming from mobile app (Figure 1).

Figure 1: PubMatic platform Q1 2016 share of monetized mobile impression volume

20% MOBILE APP

80% MOBILE WEB
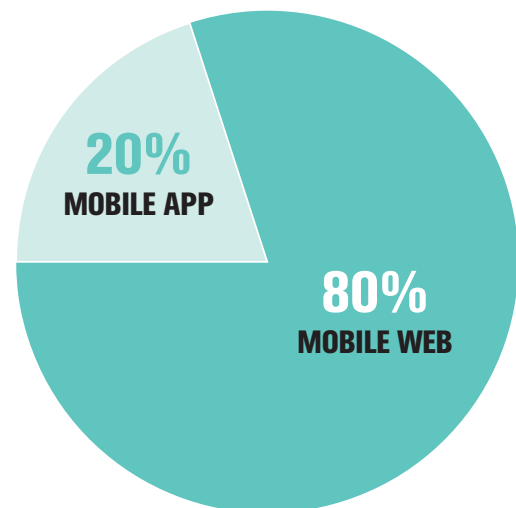
Source: PubMatic's Q1 2016 Quarterly Mobile Index report (May 2016)

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3 Deloitte (2015) – http://time.com/4147614/smartphone-usage-us-2015/
4 Forrester (2015) – http://blogs.forrester.com/thomas_husson/15-01-30-five_myths_about_mobile_apps
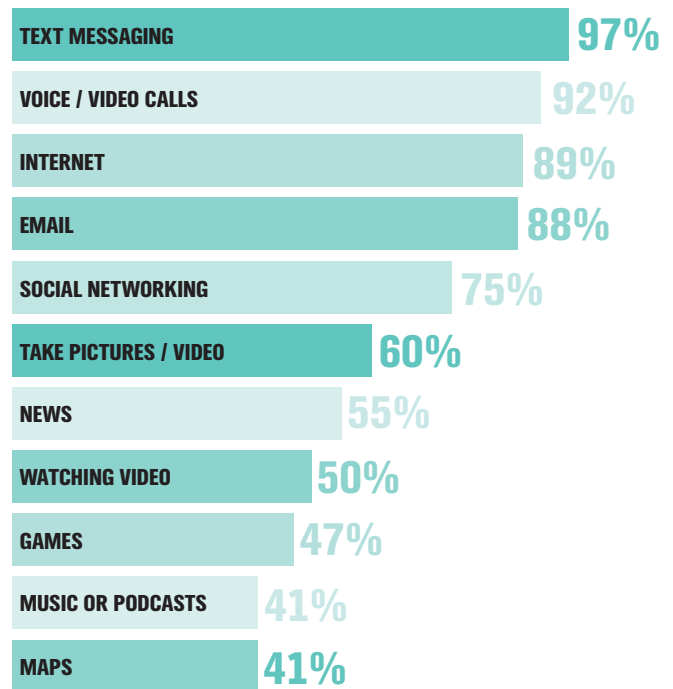5 PubMatic's Q1 2016 Quarterly Mobile Index report (2016) – http://info.pubmatic.com/QMI-Q1-2016_Download.html

This is because PubMatic's client base of premium publishers, on average, sees the majority of its mobile traffic coming from mobile web browsers rather than from mobile app. In short, while app audiences are more engaged and provide additional data points for content customization and targeted advertising, the vast majority of high-quality inventory comes from mobile web, making it a much larger opportunity for mobile advertisers.

