

# POLITECNICO DI MILANO

School of Industrial and Information Engineering

MSc in Management Engineering



## **MOBILE ADVERTISING: STATE OF THE ART AND TRENDS**

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Filip and Aleksandr

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## **ABSTRACT**

As the IT area is going through era of great inventions and developments, industries connected to it are presented with significant opportunities and challenges. This study focuses on the development and transformations that mobile advertising formats and ecosystem are going through in the today's dynamic environment. The desire to observe these changes is based on the several factors that have initiated big shifts in the mobile advertising ecosystem:

- Rapid growth of sales and penetration of smartphones and tablet devices
- Changes in the consumer behavior with arrival of the digital era
- Technology advancement thanks to the arrival of new powerful mobile targeting, re-targeting and tracking tools for marketers
- Evolvement of the value chain with programmatic platforms enabling more efficient trading of mobile inventory
- Introduction of new advertising formats available exclusively on the mobile devices

This study tends to capture the current state of the mobile advertising ecosystem, identify value chain segments their key players and give an answer to the question about direction the industry is heading to. The research was based on the thorough analysis of contemporary articles, journals and books in the field of mobile advertising, digital marketing, mobile technology and digital consumer behavior, with the aim of capturing an overall picture characterizing the currently available mobile advertising formats and the players making possible their deliver on both demand and supply side ecosystem. The empirical part of the study includes case study interviews with 11 companies from the industry as well as case history analyses of other companies coming representing different segments of the value chain.

The result of this post-graduate thesis is an extensive research on the current state of the mobile advertising ecosystem and the development trends shaping the future of it.

## **EXECUTIVE SUMMARY**

### **Background of the thesis**

Mobile advertising is for years growing with an impressive pace and year after year it is claimed that the current year, is the actual year of mobile. The sales of smartphones have already surpassed the sales of notebooks and the total number of smartphones is higher than the total number of personal computers worldwide. We are witnessing even more impressive growth of tablet devices market and at the same time arrival of new segment of “smart” devices, the so-called “wearables” such as smart-watches or smart-glasses. The fact that mobile devices are becoming an every-day necessity, together with the possibility of customization that operating systems allow, it is clear that these devices are becoming an excellent marketing tool for collecting data and learning more about the consumer behaviour and an effective medium for transmitting messages.

In a highly competitive business environment, companies are constantly introducing new technologies and features that will both satisfy the needs of advertisers and achieve high performances towards end-users. Being an effective touch point between brands and consumers, mobile advertising is all about engagement and interaction. The wide range of new mobile advertising formats was introduced recently: from Rich media units to push notifications, all with aim of increasing the end-user’s engagement with the brand. The innovative and creative solutions are allowing industry to conduct a transition from simple banners into a powerful and effective 2-way communication mobile ad formats.

Together with the introduction of new ad formats, mobile advertising is going through certain shifts in its value chain. The development of technology contributed to the changes that occurred recently in the industry, together with the entry of new players providing new technological solutions that have proven to be more efficient when addressing modern consumers. The biggest shift has occurred with the introduction and development of Real Time Bidding that allows automated trading of mobile inventory. Furthermore, actors providing technological solutions that make the precise targeting, effective re-targeting and tracking possible are fighting for their spot in the competitive ecosystem of mobile advertising and as such, are changing the shape of the value chain. Even though the growth rates of smartphones and tablet devices are high, the brands/advertisers, and the advertising industry as whole, do not follow this trend when it comes to the mobile ad investment with

spend on mobile advertising segment still representing a very small share of the total advertising spend, while traditional channels such as TV, outdoor and print advertising, as well as online (web) advertising, consume more than 90% of the total advertising spend. At the same time, new mobile ad formats and the technological advancement provide great opportunities for the investors and the possibilities in mobile advertising are growing year after year.

New players, new formats and new technologies are changing the mobile advertising value chain as well as they way the industry functions. The communication flows between the actors have been changed and there is a need for better understanding of the impacts of these changes on the mobile advertising ecosystem.

### **Objectives of the thesis**

General goal of the present thesis is to explain the nature and dynamics of the evolving market of the mobile advertising, making a snapshot of the current state of its lifecycle. Specific objectives could be summed up as follows:

- Understand what is the role of mobile in the modern world and what are the trends shaping its position
- Study the formats currently present on the mobile marketplace with respective advantages, challenges and opportunities
- Study the current value chain characterizing the world of mobile advertising paying specific attention to the players bringing innovation to the standard ways of conducting mobile advertising business
- Draw conclusions about the probable ways of development of mobile advertising formats and ecosystem as a whole on the basis of the literature review and empirical analysis

The coverage of the above-depicted points will give a reader a clear picture of the current state of the mobile advertising market, providing insights about its dynamics and the ways it is most likely to evolve in the medium-term perspective.

## Literature of reference

In the ever evolving industry as Mobile advertising almost all the information the researcher comes across is connected to reality, as this information is in a major part coming from first-party data sources, like companies' whitepapers or interviews with the companies' management. Another valuable pieces of information are coming from the research and regulatory bodies like IAB, MMA, Nielsen, Juniper and others. Additionally online resources like e-Marketer provide with extremely helpful information about the market and its dynamics. All the cited sources have a hands-on experience on the market and offer an opportunity to grasp the whole picture of the complex world of the mobile advertising

The sources utilized to collect the relevant information research included:

- Industry reports published by research bodies and industry players
- Academical reports
- Whitepapers published by industry players
- Companies' blogs and newsletter
- Web-portals dedicated to the digital and mobile advertising
- International newspapers

Apart from the sources stated above a lot of insights about the industry and its key players were gathered through a personal participation in two events:

- IAB Forum, held in Milan in December 2013
- Mobile World Congress, held in Barcelona in February 2014

The thesis begins with an introduction to the world of mobile and mobile advertising in particular, putting emphasis on the current trends shaping the market and bringing mobile to the most prominent positions in terms of marketing interest. After that the mobile advertising formats in all their diversity are put on the spotlight with the respective case studies showcasing the performance of traditionally preferred SMS, Search and simple banners ads as well as more engaging units like interstitial, Rich media and video. Other nascent types of the advertising formats like native and social advertising are discussed further as nowadays they represent an immense marketing opportunity, that the publishers are already taking advantage of. To complete the discussion over the advertising formats concepts of Location-based

advertising and retargeting are brought into consideration with all the respective advantages and challenges.

After the elaboration on the advertising formats readers are presented with an opportunity to better grasp the market dynamics through the analysis of the traditional value chain and each of its key players, ranging from publishers to mobile operators and ad networks. To develop the topic and address the changes that are occurring thanks to the natural evolvement of the market the description of the conventional value chain flow to the depiction of the revolutionary changes of the ways the media is being bought and sold nowadays, namely the discussion focuses on the ecosystem's shift towards programmatic buying in general and Real-time bidding in particular. The disruptive approaches to trading of the inventory had originated in the web environment and then migrated to mobile, with all the variety of players ranging from Agency Trading desks to Data Management Platforms. The evolving RTB mobile market and relationships within are rather complicated topics and a sequence of that a closer look was taken at each cluster of the RTB market players, with a description of their nature and respective characteristics. It should be noted that a critical attitude was taken to highlight not only the advantages and opportunities brought by the new technologies, but also the challenges and issues coming from the proliferation of the given inventory trading methodologies.

Through the literature review the snapshot of an existing value chain was taken to give the widest overview possible over the mobile advertising state of art that coupled with the takeaways from empirical analysis allowed the elaborations of the conclusions and likely scenarios for future development of the industry, the short version of which could be found in the conclusion section of the present executive summary

### **Research methodology**

To provide a reader with a hands-on experience on the market, the value chain analysis is followed by the empirical part in which the leading industry players are examined and questioned about the topics relevant to the scope of the following paper, aiming at collection of the insights that bring reader to the last part of the present work. The case studies were chosen as a research methodology because nowadays mobile industry is constantly undergoing transformations, with new players, new technologies and new opportunities appearing almost on everyday basis. The case study approach allows to get the clearest

possible picture of the current state of art in mobile advertising, as the entities under investigation are the ones shaping the current and the future landscape of the mobile world.

The sample for the case studies was chosen according to the objectives of the present work and was mainly focused on the players of the traditional mobile advertising value chain being represented by the ad networks and the new players of the nascent mobile RTB market. The analysis included the top industry players acting as Trading desks, Demand-side platforms, Supply-side platforms, Ad exchanges, Analytics software companies, Ad networks and App developers. Some of the players are mainly involved in the traditional banner advertising, while some of the actors are focused just on emerging the mobile video advertising. All in all 28 key industry players were taken into consideration and examined during the empirical analysis. Notable part of the actors, were interviewed directly by the authors, mostly through phone interviews as they allow the interview to be dynamic as opposed to the static email questionnaires. The case study part, during which the industry players were exposed to a variety of questions mainly concerning the following points:

- Mobile advertising trends
- Leading mobile advertising formats
- Leading categories of advertisers investing in mobile
- Role of data
- Role of Mobile operators
- Native advertising
- Location-based advertising
- Cross-device targeting
- Scenarios of future development for specific categories of player and mobile advertising market as a whole

While the second part of the empirical section the purpose is to give a reader insights and real examples of the actors, their spheres of interest, point of views on current trends of the industry and value chain through the indirect information search including the sources of the information mentioned in the previous subchapter.

The empirical analysis was carried out to:

- Build a picture of the current level of development of the mobile advertising ecosystem
- Understand what are the major trends shaping the mobile advertising ecosystem
- Understand the nature of relationships between various players of the market
- Understand the competitive differentials that allow companies' sustainable development
- Gain insights about the main problems slowing down the development of the mobile advertising market from both advertiser's and publisher's perspective
- Master knowledge about the scenarios that are likely to shape the future development of the mobile advertising ecosystem

### **Results of the empirical analysis and conclusions**

The empirical analysis coupled with the literature review allowed to gain valuable insights about the position that mobile advertising has taken and the likely will take over the course of the following years. Below are some of the key findings that are deepened further in the main body of the thesis.

Role of mobile:

- Mobile advertising as an industry is growing with impressive pace, that no other media experiences nowadays
- Mobile is becoming a first screen for many consumers, especially in the developed countries, meaning that the audience is shifting from the traditional media to the mobile and the ad spend is expected to follow the audience, once the key problems of the mobile advertising are addressed.

Advertising formats:

- Standard banners still remain a dominant advertising format, although Rich media and Video advertising are getting increasingly bigger share of the advertising spend, especially when it comes to the brand awareness advertising campaigns.
- Native advertising is getting more and more attention from the marketers as has proven its viability as a format that generates an unparalleled level of user experience and revenues.

- In spite of the privacy and technological feasibility issues location-based advertising especially paired up with RTB capabilities offers an unprecedented level of targeting granularity and it is expected to get a progressively bigger share of the advertising spend over the course of the following years

#### Market considerations:

- The biggest investments in mobile advertising are coming from the Automotive, Telecommunication, FMCG and Entertainment industries.
- Advertisers are not fully ready to embrace mobile and the main challenges are related to the difficulty of tracking and proper targeting on mobile as well as to the cultural shift that needs to happen amongst the investors.

#### Evolution of the ecosystem:

- The real-time trading of inventory is becoming increasingly important as more and more publishers are exposing their inventory to the Open and Private ad exchanges while more and more advertisers are taken advantage of the efficiencies offered by the technology.
- The RTB mobile market is expected to be four times bigger in a medium-term perspective
- Big credits are given to the private marketplaces as they offer to publishers and advertisers brand safety and price control
- Data is progressively seen as the fuel that powers audience-centred advertising campaigns and it will keep growing in its strategic role.
- Ad networks are raising funds to transform to more sophisticated players as the classical business model of ad networks will hardly exist in a medium-term perspective
- The marketplace is still commanded by the industry giants as Google and Facebook and the situation is not likely to change in the medium term.
- Majority of the biggest online publishers are expected to become mobile first in the medium-term perspective
- The industry is going to face a consolidation over the course of the next years, with less players competing for the advertisers' interest.



## **CHAPTER 1: THE WORLD OF MOBILE**

This chapter gives a brief overview on the development of the mobile world and mobile advertising in particular. It covers the current trends and tries to anticipate some of the challenges that mobile advertising will be facing in the upcoming period.

In the first part the role and the importance of mobile and mobile advertising in modern World will be covered. The reader will be given a chance to understand the importance of the mobile in the value creation process and to anticipate its potential as a bridge between the brand and the consumer. Further, current trends will be presented with an aim to help reader to understand better the industry's current situation, its potential and how the mobile advertising stands in comparison with online and offline advertising.

The next subchapter covers the main objectives of mobile advertising. For a reader, it is out of crucial importance to be familiar with the goal that mobile advertising has, and in which way it contributes to the overall marketing efforts of the company. In addition, second part covers some of the definitions and has the aim to explain the reader the main expressions used in mobile business environment and the main industry's terminology, which will further be elaborated in the Chapter 2.

In the end of First chapter, open issues and the challenges that this business sector is currently facing will be covered. Based on the trends of the advertising industry, we will try to anticipate which will be the key questions that mobile advertising will have to address in the future in order to respond to the market's needs and change of modern consumer behaviour.

# 1. Trends in the World of Mobile

Mobile is in its aggressive momentum, growing faster than any other medium ever before. On the wings of the continuous growth of the key Internet trends, mobile has found its way to reach billions.