Another critical component in understanding how to build mobile moments is a consumer's time spent on a certain mobile activity. Studies have shown that while simple communication, such as text messaging, calls and email are most common (Figure 2), there are increasingly more time-consuming activities that consumers rely on their phones for, such as health research, finding a new home or job and educational content (Figure 3). Similarly, long-form news content (i.e. articles with 1000 words or more) on mobile has also been shown to attract the same high level of traffic as short-form content, while doubling the time spent with content (over two minutes on average).[6] This might indicate that consumers are relying more on their mobile devices for not only snippets of entertainment, but also time-consuming activities that used to require a desktop computer. Consumers are increasingly embracing a "lean back" mobile experience, similar to that of television viewing, which is more inviting for advertising.
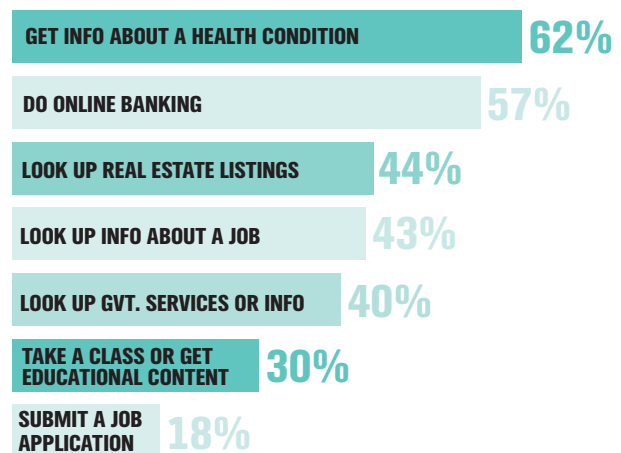
Finally, publishers and advertisers need to understand how to craft mobile moments using technographic data (i.e. data sourced directly from a mobile device), such as geolocation data, device ID and browser type. These data types can serve as a proxy for cookie targeting (i.e. targeting through saved locally-stored user profiles), which is not possible on mobile devices because cookies cannot be stored locally. Perhaps the most important technographic data is geolocation (also known as latitude and longitude data), which can illuminate a large amount of detail around user intent. For example, if a consumer accesses sports content in a given city, he or she might be a fan of that city. While this is a seemingly simple conclusion to draw, every sports fan knows that there are differences between sports fans from different cities and especially between rival cities. Device ID (i.e. the type of device someone is using) and browser type (such as Safari or Chrome) can also demonstrate some unique aspects of a user. For example, Android users are perceived to be more tech savvy, while iPhone users are perceived to be less technical, more affluent[7] and, in some cases, more likely to be college educated.[8] While these assumptions are inexact, they can certainly serve as directional indication of what type of mobile moment a consumer is creating. Probabilistic modeling can also ingest these data points to more finely determine who a mobile user is and what he or she is looking for when awaking a smartphone.

Figure 2: Percentage of smartphone owners who used the following features at least once a week

TEXT MESSAGING	97%
VOICE / VIDEO CALLS	92%
INTERNET	89%
EMAIL	88%
SOCIAL NETWORKING	75%
TAKE PICTURES / VIDEO	60%
NEWS	55%
WATCHING VIDEO	50%
GAMES	47%
MUSIC OR PODCASTS	41%
MAPS	41%

Source: Pew Research Center (Nov. 2014)

Figure 3: Percentage of smartphone owners who have used their phones to do the following in the past year

GET INFO ABOUT A HEALTH CONDITION	62%
DO ONLINE BANKING	57%
LOOK UP REAL ESTATE LISTINGS	44%
LOOK UP INFO ABOUT A JOB	43%
LOOK UP GVT. SERVICES OR INFO	40%
TAKE A CLASS OR GET EDUCATIONAL CONTENT	30%
SUBMIT A JOB APPLICATION	18%

Source: Pew Research Center (Oct. 2014)

6 Pew Research Center (2016) – http://www.journalism.org/2016/05/05/long-form-reading-shows-signs-of-life-in-our-mobile-news-world/
7 Gnip (2015) - http://www.dailymail.co.uk/sciencetech/article-2597269/Maps-reveals-Android-poor-people-iPhone-owners-live-affluent-areas.html
8 Chitika (2015) - https://chitika.com/files/iPhone_Usage_by_State-Correlation_White_Paper_ChitikaInsights.pdf

COMBINING CREATIVITY & AUTOMATION TO CRAFT MOBILE MOMENTS

Much like every effective advertising campaign, a truly successful "mobile moment" is grounded in a thoughtful, creative strategy. That perfect experience elicits an a-ha moment in which the content and advertising resonates with a consumer. This emotional evocation can only be established by a human, but it can be replicated over and over, at scale, using technology. This combination of art and science makes every successful mobile moment possible.