## 2.4B Global Internet Users in 2012\* – 8% Y/Y Growth\*, Driven by Emerging Markets

Rank	Country	2008-2012 Internet User Adds (MMs)	2012 Internet Users (MMs)	Y/Y Growth	Population Penetration
1	China	264	564	10%	42%
2	India	88	137	26	11
3	Indonesia	39	55	58	23
4	Iran	35	42	205	55
5	Russia	33	70	6	49
6	Nigeria	31	48	15	30
7	Philippines	28	34	32	35
8	Brazil	27	88	6	45
9	Mexico	19	42	9	37
10	USA	18	244	3	78
11	Argentina	17	28	57	68
12	Egypt	17	30	11	38
13	Colombia	14	25	39	54
14	Turkey	13	35	17	47
15	Vietnam	12	31	7	35
Top 15		654	1,473	15%	34%
World		902	2,406	8%	34%

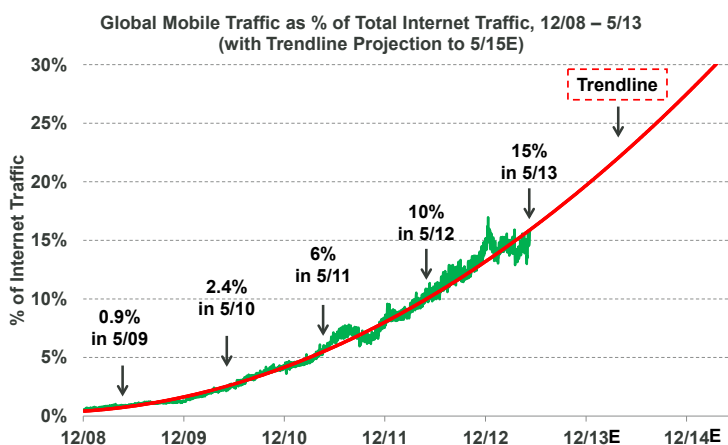
KPCB

Note: \*All data (except China) as of 6/12, 2.4B global Internet users and 8% Y/Y growth rate based on the latest available data. China Internet user data as of 12/12, per CNNIC. Source: United Nations / International Telecommunications Union, internetworldstats.com.

4

Figure 1 - Global Internet Users

## Mobile Traffic as % of Global Internet Traffic = Growing 1.5x per Year & Likely to Maintain Trajectory or Accelerate



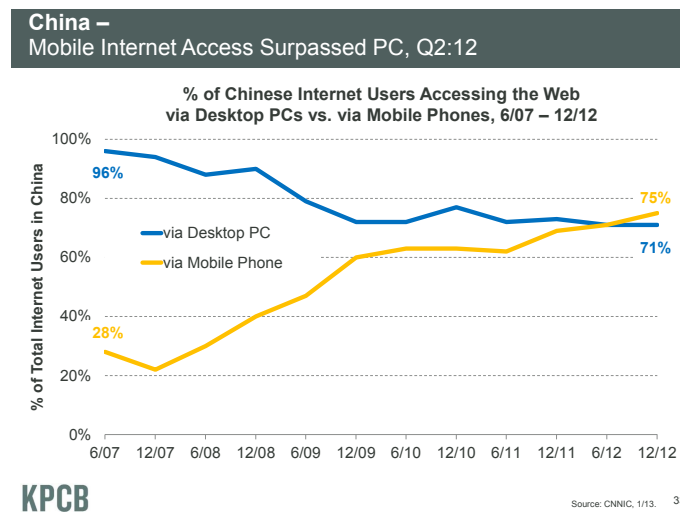
KPCB

Source: StatCounter Global Stats, 5/13. Note that PC-based Internet data bolstered by streaming.

32

Figure 2 - Mobile traffic as % of Global Internet Traffic

Importance of mobile internet access is highlighted even more once attention is drawn to the trends in China, where mobile access surpassed the PC internet one at the end of 2012, beginning of 2013<sup>1</sup>. Similar trend is present around the World and the gap will continue increasing through the 2014.



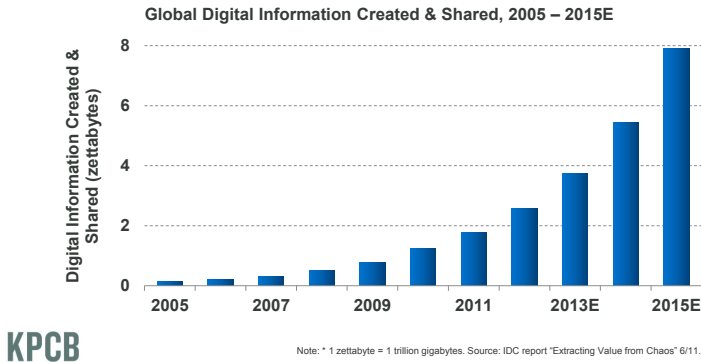
**Figure 3 - China: Mobile vs PC Internet Access**

With the high growth rate of mobile internet users and the penetration of smartphones, the famous sentence “You can run, but you can’t hide” (Joe Louis, American heavy weight boxer) gets a new meaning. In modern World, any information is just a click away, and the connectivity between people is higher than ever before. The content that people are creating and sharing online has increased more than 9 times in the past 5 years.

<sup>1</sup> Source: CNNIC

**World's Content is Increasingly Findable + Shared + Tagged - Digital Info Created + Shared up 9x in Five Years**

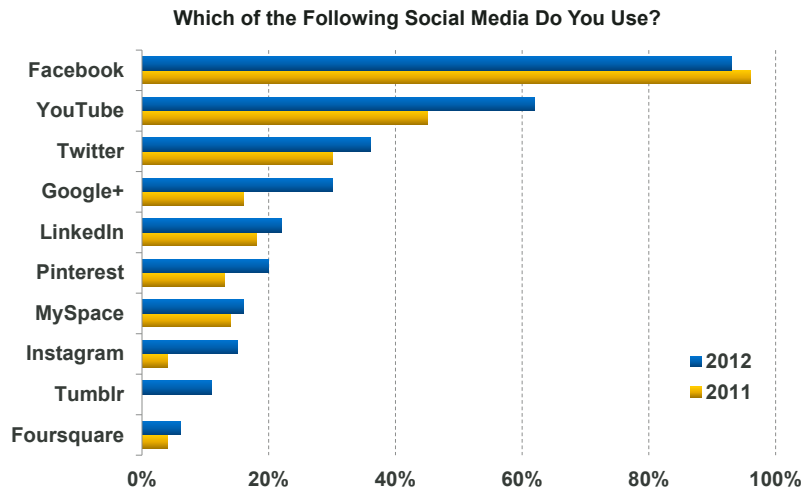
*Amount of global digital information created & shared – from documents to pictures to tweets – grew 9x in five years to nearly 2 zettabytes\* in 2011, per IDC.*



**Figure 4 - Amount of digital information created & shared**

What is specially interesting is the growing trend of usage of social networks and the way people access to them. Today, more than 65%, on average, of users access their social network profiles via mobile. The biggest platform is facebook: more than 1.1Bln active users of Facebook's services globally and 68% of them access via mobile, 60% do it daily<sup>2</sup>. Each member of biggest social network has, on average, 200 friends.

**Social Media – Facebook Leads, YouTube + Twitter + Google+ + Pinterest + Instagram + Tumblr Rising Fast**



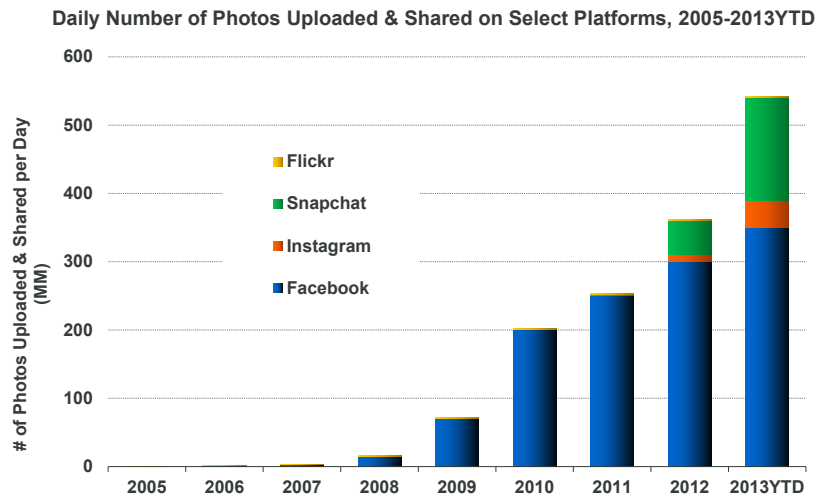
**KPCB**

Source: Frank N. Magid Associates, "Facebook Fatigue – Fact or Fiction?", March 2013. Based on a study of 2K social media users aged 12-64 who were asked "Which of the Following Social Media Do You Use?" 2011 Pinterest and Instagram data from 9/12 / 4/12. 27

**Figure 5 - Importance of social networks**

<sup>2</sup> Source: Facebook.com

**Photos = 500MM+ Uploaded & Shared Per Day,  
Growth Accelerating, on Trend to Rise 2x Y/Y**



**KPCB**

Source: KPCB estimates based on publicly disclosed company data.

Figure 6 - Update & Sharing Content/Photos

## 1.1 Smartphones / Feature phones / Tablets

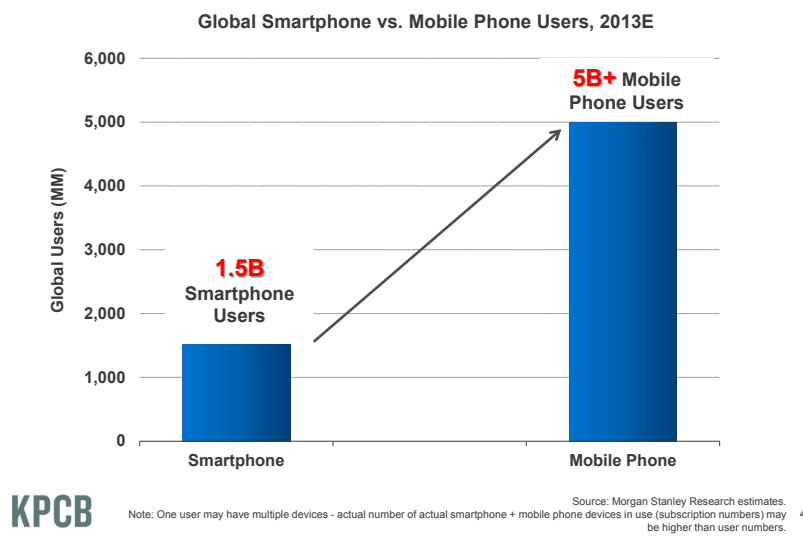
It is important to conduct an analysis of the spread of different mobile devices and understand their way of usage and the potential that brands and companies can use in order to communicate successfully the desired message to the right audience. There is a significant difference between mobile devices such as: smartphones, feature phones, laptops, tablets and e-books. Differences are the most obvious in their spread, usage and a potential in mobile advertising world.

Since 2011 tablets and smartphones have been mobile devices that contributed the most the big change that occurred when it comes to a daily habits of the modern consumer.

The number of smartphone users, in comparison with mobile phone users, increased rapidly and has reached 1.5Bln. There is a still tremendous space for growth as there are more than 5Bln Mobile Phone Users Worldwide.<sup>3</sup>

<sup>3</sup> Morgan Stanley Research

**Smartphone Usage = Still Early Stage With Tremendous (3-4x) Upside**



**Figure 7 - Rate of penetration of smartphone users**

On average, the owners of smartphones make 19.8% of the total mobile users, ranging from 35% in the Western Europe and US, on average, to only 5% in MENA Region. Furthermore, According to the eMarketer and comScore, numbers vary greatly from country to country, going from 65% in Japan, to 4% in India.

# Mobile penetration

## Mobile phone and tablet users

### ALL MOBILE PHONES

REGION	2012	2013	PERCENT OF TOTAL POPULATION			
			2014	2015	2016	2017
U.S.	77.1%	<b>77.9%</b>	78.6%	79.1%	79.4%	79.8%
Canada	66.6	<b>68.9</b>	71.2	73.2	75.0	76.0
Western Europe	80.5	<b>81.8</b>	82.9	83.9	84.7	85.4
Central and Eastern Europe	75.2	<b>77.2</b>	79.3	81.4	83.3	85.3
Asia-Pacific	58.1	<b>61.5</b>	64.5	67.5	69.9	72.1
Middle East and Africa	36.6	<b>38.8</b>	40.5	42.1	43.7	45.4
Latin America	67.8	<b>69.3</b>	71.1	72.8	74.4	75.8
Worldwide	58.1	<b>60.7</b>	63.0	65.3	67.2	69.0

### SMARTPHONES

REGION	2012	2013	PERCENT OF TOTAL POPULATION			
			2014	2015	2016	2017
U.S.	38.7%	<b>44.3%</b>	50.1%	55.4%	59.8%	63.5%
Canada	30.6	<b>35.1</b>	40.2	43.6	46.6	49.8
Western Europe	30.2	<b>38.7</b>	47.4	55.6	61.3	65.8
Central and Eastern Europe	21.0	<b>29.3</b>	39.1	46.6	53.6	59.5
Asia-Pacific	15.6	<b>18.7</b>	22.9	25.9	28.5	31.0
Middle East and Africa	5.1	<b>8.3</b>	10.9	13.0	15.0	16.8
Latin America	13.1	<b>18.6</b>	23.6	29.2	34.0	38.8
Worldwide	15.7	<b>19.8</b>	24.3	28.0	31.2	34.0

### TABLETS

USERS	2012	2013	U.S. TABLET USERS IN MILLIONS			
			2014	2015	2016	2017
Tablet users	93.9	<b>123.1</b>	143.2	157.1	168.1	178
% change	180.1%	<b>31.1%</b>	16.3%	9.8%	7.0%	5.9%
% of population	29.9%	<b>38.9%</b>	44.9%	48.9%	51.9%	54.6%
% of internet users	39.5%	<b>50.6%</b>	57.6%	61.8%	65.1%	67.9%

Source: eMarketer (emarketer.com). May 2013 for mobile phone and smartphone data; March 2013 for tablet data. Estimates are based on the analysis of survey and traffic data from research firms and regulatory agencies, historical trends, company-specific data, and country-specific demographic and socioeconomic factors. Mobile phone users are individuals of any age who own at least one mobile phone and use the phone(s) at least once per month. Smartphone users are individuals of any age who own at least one smartphone and use the smartphone(s) at least once per month. Smartphones are any voice handset with an advanced operating system (e.g., Android, BlackBerry, iOS, Windows Mobile) and features/capabilities that resemble a PC. Tablet users are individuals of any age who use a tablet at least once per month. Tablets are defined as touchscreen devices with a color display ranging 5-14 inches, a Wi-Fi connection or mobile data plan and an advanced operating system such as Android, BlackBerry, iOS or Windows. Though some have detachable keyboards, touch is the primary interface. Excludes devices with a cellular voice connection. Examples include Amazon Kindle Fire, Apple iPad, Google Nexus 7 or 10, Microsoft Surface and Samsung Galaxy Tab.