We've developed a three-prong framework that can help publishers and advertisers collaborate on constructing a mobile moment:

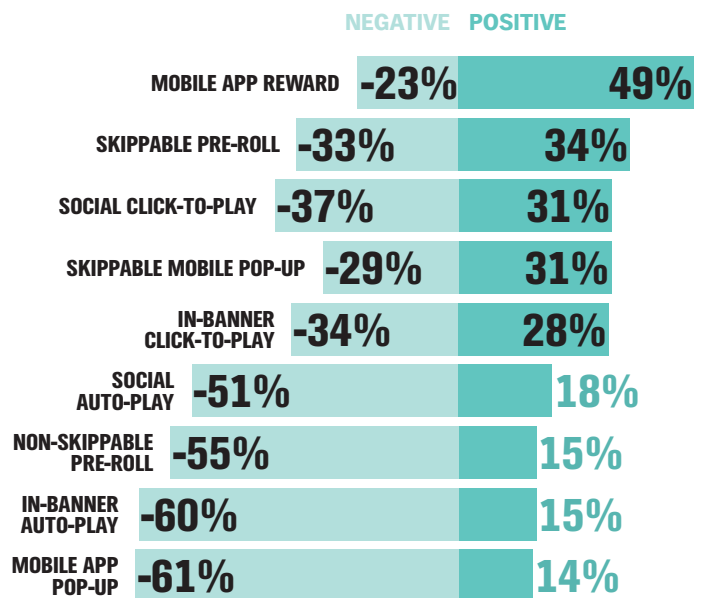## 1. Getting Creative in Mobile Means Getting to the Point

Getting the most out of a small mobile screen is far more challenging than with other platforms. Attention is short and limited bandwidth can be a constant strain on content delivery. Research has also shown that most mobile formats elicit a negative response (Figure 4), with some formats, such as "mobile app pop-ups," causing an overwhelmingly negative response. Given this information, advertisers and agencies should focus on developing mobile creatives that are less intrusive. Marketing messages should be clear and simple, and ads with a call to action (CTA) should be very prominent. Mobile video ads should also be skippable, or if they are not skippable, should be shorter in length to not deter a viewer from leaving the site entirely.

A clear consequence of poorly-received ads is the rise in usage of ad blocking plug-ins. While desktop ad blocking adoption is increasing on a global level, mobile ad blocking rates have yet to make much of an impact, with less than an estimated two percent of ad blocked traffic coming from mobile.[9] However, several companies are developing platforms to simplify mobile ads, such as Google's Accelerated Mobile Pages (AMP) project, which is attempting to simplify the code on mobile pages in order to reduce load times. Efforts like these are encouraging publishers to create more appealing and faster-loading mobile experiences for consumers.

Advertisers and agencies also need to recognize that mobile ads tend to be delivered at a higher frequency than desktop ads. A mobile user might see an ad upwards of five to ten times more often than on desktop, which has fewer page views per viewing session. Therefore, mobile creatives don't need to pack in too much of a message, as there will likely be follow-up opportunities to continue reaching a user as part of a longer customer lifecycle.

Figure 4: Negative vs. positive sentiment of typical mobile ad formats (% of respondents)

	NEGATIVE	POSITIVE
MOBILE APP REWARD	-23%	49%
SKIPPABLE PRE-ROLL	-33%	34%
SOCIAL CLICK-TO-PLAY	-37%	31%
SKIPPABLE MOBILE POP-UP	-29%	31%
IN-BANNER CLICK-TO-PLAY	-34%	28%
SOCIAL AUTO-PLAY	-51%	18%
NON-SKIPPABLE PRE-ROLL	-55%	15%
IN-BANNER AUTO-PLAY	-60%	15%
MOBILE APP POP-UP	-61%	14%

Source: Millward Brown (2015)

9 Adobe & PageFair (2015) – https://downloads.pagefair.com/wp-content/uploads/2016/05/2015_report-the_cost_of_ad_blocking.pdf

2. Data is the Key That Opens Mobile Creativity

Advertisers typically require reach and audience composition when starting an advertising campaign. This means that leading publishers need to have a strong sense of not only how many users are on their sites and apps, but also who those users are and what content topics they're viewing. This is made possible through the collection of first-party data from their sites combined with third-party data collected from other sites. The audience profile should ultimately include demographic information on their audiences, site engagement metrics to illustrate which content areas are most popular and, as mentioned previously, technographic data (e.g. location, device and browser data) to help accurately target mobile ads. Once this information is known, a publisher can create content for specific user profiles. For example, for a user who is assumed to be male, age 18 to 34 years old and living in an urban environment, a publisher can serving an ad that might resonate with that young man looking for something fun to do that evening.

Data collection is especially important, because, unlike desktop, mobile web is a cookie-less environment where smartphones cannot store local data profiles for ad targeting. Therefore, cross-platform publishers can also develop cross-device tracking tags that serve as proxies for cookies. To build this data profile, a publisher would need to combine desktop cookie data with contextual-based mobile profiles. While this practice is not yet perfected in market, many technology companies are taking the lead in developing solutions that enable mobile web targeting capabilities similar to that of desktop web and mobile app. If achieved, this might effectively enable "cookie-targeting" in this cookie-less world.

All this data can be a blessing and a curse if not managed properly. Therefore, publishers and advertisers need to leverage partnerships with data management platform (DMP) providers and data-driven technology platforms to aggregate and utilize each and every data point. These platforms also anonymize data to mitigate risks related to consumer privacy and data leakage (i.e. data from one party that can be used without permission by another party). The sole objective here is to create relevant content and advertising messages, not to jeopardize consumers' personal information.

3. A Mobile Ad Without a Scalable Platform is Merely A Message in a Bottle

In order to scale a mobile ad campaign, publishers and advertisers need a full-stack technology platform that brings creative, data integration and ad execution altogether. While very few holistic platforms can offer all of these capabilities, a truly holistic platform should manage all of these processes in a single package. What does this platform look like?

I

The platform should offer a **simple and clear user interface (UI)** that allows publishers to manage their inventory management and advertising operations, and gives advertisers and agencies a full and transparent access to a publisher's inventory.

II

This platform should be **flexible enough to connect via application program interface (API)** to any first- or third-party data source, such as a customer relationship management (CRM) system, financial or accounting system or data warehouse, to aggregate the wealth of digital data available and create targeted mobile ads.

III

The platform needs to have its **own ad server** that is capable of serving any ad format (display, video, etc.) to any device (desktop, mobile, tablet, etc.). An owned and operated server also means lower latency (i.e. load times) when serving ads.

IV

Finally, the platform needs to offer **analytics capabilities to synthesize results in real-time**. This allows publishers and advertisers to understand if campaigns are working and if adjustments need to be made on an hourly or daily basis.

3. A MOBILE AD WITHOUT A SCALABLE PLATFORM IS MERELY A MESSAGE IN A BOTTLE, CONTINUED

Having data and inventory in one place also enables some unique advantages for both publishers and media buyers. Holistic platforms can combine publisher inventories to offer advertisers and agencies one-stop access to high-quality inventory across many different publisher types. For example, if an advertiser is looking to target ten of the top news websites in a single campaign, it can do that using a holistic platform. Similarly, publishers can offer inventory packages that multiple advertisers might share, which is especially efficient if several advertisers are represented by the same agency.

The scalability enabled by holistic advertising platforms has impacted mobile advertising growth on a global level. PubMatic's Q1 2016 platform data shows that monetized mobile impression volumes rose dramatically across all global regions (Figure 5), the Americas (North and South America), the Europe, Middle East and Africa region (EMEA) and the Asia-Pacific region (APAC).