Figure 8 - Smartphone & tablet users vs. feature phone users

What could be noticed is the great imbalance between the local and regional markets, especially noticeable in the Middle East, North Africa and Asian region. This has attracted attention of the World's largest manufacturers of mobile devices and has influenced their strategic decisions regarding forecasted growth.

## Smartphone Subscriber Growth = Remains Rapid 1.5B Subscribers, 31% Growth, 21% Penetration in 2013E

Rank	Country	2013E Smartphone Subs (MM)	Smartphone as % of Total Subs	Smartphone Sub Y/Y Growth	Rank	Country	2013E Smartphone Subs (MM)	Smartphone as % of Total Subs	Smartphone Sub Y/Y Growth
1	China	354	29%	31%	16	Spain	20	33%	14%
2	USA	219	58	28	17	Philippines	19	18	34
3	Japan*	94	76	15	18	Canada	19	63	21
4	Brazil	70	23	28	19	Thailand	18	21	30
5	India	67	6	52	20	Turkey	17	24	30
6	UK	43	53	22	21	Argentina	15	25	37
7	Korea	38	67	18	22	Malaysia	15	35	19
8	Indonesia	36	11	34	23	South Africa	14	20	26
9	France	33	46	27	24	Netherlands	12	58	27
10	Germany	32	29	29	25	Taiwan	12	37	60
11	Russia	30	12	38	26	Poland	11	20	25
12	Mexico	21	19	43	27	Iran	10	10	40
13	Saudi Arabia	21	38	36	28	Egypt	10	10	34
14	Italy	21	23	25	29	Sweden	9	60	16
15	Australia	20	60	27	30	Hong Kong	8	59	31

2013E Global Smartphone Stats: Subscribers = 1,492MM Penetration = 21% Growth = 31%

KPCB

Note: \*Japan data per Morgan Stanley Research estimate. Source: Informa. 40

Figure 9 - Smartphone subscriber growth

One of the World's biggest producer of mobile devices, Samsung, is expecting a decrease in demand for smartphones in the Western countries, both due to the saturated market and high price competition with competitors. For this reason, company set up a strategy aiming at fast penetration to the markets of developing countries, where general mobile penetration is still relatively low.

## Smartphone OEMs by share of market

Apple leads with 39.2% of U.S. market

RANK	ORIGINAL EQUIPMENT MANUFACTURER	MAY 2013		MAY 2012	
		SUBSCRIBERS	SHARE	SUBSCRIBERS	SHARE
1	Apple	55,256	39.2%	35,071	31.9%
2	Samsung	32,416	23.0	18,179	16.5
3	HTC	12,321	8.7	13,812	12.6
4	Motorola <sup>1</sup>	11,040	7.8	11,207	10.2
5	LG	9,457	6.7	7,838	7.1
6	BlackBerry	6,770	4.8	12,526	11.4
7	Nokia	1,875	1.3	1,476	1.3
8	Huawei	1,612	1.1	1,698	1.5
9	Kyocera	1,023	0.7	399	0.4
10	ZTE	949	0.7	533	0.5
Total Audience: 13+ years old		141,037	100.0	109,959	100.0

Source: ComScore MobiLens (comscore.com). Subscribers are in thousands. Only smartphones are included. Data show three-month averages ending May 2013 for mobile subscribers ages 13-plus in the U.S. 1. Google in May 2012 acquired mobile-phone maker Motorola Mobility.

Figure 10 - Smartphone OEMs by share of market



What is interesting to notice is the growth of companies such as Samsung and Apple, on the market of smartphones. Samsung made tremendous growth in the past 2 years of up to 7 times.

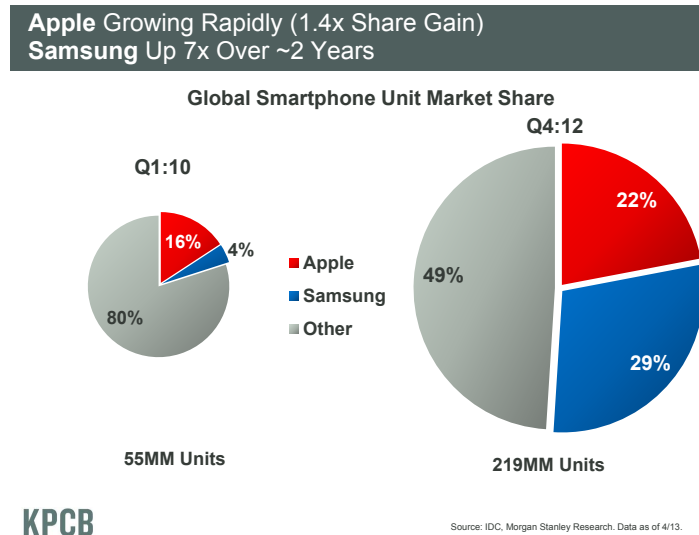


Figure 11 - Growth of Samsung and Apple's shares : smartphone's market

When observing the operating systems and platforms sale, in 2011 and 2012, Google was making an annual growth that has been twice of the market average. In 2013, the overall market share of Google Android OS has increased to 52.4%, while the biggest growth made Apple's iOS that captured 39.2% of the market share. These growths were based on the big decline of the Microsoft's and BlackBerry's operative systems that rosed on less than 5% each.

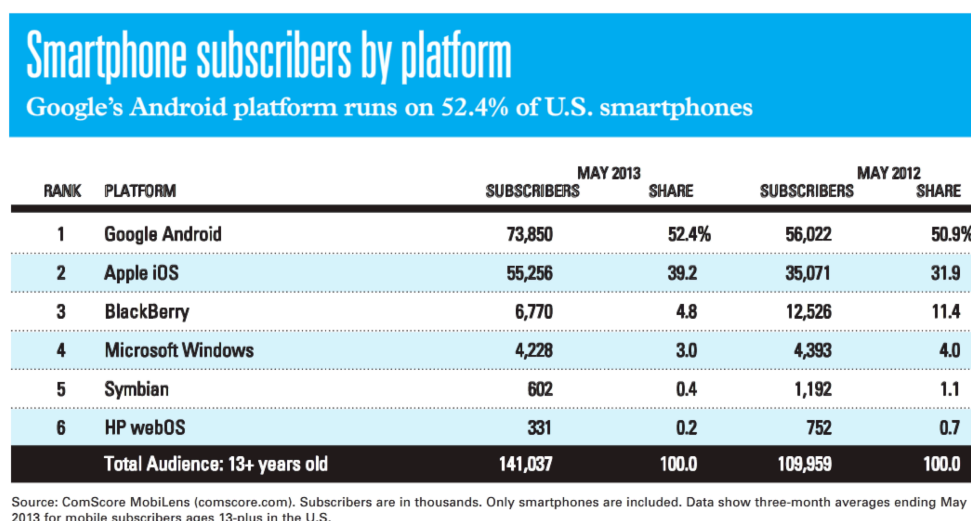


Figure 12 - Smartphone subscribers by platform

As it can be seen at the figures 13 and 14, the most dominant Operative Systems for smartphones are the ones coming from the USA. All together, Microsoft Windows OS, Apple’s iOS and Android’s OS, are present in more than 94% of all the smartphones currently at the market.

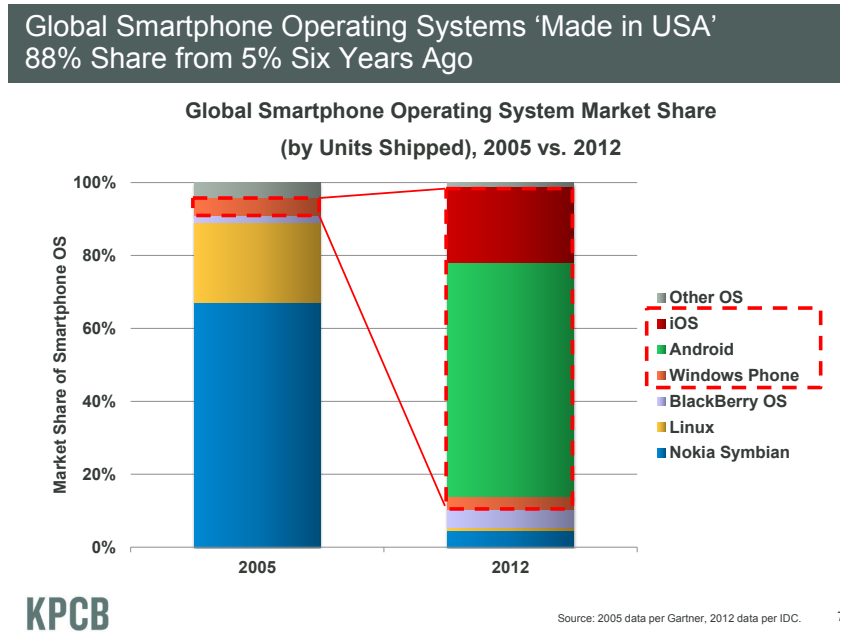


Figure 13 - Smartphone OS : Made in USA

Even though the word “mobile” can drive one to think exclusively in the direction of smartphones, the tablet devices cannot be excluded from a brief discussion of World’s mobile trends. This statement is further strengthened with the increasing penetration rate of tablet devices among smartphone users.

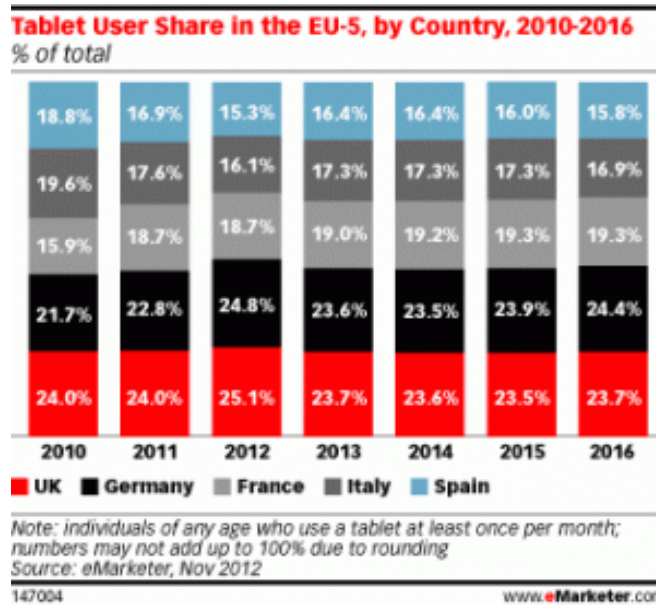


Figure 14 - Percentage of tablet users by country: EU 5

Research of eMarketer.com confirms the strong growth of 130% and the spread of tablet devices in Top 5 European countries and its penetration.

**Tablet User Growth in the EU-5, by Country, 2011-2016**  
% change

	2011	2012	2013	2014	2015	2016
Germany	144.7%	149.1%	38.1%	27.6%	21.5%	14.7%
UK	132.1%	140.0%	36.8%	27.6%	19.3%	13.3%
France	173.4%	129.4%	47.2%	29.7%	20.3%	12.1%
Italy	109.4%	108.5%	56.1%	28.2%	19.9%	9.9%
Spain	108.8%	106.4%	56.3%	27.9%	16.3%	11.1%
<b>EU-5</b>	<b>132.6%</b>	<b>128.9%</b>	<b>45.1%</b>	<b>28.1%</b>	<b>19.6%</b>	<b>12.5%</b>

Note: individuals of any age who use a tablet at least once per month  
Source: eMarketer, Nov 2012

147002 www.eMarketer.com

Figure 15 - Tablet users growth in EU 5

In total, more than 130 million people possess a tablet, aside the smartphone, and has used it at least once per month.

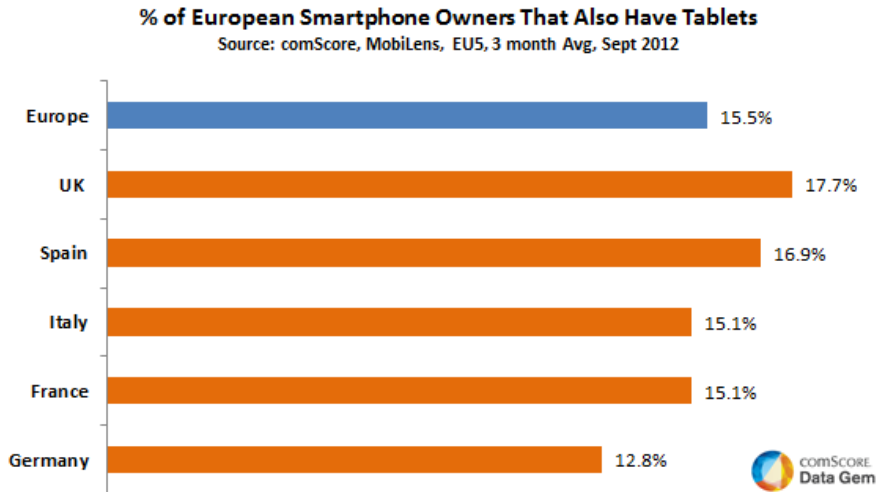


Figure 16 - Percentage of smartphone users who own a tablet

Even though the numbers that are confirming growth of smartphone usage and penetration are impressive, the Apple's report of CQ1 2013 reveals that the growth of its tablet device, iPad, has recorded 3 times faster growth than the one of iPhone.