Figure 5: Percentage change in monetized mobile impression volume, by global region

+57% AMERICAS

+124% EMEA

+514% APAC
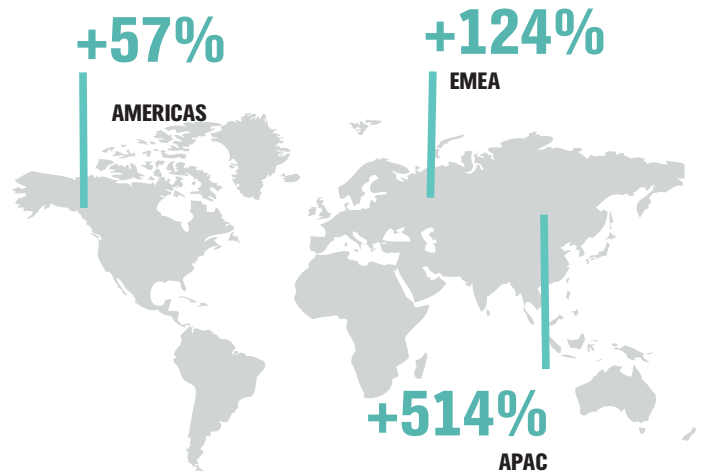
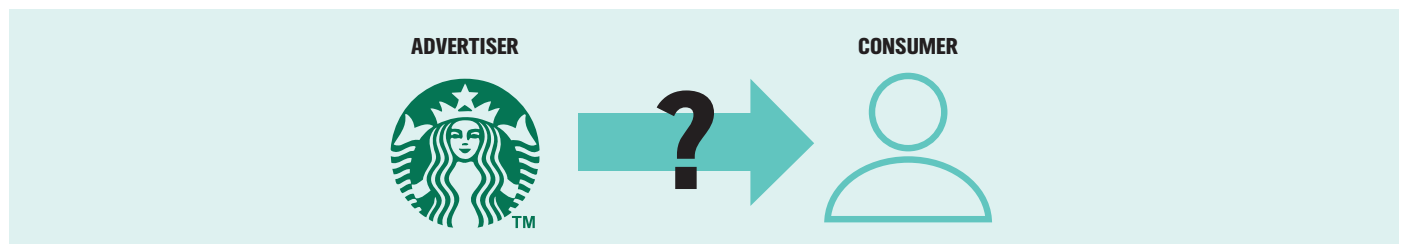Source: PubMatic's Q1 2016 Quarterly Mobile Index report (May 2016)

SNAPSHOTS OF SUCCESSFUL MOBILE MOMENTS IN ACTION

National Rail Enquiries is the U.K.'s premier source for train times and tickets and one of the most popular travel sites in the country. The publisher has crafted mobile moments for a number of major brand advertisers, including Starbucks, McDonald's and Travelodge.
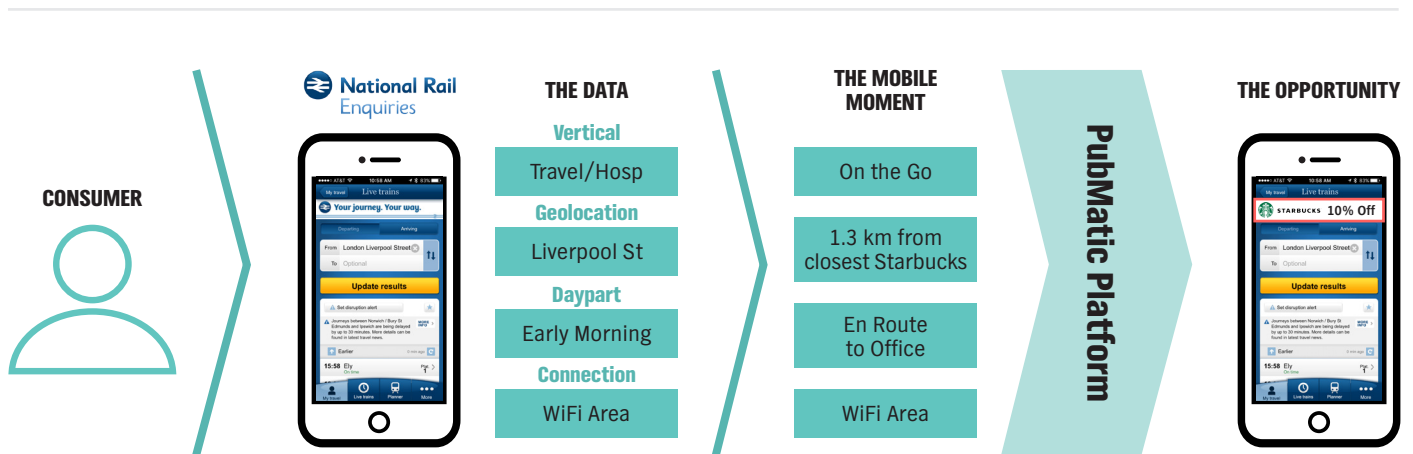
In 2015, the company developed a mobile moment for Starbucks targeting National Rail riders en route to the office during the early morning hours. This campaign led to higher than average performance and helped drive store visits for Starbucks.