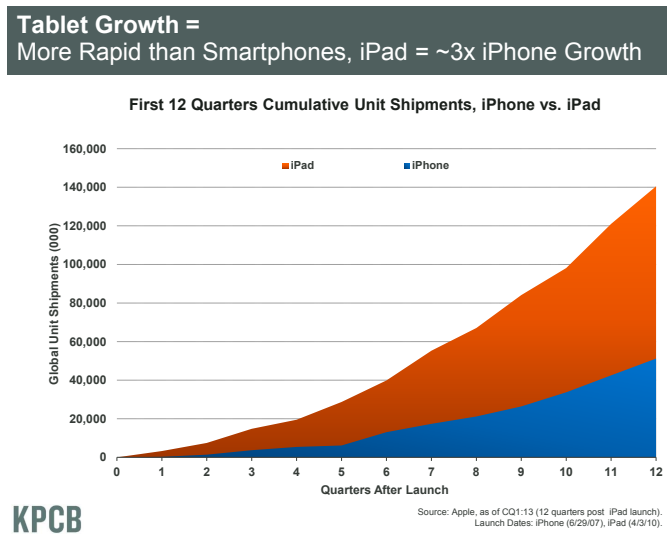


Figure 17 - Apple's tablet growth in comparison with phone's growth

The shipment of tablets surpassed Desktop PCs and Notebooks in the last quarter of 2012, in less than 3 years since the first entry to the market, with more than 52MM Global Units Shipped, in comparison with 47MM of Notebook PCs and 34MM of Desktop PCs<sup>4</sup>.

What is interesting to notice further is the list of top vendors on the market of Desktop PC and Notebook PC devices, and compare it with the top list of vendors of Tablet devices. While in the first two markets, list of vendors is mostly the same; the list of tablet vendors is

<sup>4</sup> Katy Huberty, Ehud Gelblum, Morgan Stanley Research. Gartner

very different and presents some new players on the market.

**Top Vendors Largely Same in Desktop & Notebook Cycles – Very Different in Tablet (& Smartphone) Cycles**

<i>Desktop PC</i> Market Share 2000		<i>Notebook PC</i> Market Share 2010		<i>Tablet</i> Market Share 2012		<i>Smartphone</i> Market Share 2012	
	% Share		% Share		% Share		% Share
Compaq	13%	HP	19%	Apple	51%	Samsung	30%
Dell	11%	Acer	17%	Samsung	13%	Apple	19%
HP	8%	Dell	12%	Amazon	8%	Sony	5%
IBM	7%	Lenovo	10%	ASUS	5%	ZTE	5%
NEC	4%	ASUS	8%	Lenovo	1%	BlackBerry	5%
Others	57%	Others	34%	Others	20%	Others	37%

**KPCB**

Note: Notebook PCs include Netbooks.  
Source: Morgan Stanley Research, Gartner. Data as of 4/13. 47

**Figure 18 - Top Vendors of Desktop PC, Notebook PC and Tablet devices**

Even though the market of tablet devices is growing with great pace, by observing current situation on the US market, it can be noticed that approximately 98% of the market is running on two platforms – Google’s Android and Apple’s iOS. This can be a big threat to the market due to the lack of competition and alternative sources for tablet manufacturers.

**Tablet owners by platform**  
Average U.S. owners in thousands

RANK	PLATFORM	MAY 2013		MAY 2012	
		TABLET OWNERS	SHARE	TABLET OWNERS	SHARE
1	Google Android	40,768	57.9%	23,301	55.5%
2	Apple iOS	31,559	44.9	19,284	45.9
3	HP webOS	958	1.4	802	1.9
4	BlackBerry	651	0.9	514	1.2
5	Microsoft Windows	641	0.9	407	1.0
<b>Total Audience: 13+ yrs old</b>		<b>70,364</b>	<b>100.0</b>	<b>42,001</b>	<b>100.0</b>

Source: ComScore TabLens (comscore.com). Data show three-month averages ending May 2013 for tablet owners ages 13-plus in the U.S.

**Figure 19 - Tablet owners by platform**

An unusual pattern occurred that, in the era of smartphones and tablets, a mobile industry is entering its third cycle of wearables, drivables and scannables. In the technology cycles, it is typical to observe a 10-year cycles but since 2011, we are witnessing technology cycles that are changing much faster than the ones in past. In 2014 we will have high growth of

wearables and advancement of computing that will change its form from “mobile computing” to “everywhere computing”.

## **1.2. Mobile phone user's behavior**

The evolution of the mobile industry and in particular, the mobile phones as medium, has enabled creation of a very direct and personal point of contact between customers and companies, between brands and its users.

At the moment, we are in the post-PC period and with the launch of the smartphones and tablets, the new era of digital advertising was born. At this moment, more than 1.5 billions of consumers are carrying with them their internet-connected mobile devices all around, for up to 16h a day. For marketers, the new important audience was born – the mobile audience.<sup>5</sup>

"Mobile advertising is the communication of messages or media content to one or more potential customers who use mobile devices."<sup>6</sup>

In a simple way, Mobile Advertising is all about transferring the traditional advertising through mobile channel.

Since modern consumers are attached to their mobile devices, the mobile advertising provides a unique opportunity to connect with consumers on a personal level, with ads that reflect their on-the-go need states and moments of decision. Mobile Advertising gives a possibility to get in touch with the consumers while they are communicating with their family and friends and while spending their free time with the news they care about and applications they are attached the most.<sup>7</sup> Mobile advertising can be very powerful and precise. It has an ability, with the right tools, to target very narrow audience and provide an access to the targeted population filtered by location, device, demographic and, maybe the most important – behavior. Desired audience can be reached with different models that call on interaction and have action-oriented nature: video, rich media, click-to-call, click-to-text, click-to-go, etc.

For marketers, the level of intimacy of mobile technology makes new opportunities to engage consumers throughout the shopping journey possible. Content delivered on-the-go has the ability to inspire and entertain consumers.

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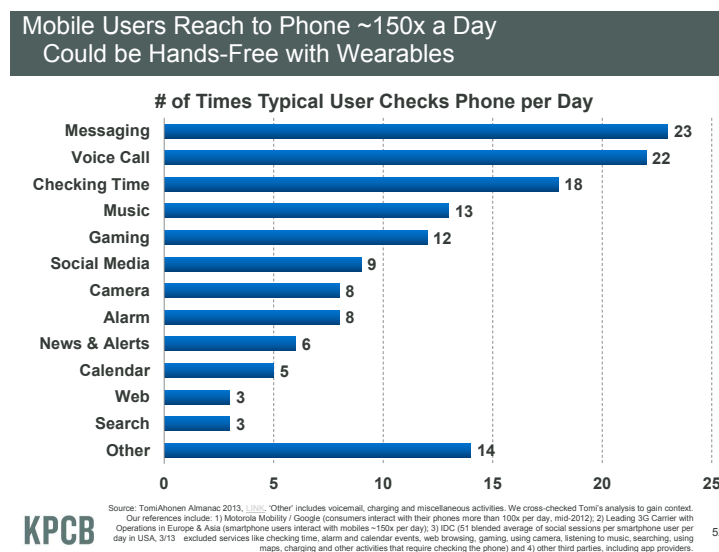
<sup>5</sup> Business Insider: “The Mobile Advertising Ecosystem Explained”, Sep 2013

<sup>6</sup> [http://www.emarketingdictionary.com/Internet\\_Marketing\\_dictionary\\_Mobile\\_Advertising\\_definition.html](http://www.emarketingdictionary.com/Internet_Marketing_dictionary_Mobile_Advertising_definition.html)

<sup>7</sup> <http://advertising.microsoft.com/en-us/mobile-advertising>

Mobile phones and tables have become a first touch point between the brands and consumers. The mobile device’s dominance is supported with the research of Crain Communication Inc. that states that adults spend, on average, 141 minutes every day using their mobile devices. Furthermore, big potential of mobile advertising is based on the fact that more than 24% of World’s population will have smartphone in 2014.

A typical mobile phone user, reaches to his phone, on average, 150 times a day. Most of the time, it is for messaging and voice call, counting 30% of the occasions for interacting with a phone.



**Figure 20 - Usage of mobile phone**

Mobile consumers could be segmented in two main categories, depending on how they interact with devices and access online content. These two main categories, according to Forester Research, are: Unshifted and Shifted segments<sup>8</sup>.

It is important to understand the following segments and measure the Mobile Mind Shift Indexes (MMIS) in order to understand in which way customers judge the mobile utility offer that brand/company has to offer.

<sup>8</sup> Forrester: “The Mobile Mind Shift Index”, 2013

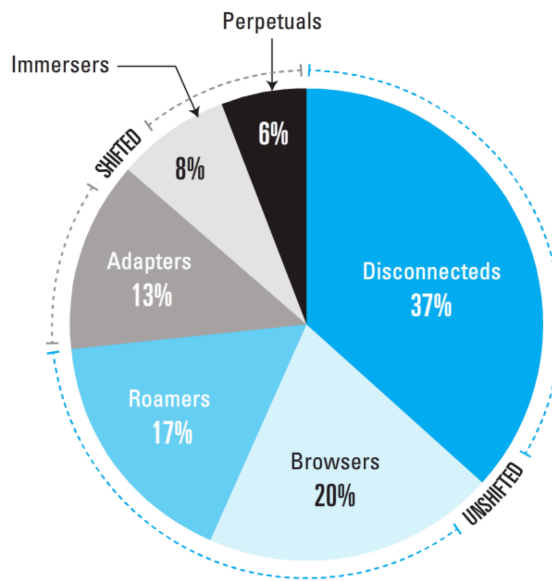


Figure 21 - The Mobile Mind Shift Segments

**Disconnecteds:**

37% of U.S. online adults score in this very bottom segment. The average age is around 45 years and these users tend to connect in one place, only in house and only on a PC. Cell phones are used exclusively for phone conversations.

**Browsers:**

This segment occupies 20%. 41% own smartphones and 14% tablets. Average age range varies from 30 to 50 years and these users are likely to connect every day from the devices they possess but few use applications and have not yet discovered the full potential of mobile.

**Roamers:**

The average age of these group's members is 39 years. They are connecting online from different locations such as restaurants, kitchen, bedroom, cars, etc. Usually they are familiar with the apps but still they are not using them so intensive.

**Adaptors:**

Approximately 29% of Adaptors have tablet and 90% of them own smartphone. They are mostly using music and sport's app.

**Immersers:**

Members of this group are 34 years old, while 95% of them have smartphones and half have tablets in possessions. Immersers are making small mobile purchases and are accessing from everywhere.



Perpetuals:

Youngest segment of all, with an average age of 33 years. More than 96% have smartphones and 78% have tablets as well. They are all the time connected, using all categories of apps.

By understanding the shifted segment, and developing the best way to approach them, companies can count on high results and effects of its mobile effort. It is also important to understand in which occasion shifted and unshifted mobile users are accessing online.

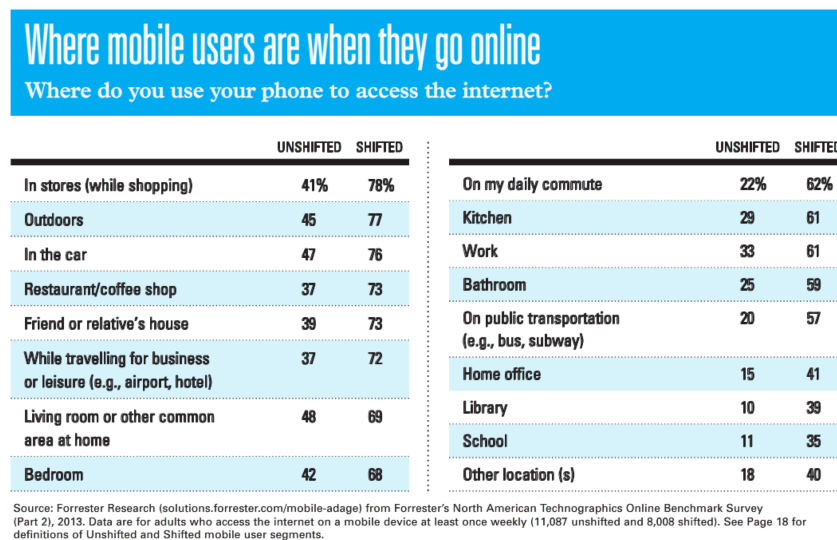


Figure 22 - Position of mobile users when going online

Another interesting data is the average time spent with mobile devices. As it can be seen from the figure 24, all combined digital channels surpassed TV, radio and offline medias.

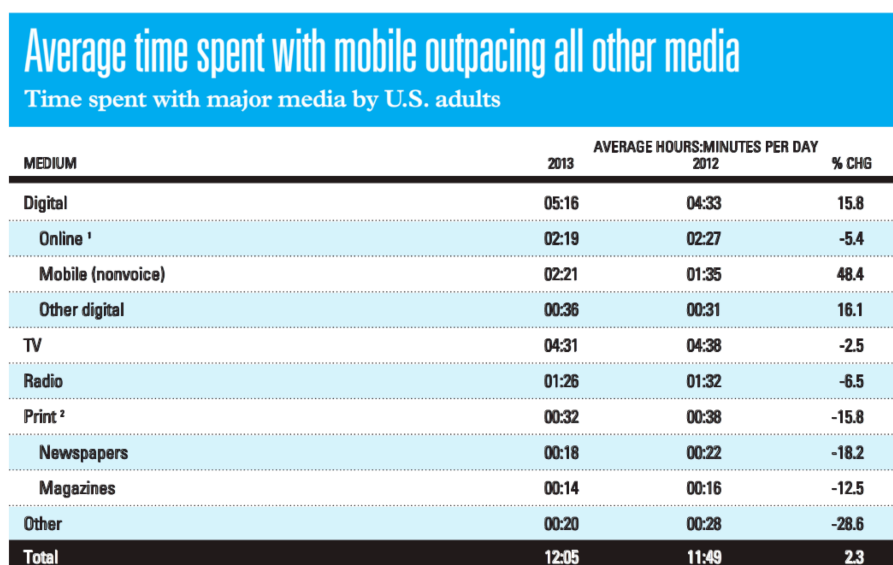


Figure 23 - Average time spend with different media channels

## **2. Objectives of Mobile Marketing**

The innovation in the field of mobile industry has provided users with an exciting opportunity to participate in a big extent in the definition of the “value proposition” of the brand and companies they love and follow. The advancement of the market has opened new systems for understanding and anticipating needs and desires of modern consumer, which are all about personalization, interaction, value, comfort and contextualization.

Modern consumer has a deep need for personalization and customization of the desired product. It is very important to allow consumer to be involved in the creation processes since it will help build and sustain the personal relation that consumer has with the brand. At the same time, this interaction has to be conducted through the channels which consumer uses the most and it has to be done in both “real” and “virtual” worlds in which he spends his time. Through these channels, brand will be able to absorb all the shared ideas and experiences of its consumers and later on, use it for understanding its consumer’s expectations.

In the time of economic downturn, value is one of the things that consumer take into consideration in the most critical way. With the available search tools, consumers can easily find the best offers on the market, and with the development of mobile industry, there are easy ways to conduct comparison analyses and evaluation of one of the most influential variable – the price. The flow of information is higher than ever before and the modern consumer is always on the move, searching for most reliable information before taking its final decision.

When we are talking about the comfort in the world of mobile, we are talking about the possibility to use different channels for the purpose of purchase, and the customer journey in general. As important in marketing strategies, the multi-channel and multi-approach has the same weight in online/mobile purchase processes. All the pre-sale, sale and post-sales activities and services must add significant value to the overall mobile customer journey. Term of contextualization is in close relation of enabling consumer an end-user experience that is equal or above its expectations – the possibility to make use of concrete offered content at any time.

All stated consumer's needs go in favour for the increasing importance of mobile within the general marketing strategy of a company. In order to truly understand and fulfil the expressed and non-expressed consumer's needs, companies need to take initiative in developing new multi-channel strategies that will enable their brands to communicate with consumers everywhere, at any moment and exactly what consumer wants to hear. Only like that, the brand's message can arrive directly to the target audience, using marketing activities through a mobile, an intimate and personal device that has become essential in modern world.

Mobile Marketing has a very similar role and the objective as any other marketing initiative and it is to assist in increasing the company's turnover and performance and to increase the brand's awareness and loyalty.

In fact, there are two main mobile initiatives that are fulfilling the tangible and intangible objectives: "call-to-action" and "branding".

The first one has aim to generate a concrete and very specific action that the final consumer will take and that will have tangible results for the company, such as sales, in-store engagement, etc.

The second one, "branding" initiative, has objective of strenghting the brand's position and effect on consumer's mind. It plays with the perceptions and influence consumer's behaviour towards the brand.

In short sum, the main objectives of mobile advertising, under the "call-to-action" and "branding", are to:

- Build and increase the brand's awareness
- Drive sales
- Grow loyalty, retention and engagement

According to the OVUM Report<sup>9</sup>, the increase of brand awareness turned out to be the stand-out goal and the top objective for marketers around the World.

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<sup>9</sup> OVUM: "Martker Perceptions of Mobile Advertising"

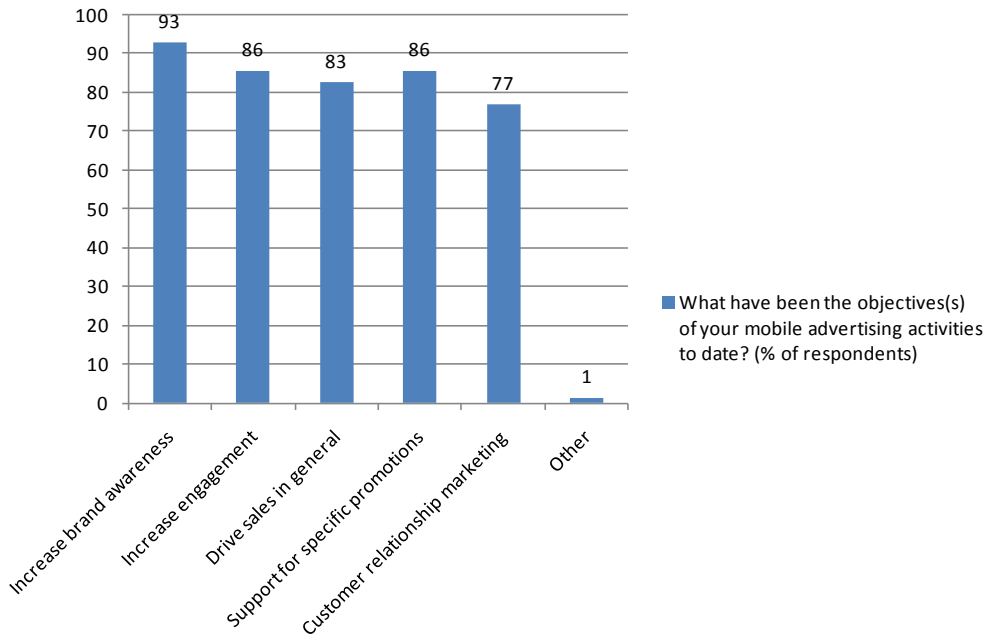


Figure 24 - Top Objectives of Mobile Advertising

The emphasis of the top objective of mobile advertising is in consistency with the top ranking perceived benefits of mobile advertising: reach and immediacy.

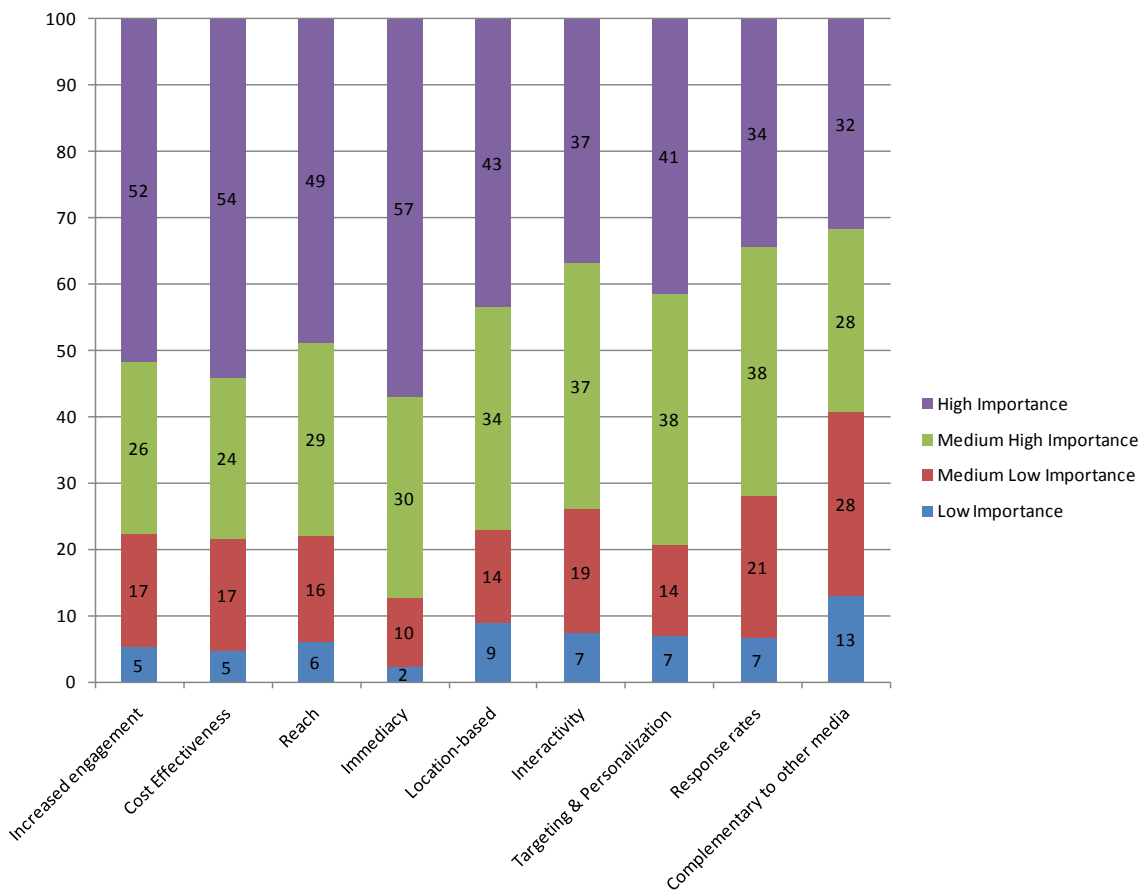


Figure 245 - Key Benefits of Mobile Advertising

As it can be seen in the Figure 2, the key benefit of mobile advertising, from a brand/buyer perspective, are the immediacy and the reach, while increased engagement plays important role. Closely followed is cost effectiveness while mobile's ability to complement other media is gaining on its importance year after year since it has been proven that mobile is one of the best tools at adding interactivity to the traditional offline media that are not interactive in themselves (for example, SMS codes/QR codes at billboards, newspaper, etc.).

### **Building and increasing brand awareness**

This is a long-term process during which the communication with consumer is aimed at increasing the awareness and remembrance by consumer of the brand itself, rather than of the specific product/service of the company. Companies want to increase the knowledge about the brand, the values it carries and to influence on the primary associations of the brand. In order to reach this objective, companies are using static and dynamic banner ads, containing the logo of the brand. Recently, the usage of video formats has increased rapidly in brand awareness missions.

### **Driving Sales**

Under the objective of increasing the sales, there is also a goal of **acquiring new customers** that will drive the sale. Through mobile advertising, companies are converting leads (consumers that demonstrated certain interest for the brand/product/service) to prospect (consumer that will make the purchase) and the final step, from prospect to customer (actual purchase – full conversion). There are two main strategies used for generating sales:

- Cross-selling – The practice of selling or suggesting related or complimentary products to a prospect or customer. Cross selling is one of the easiest and most effective methods of marketing<sup>10</sup>.
- Up-selling - Up-sell is a marketing term for the practice of suggesting higher priced products or services to a customer who is considering a purchase<sup>11</sup>.

### **Loyalty and engagement**

As in traditional advertising channels, mobile advertising has the aim of creating, maintaining, supporting and managing relationship with the consumers by enabling them

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<sup>10</sup> Investopedia.com

<sup>11</sup> Margaret Rouse, SearchCRM

value-added services. Furthermore, mobile, as being the first screen of the consumer, gives a tremendous opportunity for listening and understanding customers. It is also an important tool for engaging users which is all about pushing the target audience to take the next action that will most likely make consumers feel the need for more. (Forrester)

“On engagement, we're already seeing that mobile users are more likely to be daily active users than desktop users. They're more likely to use Facebook six or seven days of the week.”

Mark Zuckerberg

By theoretical classification, the mobile advertising includes: messaging, display advertisement, search and video advertisement (ad) formats. These advertisement formats are being used to<sup>12</sup>:

- Build and increase the brand awareness
- Increase sales both online and offline (in-store)
- Extend special offers and coupons
- Enhance multichannel campaign efforts
- Increase customer acquisition, engagement and loyalty
- Simulate word-of-mouth and social media engagements

## **Messaging**

Messaging is one of the first and most commonly used mobile advertising formats. It is widely known as the SMS advertising. It represents an advertisement in the form of SMS in which the marketing message is placed in the text message that consumers have opted in to receive.

SMS Advertising represents one of the most easiest ways of approaching to consumers since it is one of the most used mean of communication via mobile. Only in 2011, mobile users sent more than 7 trillion SMS<sup>13</sup>. It is estimated that sms are sent by more than 3.5 Bln active users

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<sup>12</sup> Mobile Marketer: “State of Mobile Advertising 2011”

<sup>13</sup> ABI Research: “Mobile Messaging Services 2010”, code: RR-MMSG-10

or about 80% of all mobile phone subscribers, at the end of 2010<sup>14</sup>. With the given level of engagement that this type of mobile advertising provides, its biggest mobile potential is to guide consumers directly to the mobile web, to drive them to the stores, both online and offline and to download a mobile app.

### **Display Advertising**

Display advertising represents a type of advertising that is consisted out of text, logos, photographs or other images, location maps and similar items. Mentioned items are usually presented in the form of banner that can be static, dynamic and/or interactive.

The banners displayed on a mobile device are capable of creating various interactions between a consumer and a brand. Some of the most common known interactions and the flows are as following:

- Click-to-web: Consumer clicks on a banner and is directed to a landing page that presents in more details the initial offer that was displayed on the banner. The landing page could be a website, application store or a
- Click-to-call and click-to-text: Consumer clicks on a banner in order to initiate a call or send a text message to the brand
- Click-to-rich-media: Rich media advertisement units can be tailerod according to the specifications of the advertiser and its needs. Some of the most common interactions are click-to-video and click-to-download.

### **Search**

Search advertising are the paid rankings and listings that consumers see during the search. After entering a query during a mobile search, consumer see first paid listings that represent search advertising, a very similar model to the one of online advertising.

The brands – advertisers are paid on the cost-per-click basis, after consumers click on the high ranked paid listings. This type of mobile advertisement is expected to reach \$201.3 Mln in 2014, according to eMarketer, while the absolute dominance holds Google.