THE CHALLENGE

ADVERTISER

?

CONSUMER

THE STRATEGY

		THE DATA	THE MOBILE MOMENT		THE OPPORTUNITY
CONSUMER	National Rail Enquiries	**Vertical** Travel/Hosp	On the Go	PubMatic Platform	
		Geolocation Liverpool St	1.3 km from closest Starbucks		
		Daypart Early Morning	En Route to Office		
		Connection WiFi Area	WiFi Area		

"Working with PubMatic, we have seen a significant uplift in mobile revenue whilst adhering to our core values of user experience and transparency. Creating relevant, customized experiences for our customers comes first."
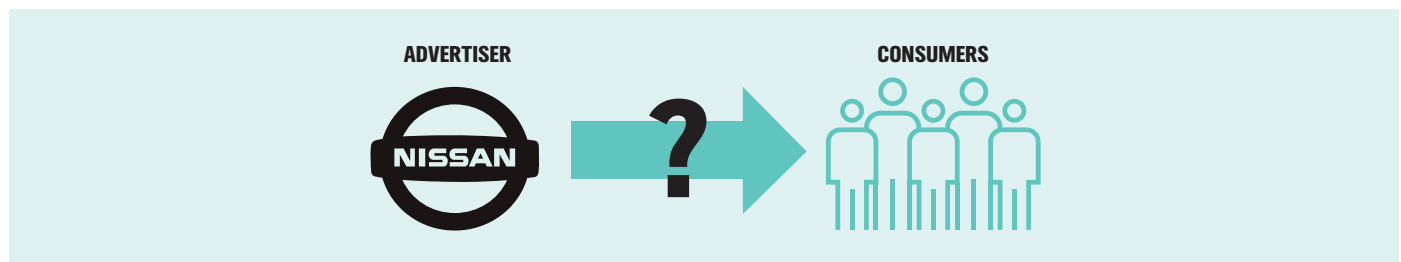— Jonathan McCauley-Oliver, Online Sales Manager, NRE

Adapt ADX is a Swedish publisher consortium consisting of six of the country's largest newspaper groups, making it one of the broadest reaching publishers in Sweden. The publisher has developed mobile moments for advertisers looking to target consumers across a wide range of Swedes.
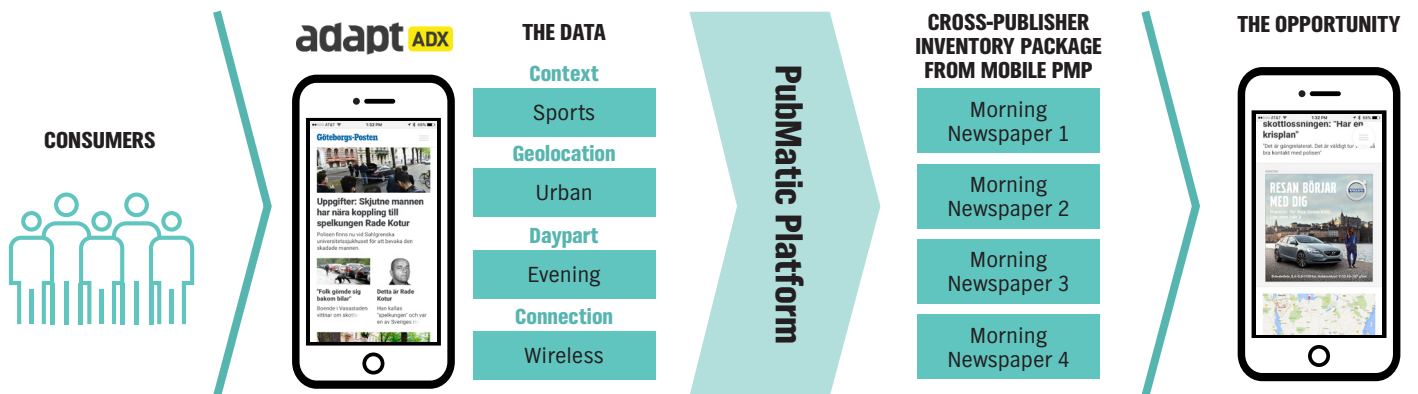
Through mobile private marketplace deals on PubMatic's platform, Adapt ADX offers advertisers opportunities to contextually target specific audiences across a number of its publications. By combining the concept of a media consortium with the scalability of a private marketplace, advertisers can scale their marketing messages while simultaneously targeting specific audience profiles. One specific private marketplace deal allows advertisers, such as Nissan, to target across four of its highest traffic morning newspapers.

THE CHALLENGE

ADVERTISER   ?   CONSUMERS

THE STRATEGY

CONSUMERS

adapt ADX

THE DATA
- **Context**
  - Sports
- **Geolocation**
  - Urban
- **Daypart**
  - Evening
- **Connection**
  - Wireless

PubMatic Platform

CROSS-PUBLISHER INVENTORY PACKAGE FROM MOBILE PMP
- Morning Newspaper 1
- Morning Newspaper 2
- Morning Newspaper 3
- Morning Newspaper 4

THE OPPORTUNITY

"Cross-platform is the future of digital media. We know that better than anyone coming from a print origin. The global population is increasingly consuming their news through multiple devices."

— Anna Ireby, CEO at Adapt ADX

SNAPSHOTS OF SUCCESSFUL MOBILE MOMENTS IN ACTION

U.K.-based mobile agency **Somo** worked closely with online retailer, Very.co.uk to create a clever, location-based rich media campaign to urge shoppers to buy weather-specific clothing.

The ads rapidly determine the user's location and the weather in order to display relevant messaging, creative and product choices based on dynamic XML feeds. So, for example, if the weather outside was raining the creative displayed raindrops and showed a choice of raincoats and umbrellas. The background image of the display ad would also change based on location data. For example, a user located in Liverpool would see a picture of the docks in the rain in the background of the ad unit to increase the message relevancy.

The campaign's contextually relevant messaging and timeliness resonated with target audiences and implored a sense of urgency to buy before the weather changed again. This personal experience received outstanding engagement rates, conversion and ultimately incremental sales, with an **ROI of 10:1** for the entire campaign, beating the initial target ROI of 7:1.