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<sup>14</sup> Tomi T.Ahonen (January 13, 2011): "Time to confirm some Mobile User Numbers: SMS, MMS, Mobile Internet, M-News"

The main difference between online and mobile search advertisement is the consumer's behavior. While on desktop consumers are conducting research, on the mobile devices, people are searching for local content (movies, restaurants, events, etc.) and are asking one thing, in order to get a proper answer to their inquiry.

The biggest challenge in the mobile search advertising represents utilization of the advantage of the mobile-specific potential such as location-based services that can support in great extent the effectiveness of paid listings.

## **Video**

Video advertising formats are ones of the most effective as they represent similar experience as the classic TV advertisement units. They could be displayed as the pre or post-roll, in-stream or in-ad units.

The fast growing market of tablets and smartphones with big screens has propelled the growth of the mobile video advertising. The completion rates for mobile video ad units stand high at 87% and exceed television and online video.

By clearly understanding the importance of mobile and the potential it carries, it is possible to move on to the next phase in reaching the objectives which is to define an appropriate strategy and tactics that will be successful and, not according to the company's preferences but rather its audience's preferences. For this reason, it is important to listen target audience, to collect and integrate data and analyses results coming from different sources in order to effectively monitor the market and identify all the leads, current customers and prospects. Only by conducting above mentioned, it is possible to develop a communication strategy that will enable establishing of a dialogue between customer and company that will be a truly a two-way communication.



### 3. Challenges of Mobile Advertising

Mobile Advertising is, without any doubt, making an excellent progress and it is in its rapid growth phase. Nonetheless, there is a lot of work to be done in terms of adoption of mobile strategies by wider range of companies. Major part of companies did not yet fully embraced mobile advertising as the leading channel of their marketing strategies.

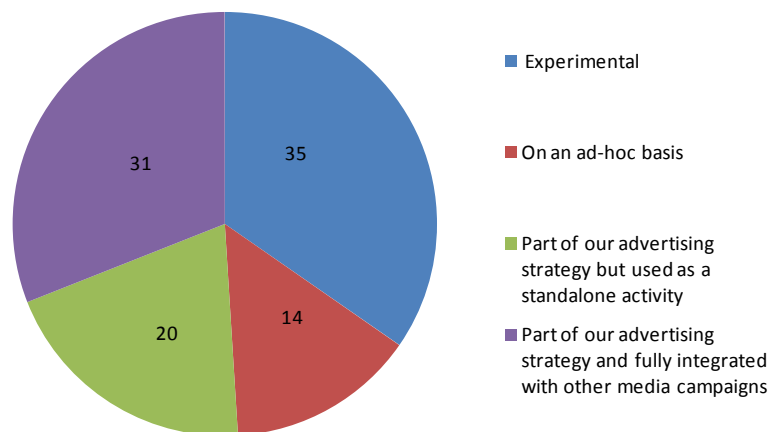


Figure 25 - Usage of different types of mobile inventory by companies

As it can be seen from the figure 29, majority of companies still use the mobile channel only in the initial phases of different marketing efforts. Companies still do not develop pure strategies specifically for mobile and its integration into the overall marketing strategy of the company is questionable. In fact, there are 3 main trends<sup>15</sup>:

- Mobile Advertising is used mainly for the brand-awareness campaigns
- Only 43% of marketers use data derived from the mobile while major part still rely on the data generated from different sources
- Only 45% C-level marketers confirmed that they possess quality in-house knowledge on mobile

If observing the stated trends and the current adoption of mobile as a marketing channel, we can see that there are some obstacles to cross for mobile in order to become a leading marketing channel for the companies in the upcoming years.

When it comes to the adoption of mobile advertising by vertical market, media and entertainment companies are way ahead of the curve:

<sup>15</sup> Forrester about Mobile Advertising as a part of Marketing strategies, 2013

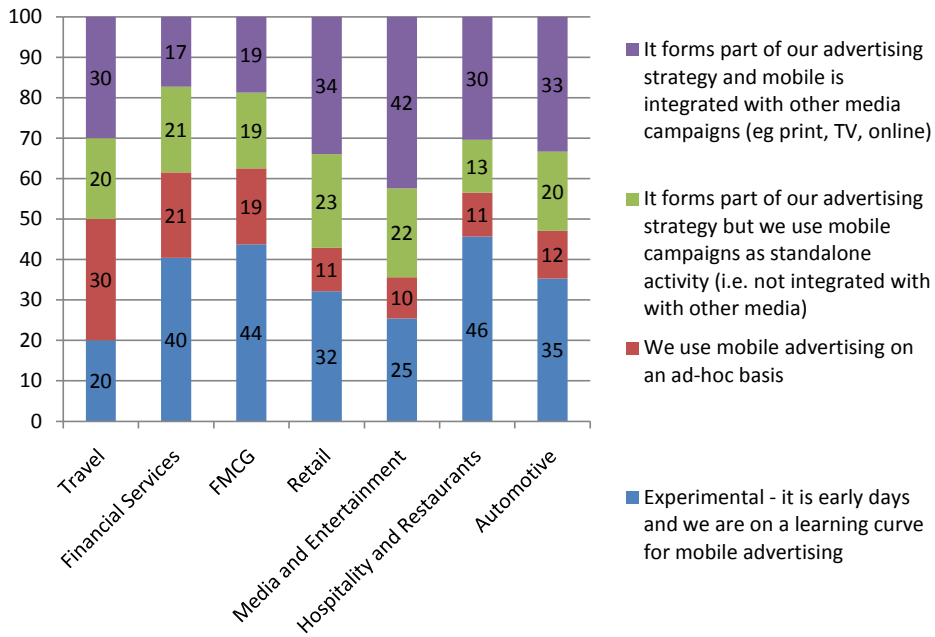


Figure 26 - Mobile advertising strategy adoption by vertical market

It is logical that the strategies vary by industries, while media and entertainment are in the lead. As shown in Figure 32, many media and entertainment companies are at the forefront of using digital media and they are considered as early adopters of mobile. Several of verticals, such as automotive, retail and restaurants are still in the experimental phases while some have adopted a fully integrated mobile strategy. This all is suggesting that once companies adopt mobile advertising, they are becoming confident and quickly migrate to an advanced mobile advertising strategy.<sup>16</sup>

Some of the biggest challenges of mobile advertising are: privacy issues, device fragmentation, lack of standardised metrics and lack of agency expertise in mobile are seen as the biggest challenges, according to the OVUM's research on marketer's perceptions of mobile advertising.

<sup>16</sup> OVUM: "Marketer perceptions of mobile advertising"

## **Privacy issues**

There are certain issues and concerns on privacy issues and targeting based on the use of customer data.

According to the OVUM's research, way to solve successfully privacy issues is adoption of standardized code of behaviour and rules that will be applied in the mobile advertising world.

Some of the ideas emerged are:

- Need for regulation and legislation for privacy protection
- Standards and codes of conduct
- Consent from consumers when their data is being used
- Full disclosure on how private data is being used
- Privacy protection is necessary for consumer's trust and by extension, the success of mobile advertising

More education, more guidance and best practices are needed in this sensitive and confusing area since the protection of privacy is the basic and fundamental issue that needs to be discussed and solved in order for people and marketers to accept mobile channel as the primary channel for communication between consumers and brands. As soon as the market feels that the given information are protected by the concrete regulations and policies, consumers will be more relaxed and ready to share their private data in order to receive promotions and receive messages from the various brands.

## **Standardization**

With the growth and expansion of different types of smartphones and tablets and optimization of websites for mobile usage, the formats used in mobile advertising are facing a difficulty of adapting to different landscapes and channels. From the creative perspective, there is a difficulty in designing advertisement units that are capable of adapting to different screens and devices. In order to overcome these problems, there are certain efforts done by the Mobile Marketing Association (MMA) and the IAB organization, that have an aim of defining and setting standards and guidelines in this area. The idea is to categorize the space dedicated for advertising based on the size, load time and types of creative. In order for this initiative to fully succeed, all the players of Mobile Advertising need to adopt standardized procedures and apply proposed guidelines. Nevertheless, there is a doubt if these efforts will be successful enough due to the ever-changing industry, devices and media units.

Many companies already have adopted mobile as a channel for communicating with the audience and have entered the mobile ecosystem. Nevertheless, majority has not yet begun to use it as a main channel or to develop marketing strategies entirely based on mobile and to include it to its long-term marketing strategies. Companies are mainly using mobile for a very short-term campaigns and initiatives and it seems that they are far from the full integration of mobile channel into a well defined and structured strategic marketing plan. According to Forrester research, more than 60% companies have used mobile exclusively for a short term initiatives while 7% have never been thinking on using mobile as a part of their marketing mix.

Furthermore, many companies are still at the very early stage of developing mobile advertising strategies due to the lack of internal knowledge about mobile. Less than 30% of companies have the knowledge to monitor precisely the performance of their mobile marketing initiatives, while very few consider mobile as a part of strategy for retaining the users. Still, the transfer from online to mobile is hard for some companies since more than 45% of companies still relies on the “Click through rate” performance parameter (CTR) that measure the number of clicks on the banner, in respect to the number of views of an ad. This metric is an index of performance typical for online campaigns while in mobile there are other performance parameters such as downloads, acquisition, action, purchase and many others that gives a better insight on the performance of mobile campaigns. In this field, the systematic approach is needed aimed at educating marketers around the World about the new channel and its opportunities, all with the aim of adopting the mobile as a leading communication medium.

For the end, as already indicated, privacy issues needs to be done and resolved by all the members of the mobile ecosystem and only like that, mobile marketing will be able to show its full potential and companies will be capable to increase the effectiveness of theirs campaigns.

## CHAPTER 2: MOBILE ADVERTISING AND ITS FORMATS

### 1. Introduction

Mobile is a big word. It is just six letters, but it still succeeds in putting fear into the hearts and minds of many media executives. Just a limited number of people can completely grasp mobile advertising because it contains so many dissimilar elements that continually change. In fact, the world of mobile and mobile advertising specifically changes so rapidly that even the papers written some 3-4 years nowadays look quite out-dated.

Giving a comprehensive definition to mobile advertising we can say that it is a fast growing segment of advertising providing agencies and marketers with a possibility to reach consumers directly on their mobile phones, offering exciting opportunities not available for traditional and digital media as currently mobile phones are used not only for calling and messaging as a decade ago, but rather for internet surfing, social media activities and gaming, that carry both content and advertising.

The mobile phone usually has just one unique user and hence is an extremely personal device. This fact makes mobile devices precisely targeted communication channel, where users are highly engaged with content. As an outcome, the mobile channel delivers campaign effectiveness and response levels that are beyond the reach of other advertising means. Compared to web- based advertising, mobile advertising has several advantages as it has high penetration rate, while being personal individually addressable communication device that supports multimedia and interactivity capabilities. Thus, advertisers can associate each user with fully personalized ads to increase large value of mobile ads.<sup>17</sup>

In 2013, global mobile ad spending increased 105.0% to total \$17.96 billion, according to new figures from eMarketer<sup>18</sup> published in March 2014, while in 2014, mobile is on pace to rise another 75.1% to \$31.45 billion, accounting for nearly one-quarter of total digital ad spending worldwide.

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<sup>17</sup> <http://research.microsoft.com/en-us/um/beijing/events/ia2011/n6.pdf>

<sup>18</sup> <http://www.emarketer.com/Article/Driven-by-Facebook-Google-Mobile-Ad-Market-Soars-10537-2013/1010690>

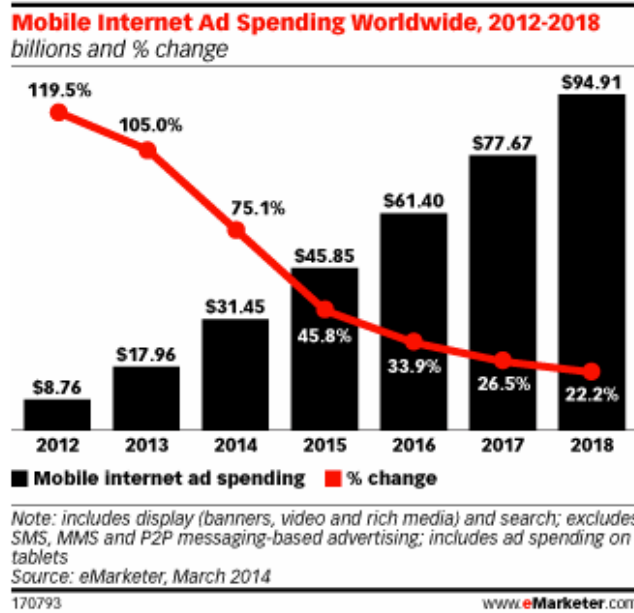


Figure 27. Mobile Internet Ad spending worldwide

As for geography of the spend, according to eMarketers findings North America is still dominating total global ad spending as well as its digital component and will lead in digital ad spending worldwide through 2016, though its share will decline, while Asia-Pacific, Eastern Europe, Latin America and the Middle East and Africa will increase expenditures in digital ad spending and become bigger players in the global digital ad market.<sup>19</sup>

**Digital Ad Spending Worldwide, by Region, 2011-2017**  
billions

	2011	2012	2013	2014	2015	2016	2017
North America	\$34.58	\$39.70	\$45.44	\$51.05	\$56.24	\$61.31	\$65.59
Asia-Pacific	\$22.40	\$30.58	\$33.76	\$37.77	\$41.78	\$45.83	\$50.18
Western Europe	\$23.51	\$25.76	\$28.39	\$31.37	\$33.79	\$36.09	\$38.25
Central & Eastern Europe	\$2.87	\$3.70	\$4.55	\$5.28	\$5.97	\$6.50	\$7.03
Latin America	\$2.48	\$3.39	\$4.11	\$5.29	\$6.18	\$7.23	\$8.27
Middle East & Africa	\$0.59	\$0.91	\$1.35	\$1.86	\$2.42	\$3.06	\$3.80
<b>Worldwide</b>	<b>\$86.43</b>	<b>\$104.04</b>	<b>\$117.60</b>	<b>\$132.62</b>	<b>\$146.38</b>	<b>\$160.02</b>	<b>\$173.12</b>

Note: includes advertising that appears on desktop and laptop computers as well as mobile phones and tablets, and includes all the various formats of advertising on those platforms; excludes SMS, MMS and P2P messaging-based advertising; numbers may not add up to total due to rounding  
Source: eMarketer, Aug 2013  
162195 www.eMarketer.com

Figure 28. Digital Ad Spending Worldwide<sup>20</sup>

<sup>19</sup> <http://www.slideshare.net/catchadigital/emarketer-worldwideadspendingforecast>

<sup>20</sup> <http://www.emarketer.com/Article/Mobile-Expands-Its-Share-of-Worldwide-Digital-Ad-Spend/1010170>

As for the Mobile ad spending as a share of the overall digital ad spending in 2013 eMarketer expected<sup>21</sup>, 18.8% of all digital ad spending in North America to go toward mobile internet ads—which include all mobile advertising on tablets, smartphones and other devices except messaging-based formats. While Western Europe and Asia-Pacific have 12.6% and 12.3% of all digital spending occurring on mobile, respectively. By 2017, nearly half of all digital ad spending in North America will be on the mobile internet.

<b>Mobile Internet Ad Spending Share of Total Digital Ad Spending, by Region, 2011-2017</b>							
<i>% of total</i>							
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
North America	4.0%	10.8%	18.8%	26.1%	33.9%	41.5%	49.1%
Western Europe	3.3%	6.5%	12.6%	20.4%	27.2%	33.4%	39.7%
Asia-Pacific	7.9%	8.8%	12.3%	15.5%	19.4%	22.9%	26.0%
Latin America	1.7%	2.3%	3.7%	5.5%	7.8%	10.6%	14.5%
Middle East & Africa	1.7%	2.3%	3.7%	4.6%	5.7%	7.2%	8.9%
Central & Eastern Europe	1.3%	1.9%	3.6%	5.2%	7.1%	9.4%	11.7%
<b>Worldwide</b>	<b>4.6%</b>	<b>8.5%</b>	<b>14.2%</b>	<b>19.8%</b>	<b>25.6%</b>	<b>31.0%</b>	<b>36.3%</b>

*Note: includes display (banners, video and rich media) and search; excludes SMS, MMS and P2P messaging-based advertising; includes ad spending on tablets*  
*Source: eMarketer, Aug 2013*

161923 www.eMarketer.com

Figure 29. Mobile internet Ad spending as a share of total digital ad spending

Western Europe is expected to expand its share more rapidly than Asia-Pacific, as a relatively mature desktop ad market gives over to mobile channels. Latin America, the Middle East and Africa, and Central and Eastern Europe all have less mature digital ad markets overall, but the direction is clear: A greater share of all digital dollars will go toward mobile each year. By 2017, eMarketer expects, 36.3% of digital ad spending around the world will go toward mobile formats, up from just 4.6% as recently as 2011.

North America not only remains the biggest market in terms of the ad spending, but is also a trendsetter which clearly reflecting the market situation can be used as a benchmark for other markets.

In the present work we focus on the three following subcategories:

- Direct advertising
- Keyword advertising
- Display advertising

<sup>21</sup> <http://www.emarketer.com/Article/Mobile-Expands-Its-Share-of-Worldwide-Digital-Ad-Spend/1010170>

These categories in 2013 represent 98,6% of all the mobile ad spending on the world’s leading digital advertising market . The other types of the mobile advertising, examples being email advertising and lead generation, will not be put on the spotlight due to their triviality and relative insignificance to the scope of the present work.

<b>US Mobile Ad Spending, by Format, 2011-2017</b>							
<i>millions</i>							
	2011	2012	2013	2014	2015	2016	2017
<b>Search</b>	\$743	\$2,241	\$4,348	\$6,661	\$9,300	\$12,229	\$15,253
<b>Display</b>	\$547	\$1,848	\$3,809	\$5,988	\$8,661	\$11,571	\$14,499
—Banners, rich media and other*	\$479	\$1,605	\$3,233	\$4,960	\$7,041	\$9,248	\$11,512
—Video	\$68	\$244	\$576	\$1,029	\$1,619	\$2,324	\$2,987
<b>SMS/MMS/P2P messaging</b>	\$251	\$223	\$240	\$223	\$211	\$209	\$200
<b>Other (classified, email, lead gen)</b>	\$27	\$50	\$112	\$214	\$389	\$695	\$1,176
<b>Total</b>	<b>\$1,568</b>	<b>\$4,363</b>	<b>\$8,508</b>	<b>\$13,086</b>	<b>\$18,561</b>	<b>\$24,705</b>	<b>\$31,128</b>

*Note: ad spending on tablets is included; numbers may not add up to total due to rounding; \*includes ads such as Facebook’s Sponsored Stories and Twitter’s Promoted Tweets*  
Source: eMarketer, Aug 2013

161792 www.eMarketer.com

Figure 30. US Mobile ad spending by format<sup>22</sup>

Quite interestingly Facebook and Google accounted for a majority of mobile ad market growth worldwide in 2014. Combined, the two companies saw net mobile ad revenues increase by \$6.92 billion, claiming 75.2% of the additional \$9.2 billion that went toward mobile in 2013. Facebook in particular is gaining significant market share. In 2012, the social network accounted for just 5.4% of the global advertising market. In 2013, that share increased to 17.5%, and analysts predict it will rise again this year to 21.7%. Google still owns a plurality of the mobile advertising market worldwide, taking a portion of nearly 50% in 2013, but the rapid growth of Facebook will cause the search giant’s share to drop to 46.8% in 2014. The two companies are consolidating their places at the top of the market, accounting for more than two-thirds of mobile ad spending in 2013—a figure that will increase slightly in 2014, according to research of eMarketer discussed above.

<sup>22</sup> <http://www.emarketer.com/Article/Mobile-Gains-Greater-Share-of-Search-Display-Spending/1010148>



**Net Mobile Internet Ad Revenue Share Worldwide, by Company, 2012-2014**

% of total

	2012	2013	2014
Google	52.6%	49.3%	46.8%
Facebook	5.4%	17.5%	21.7%
Twitter	1.5%	2.4%	2.6%
Pandora	2.6%	2.1%	1.7%
YP	2.9%	2.1%	1.6%
Millennial Media	0.8%	0.8%	0.7%
Other	34.2%	25.8%	24.9%

**Total mobile internet ad revenues (billions) \$8.76 \$17.96 \$31.45**

Note: net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; includes display (banners and other, rich media and video) and search; ad spending on tablets is included; excludes SMS, MMS and P2P messaging-based advertising

Source: company reports, 2012 & 2013; eMarketer, March 2014

170637

www.eMarketer.com

Figure 31. Net mobile internet ad revenue share by company

As for the European market, in terms of digital Ad spending UK unquestionably remains on the leading position, overcoming by far the runner-up Germany, which in its turn has double of the spend of the third digital ad spending country- France.

**Digital Ad Spending in Western Europe, by Country, 2011-2017**

billions

	2011	2012	2013	2014	2015	2016	2017
UK	\$7.63	\$8.60	\$9.63	\$10.83	\$11.70	\$12.52	\$13.27
Germany	\$4.57	\$5.05	\$5.65	\$6.22	\$6.59	\$6.94	\$7.29
France	\$2.49	\$2.64	\$2.80	\$3.05	\$3.26	\$3.46	\$3.65
Italy	\$1.44	\$1.52	\$1.65	\$1.83	\$2.05	\$2.28	\$2.51
Netherlands	\$1.37	\$1.48	\$1.60	\$1.72	\$1.84	\$1.95	\$2.05
Spain	\$1.15	\$1.14	\$1.15	\$1.24	\$1.36	\$1.47	\$1.57
Sweden	\$0.83	\$0.91	\$1.01	\$1.10	\$1.18	\$1.25	\$1.31
Norway	\$0.74	\$0.79	\$0.85	\$0.91	\$0.97	\$1.03	\$1.08
Denmark	\$0.65	\$0.73	\$0.80	\$0.86	\$0.92	\$0.99	\$1.05
Finland	\$0.28	\$0.31	\$0.35	\$0.37	\$0.39	\$0.41	\$0.42
Other	\$2.35	\$2.60	\$2.91	\$3.25	\$3.53	\$3.80	\$4.05
<b>Western Europe</b>	<b>\$23.51</b>	<b>\$25.76</b>	<b>\$28.39</b>	<b>\$31.37</b>	<b>\$33.79</b>	<b>\$36.09</b>	<b>\$38.25</b>

Note: includes advertising that appears on desktop and laptop computers as well as mobile phones and tablets on all formats mentioned; includes display—affiliates, banners, rich media, sponsorships, tenancies and video (in-stream, in-banner, in-text); search (paid listings, contextual text links, paid inclusion); classifieds; and email (embedded ads only); includes mobile ad spending and lead generation within existing formats, mainly search and banners; numbers may not add up to total due to rounding

Source: eMarketer, June 2013; confirmed and republished, Aug 2013

158771

www.eMarketer.com

Figure 32. Digital Ad spending in Western Europe by country

eMarketer expects<sup>23</sup> investment in digital ads to rise steadily in all EU-5 nations through 2017, but the relative rankings of these countries will remain unchanged. Germany, for example, will account for an estimated 19.9% of regional spending in 2013 and 19.1% in

<sup>23</sup> <http://www.emarketer.com/Article/Display-Mobile-Key-Drivers-of-Western-European-Digital-Ad-Spending-Growth/1010371>

2017. France will claim 9.9% of digital ad investments this year. Italy and Spain will continue to lag in share, thanks chiefly to the severe economic difficulties both countries are suffering. In Germany, growth in digital ad spending is expected to peak in 2013, while France should see its most dramatic gains next year. In Italy and Spain, by contrast, the economic turmoil of recent years has severely hindered the development of digital advertising. Growth rates in both countries, which reflect those markets' relative immaturity, are still climbing and are projected to begin falling only after 2015. In most of Western Europe's major ad markets, expenditure on search ads is diminishing as a share of total digital ad investments, while display advertising is increasing—and helping fuel digital ad spending growth. The popularity of video ads among both consumers and advertisers is a major driver of display's growth in the region.

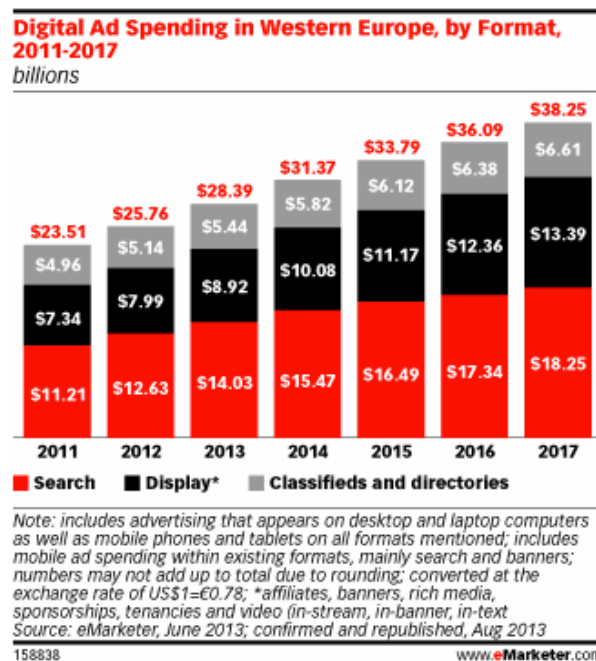


Figure 33. Digital Ad Spending in Western Europe by format

As for the advertisers, according to Nielsen's research<sup>24</sup> Industry & Services and FMCG continued their reign as the macro sectors with the highest percentage growth during the first three quarters of 2013.

<sup>24</sup> <http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2014%20Reports/global-adview-pulse-2013-q3-lite.pdf>

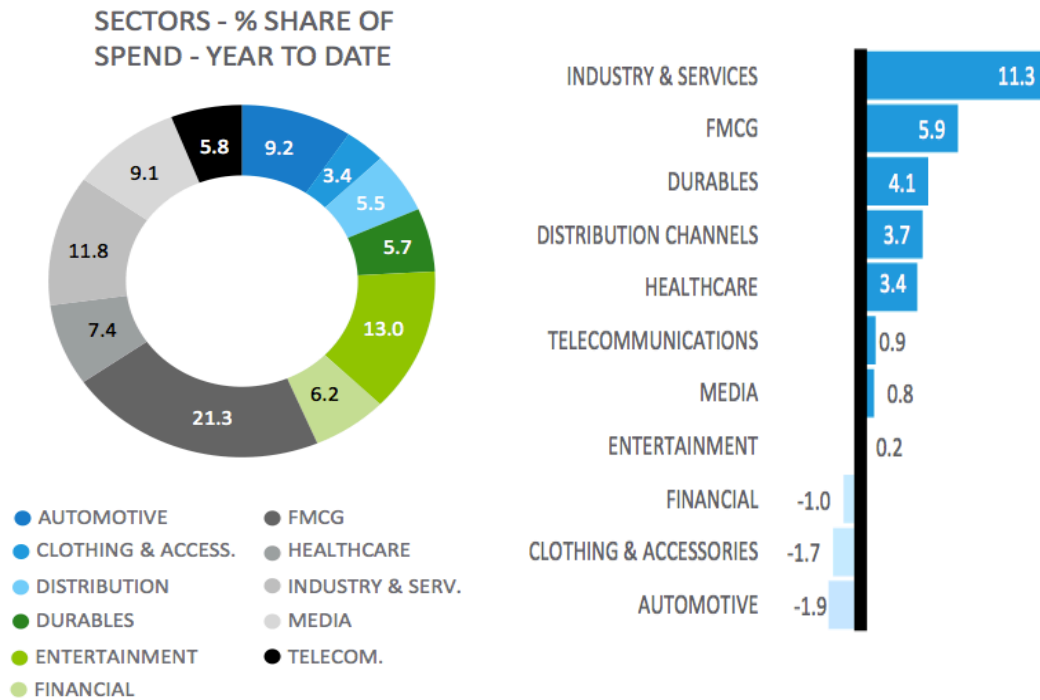


Figure 34. Macrosectors in terms of advertising spend

The Industry & Services macro sector, driven by advertising in the Property category, saw an impressive 33.9 percent increase in the Asia Pacific, while the sector dropped by - 5.7 percent in North America (mostly due to US election advertising, which took place in Q3 2012). Automotive advertisers put on the brakes globally, cutting ad spend by - 1.9 percent for the year - to - date. Automotive advertisers in Europe cut budgets by - 11.2 percent, while advertisers in the Asia Pacific reduced spending by - 6.8 percent.