THE CHALLENGE

THE STRATEGY
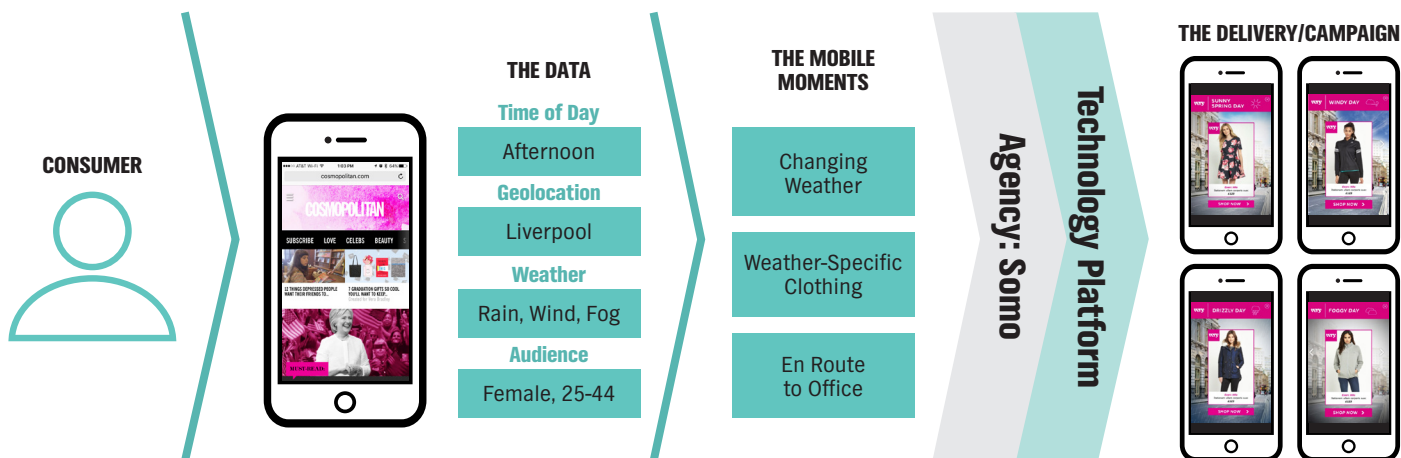
"**Somo designed, built and ran a weather rich media campaign that had exceptional personalization. It allowed us to deliver relevant messages to the right people at the right time.**"
— Kenyatte Nelson, Group Marketing Director at Shop Direct (owner of Very.co.uk)

10:1 ROI for Very.co.uk

THE FUTURE OF CREATIVITY AND AUTOMATION IN MOBILE

The late British futurist Arthur C. Clarke once wrote, "Any sufficiently advanced technology is indistinguishable from magic." Programmatic advertising technology is advanced but far from magic. It's a logical framework that helps catalog billions of ad impressions, reduce the number of handoffs in an ad sales deal and deliver creative marketing messages to consumers in milliseconds. Programmatic platforms are also becoming easier-to-use, with intuitive user interfaces that allow both publisher and media buyers to easily select inventory segments and deliver advertising in just a few keystrokes. And because the promise of digital was always all encompassing measurability, these user interfaces also simplify campaign analysis so that humans (not machines) can adapt campaign goals and methods according to changing market conditions.

Mobile is an environment that was built on technology but requires creativity to succeed in. While some might believe that effective mobile advertising can heavily rely on technology—with approximately 90 percent effort grounded in technology, and just 10 percent grounded in creativity—building a truly successful "mobile moment" should really be viewed as a 90-percent creative effort with 10-percent of technology scaling a message. Major advancements in technology are inevitable, but publisher and advertisers still need to be storytellers even on the tiniest screens.

About PubMatic

PubMatic is the leading marketing automation software company for publishers. Through real-time analytics, yield management, and workflow automation, PubMatic enables publishers to make smarter inventory decisions and improve revenue performance. Focused on serving the needs of premium publishers, PubMatic inspires buyer confidence by providing flexibility in audience discovery and planning media campaigns through its Media Buyer Console and APIs. The company's marketing automation software platform provides a global roster of comScore publishers with a single view into their advertiser relationships across every screen, every channel and every format. PubMatic was ranked by Deloitte as one of the fastest growing companies in the US for the fourth consecutive year in 2015. The company has offices worldwide, and is headquartered in Redwood City, California.

PubMatic Contacts

ALEX FU
Director of Corporate Marketing
& Insights
alex.fu@pubmatic.com

Sales Contacts

EVAN KRAUSS
Vice President, Publisher Development,
Americas
evan.krauss@pubmatic.com

BILL SWANSON
Vice President, EMEA
bill.swanson@pubmatic.com

JASON BARNES
Vice President, Asia Pacific
jason.barnes@pubmatic.com

Press Contact

NICOLE KAPNER
Corporate Communications Manager
nicole.kapner@pubmatic.com