As for the means of media, Television continued to reign as the most favored method to reach potential consumers (commanding a 57.6% share of all spending), with advertisers pouring 4.3 percent more investments into TV, however Internet advertising has showing significant growth figures, overcoming by 5x the growth of other formats.

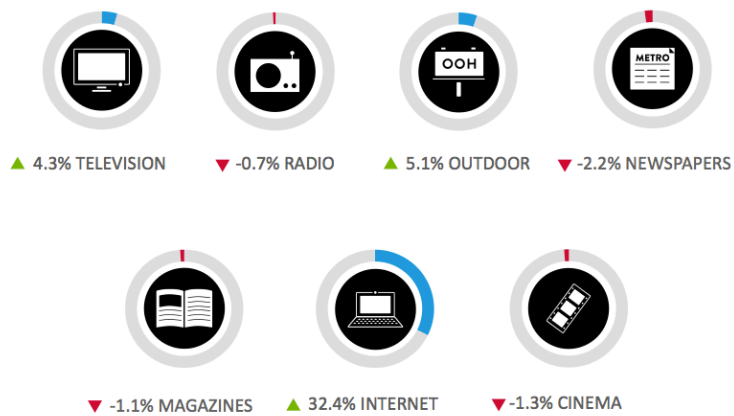


Figure 35. Media means growth rate 2012-2013

Speaking about the biggest spenders in terms of brands, Nielsen provides with the following list that has been quite stable over the course of the last years:

- Procter&Gamble
- Unilever
- L'oreal
- Ford motor
- General motors
- Toyota motors
- Volkswagen group
- Mcdonald's
- Nestle
- Honda motor
- Pepsico
- Nissan
- Mars
- The Coca cola company
- Time warner
- Johnson&Johnson
- Microsoft
- Pfizer
- Samsung

To make the reading smooth and sequential in this chapter we will proceed in the logical order starting from the conventional types of advertising including direct advertising and contextual advertising, putting the strongest emphasis on the display advertising, describing all the variety of the subcategory with the respective real world examples.

## **2. Direct mobile advertising**

Direct advertising is a strategy aimed at reaching potential and existing consumers without any mediator to establish the connection with the target audience. Direct advertising is considered to be a powerful tool in the hands of the mobile savvy marketer not only thanks to its one-to-one relationship nature, but rather because its outcomes could be effectively measured. Meaning that in the simplest case if advertisers sends a message to his database of 100 consumers and 15 of them react to the message, the advertiser can say with confidence that campaign led directly to 15% direct responses.

In the mobile eco-system direct advertising is represented by SMS, MMS and MMS video advertising that would be covered below starting from the first.

### **2.1 SMS advertising**

The SMS definition provided by the Mobile Marketing Association<sup>25</sup>:

“Short Message Service (SMS) is a communications service that allows the exchange of short text messages, limited to 160 characters, between mobile phones. It is also referred to as “text messaging” or “texting.” SMS messages can be sent and received between virtually all operator networks. Virtually every mobile phone in the world supports SMS, creating a ubiquitous market for SMS-based advertising campaigns. SMS supports messages sent from one user to another, as well as messages sent from a machine, such as a PC, application or server, to a user.”<sup>26</sup>

It is important to notice the SMS as well as MMS advertising is possible thanks to the existence of the Mobile Network Operators that provide the advertisers and consumers with a Short Message Service Center and Multimedia Messaging Service Centre , whose purpose

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<sup>25</sup> <http://www.mmaglobal.com/>

<sup>26</sup> [www.mmaglobal.com/files/mobileadvertising.pdf](http://www.mmaglobal.com/files/mobileadvertising.pdf)

is to store, forward, convert and deliver SMS and MMS messages from the sender to the right addressee.

SMS has a way better performance than typical e-mail direct advertising having in some cases an open rate of 97%<sup>27</sup>, while respective one of the e-mail averages at around 15%<sup>28</sup>

Customers and potential customers are not only more likely to read a marketing message or offer sent via SMS, but they are also likely to do so much more quickly than with other media.

According to some studies a typical user will respond to an email in about 90 minutes, but respond to a text message in about 90 seconds<sup>29</sup>



Figure 36. SMS campaign example

Another advantage of the SMS advertising is the possibility to reach an engaged audience, since consumers are opting in to mobile promotions and make decisions about text campaigns they choose, so that brands are able to market more directly to a captive, and loyal, target audience, this fact distinguishes the SMS advertising from email campaigns, where consumers typically subscribe for brands they may be only be partly interested in.

According to the Oxygen8 there are 5 main metrics to assess the performance of the SMS campaign<sup>30</sup>:

<sup>27</sup> <http://www.velocify.com/resources/whitepapers/whitepaper-download/?msg=whitepaper&KW=SMS-Study&wp=102>

<sup>28</sup> <https://www.mailermailer.com/resources/metrics/2012/open-rates.rwp>

<sup>29</sup> <http://www.youtube.com/watch?v=AyV7lI85MqU&feature=youtu.be&t=36s>

<sup>30</sup> <http://blog.oxygen8.com/five-metrics-to-assess-the-effectiveness-of-sms-marketing/#.UqTCMOLNky0>

- 1) Delivery rate: The delivery rate tells you the percentage of messages successfully delivered, out of the total subscribers who the SMS is sent to. Delivery rates vary widely based on a variety of factors (list size, message frequency and pre-paid phone composition).
- 2) Open Rate: Open rate is a measure of how many subscribers on an SMS list open a particular SMS campaign after receiving it, normally expressed as a percentage.
- 3) Opt-Out Rate: The opt-out rate tells us the percentage of recipients who opt out after receiving an SMS campaign. A high opt-out rate for an SMS campaign can signal that the incorrect audience has been targeted, or the content within the SMS didn't provide value to your audience. Better targeting, and split testing your SMS campaigns can help decrease opt-out rates
- 4) Click-Through Rate: The click-through rate measures the proportion of subscribers who initiated action with respect to an advertisement that redirected them to another page where they might purchase an item or learn more about a product or service.
- 5) Conversion Rate: The conversion rate is the proportion of visitors who take a valuable action. This can be a purchase, signup, phone call, reply SMS, app download or simply a page view.

Interesting trend to be noted is involvement of SMS players to the field of application installs, according to Infobip SMS is crucial for modern app engagement; it's a unique way to tackle the problem of general awareness of the app and audience targeting. Additionally, SMS is making it easier for potential users to find and install their apps Sending a download link via SMS hits the sweet spot where engagement, nurturing and promotion come together, at the same time without being overly or overtly invasive<sup>31</sup>.

Speaking about SMS from a business perspective, it would be interesting to take a look at the report of Gartner, one of the world's leading information technology research and advisory companies, that says that SMS marketing is still in force today, and will continue to be so for a long time despite predictions of decline or abandonment in favour of other channels.

Services like Whatsapp and Kakaotalk are apps that enable users to send messages over an IP channel instead of using the traditional SMS. So it may be argued that SMS is dying in favour

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<sup>31</sup>[http://www.infobip.com/blog/app\\_promotion\\_summit\\_boosting\\_app\\_downloads\\_with\\_sms#sthash.6rS2YPiT.dpuf](http://www.infobip.com/blog/app_promotion_summit_boosting_app_downloads_with_sms#sthash.6rS2YPiT.dpuf)

of these new forms of technology that are taking over the traditional mobile messaging. These apps have a downside, and it is that they are non-interoperable, so you can only send messages to other users of the same app<sup>32</sup>. eMarketer agrees, stating that spend on SMS/MMS and P2P messaging, not only will not decrease but will rather grow over the course of the upcoming years.

<b>US Mobile Ad Spending Growth, by Format, 2012-2017</b>						
<i>% change</i>						
	2012	2013	2014	2015	2016	2017
<b>Display</b>	<b>238.0%</b>	<b>132.5%</b>	<b>59.5%</b>	<b>44.6%</b>	<b>33.6%</b>	<b>25.3%</b>
—Video	257.5%	166.5%	81.2%	57.4%	43.5%	28.6%
—Banners, rich media and other*	235.2%	127.3%	55.6%	42.0%	31.3%	24.5%
<b>Search</b>	<b>201.7%</b>	<b>118.8%</b>	<b>55.4%</b>	<b>39.6%</b>	<b>31.5%</b>	<b>24.7%</b>
<b>SMS/MMS/P2P messaging</b>	<b>-11.0%</b>	<b>3.1%</b>	<b>2.1%</b>	<b>1.2%</b>	<b>0.6%</b>	<b>0.5%</b>
<b>Other (classified, email, lead gen)</b>	<b>86.6%</b>	<b>231.2%</b>	<b>59.2%</b>	<b>69.8%</b>	<b>77.1%</b>	<b>67.7%</b>
<b>Total</b>	<b>178.3%</b>	<b>120.0%</b>	<b>56.0%</b>	<b>41.8%</b>	<b>33.1%</b>	<b>26.0%</b>

Note: ad spending on tablets is included; \*includes ads such as Facebook's Sponsored Stories and Twitter's Promoted Tweets  
Source: eMarketer, Dec 2013

166079 www.eMarketer.com

Figure 37. US mobile ad Spending Growth

Although the growth rates are negligible in comparison with other types of advertising still there are opportunities for savvy marketers, especially when it comes to Location-based advertising as it is one of the way to provide consumers with 'targeted ads', plying them with promos dependent on their whereabouts to generate a better engagement response. Data from Juniper Research says the aforementioned platform will boom in the next five years, encouraging the mobile messaging ad spend to hit \$7.4bn within the next five years<sup>33</sup>



## Case history

**Company:** Kiehl's

**Description:** American cosmetics brand retailer that specializes in making premium skin, hair, and body care products Kiehl's used in-store signage, email marketing and social media to promote the use of their SMS Campaign, which they dubbed Kiehl's Alerts. The cosmetic company had two opt-in methods, one being signing up online, which you can see here (or in

<sup>32</sup> <http://www.onbible.com/info/worldwide-mobile-advertising-revenue-in-2013/>

<sup>33</sup> <http://www.mobile-ent.biz/development/location/mobile-sms-ad-spend-to-hit-7-4bn-by-2017/038698>



the image below), and the second being texting the SMS keyword “KIEHLS” to the SMS short code



Figure 38. Kiehl case history

### Results after six months:

- 73% of customers who had signed up for Kiehl's SMS marketing campaign had actually purchased at least one of their products
- 81% of respondents to a survey taken after the pilot program remembered Kiehl's SMS marketing messages.
- 90% of the customers who received Keihl's text offers actually made a purchase in-store during during that six month pilot program.<sup>34</sup>

Concluding we can add that there is no doubt that SMS is the ultimate channel for introducing a consumer to a brand's mobile program. It is easy to understand and accessible to nearly everyone who owns a mobile phone.

Text messaging acts as one of the most influential first lines of offense in a mobile strategy through its ability to connect the channel to backend databases, point-of-sale systems, loyalty programs, email service providers, and other CRM tools. SMS thus becomes elevated as a valued component of a holistic marking effort, rather than consigned as yet another disparate set of big data that cannot be effectively managed.<sup>35</sup>

<sup>34</sup> <http://www.tatango.com/blog/sms-marketing-case-study-kiehls-experiences-73-redemption-rate/>

<sup>35</sup> <http://thenextweb.com/mobile/2013/11/01/sms-making-comeback-conduit-connecting-mobile-consumers-technically-never-left/#!pgcQA>

## 2.2 MMS advertising

The MMS definition provided by the Mobile Marketing Association:

“Multimedia Messaging Service (MMS) is a rich media messaging service that allows mobile users to send and receive messages/media that can include graphics, photos, audio, video and text. Unlike the Mobile Web, this media resides on the user’s mobile phone, so a data connection isn’t required to access the ad content once the message has been received”<sup>36</sup>

In other words MMS is an advance way to send text messages that include pictures and videos to mobile phones. Thanks to MMS capabilities brands, advertisers, and businesses can deliver powerful messages with multimedia content and increase brand recognition, sales, promotions, and marketing

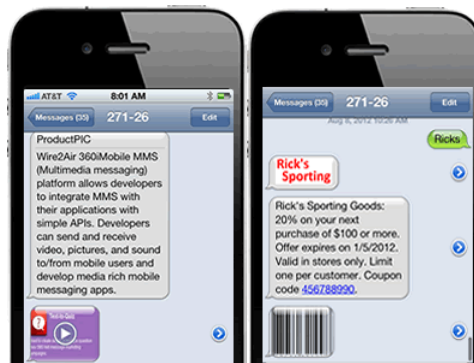


Figure 39. Examples of video and barcode Multimedia Messages

Although MMS might seem as a slightly out-dated means of communication, the reality provides with different figures, according to the Cellular Telecommunications Industry Association’s study<sup>37</sup> mobile consumers sent some 74 billion MMS messages in 2012, a figure that rose, while the number of minutes of talk and text messages decreased.



### Case history

**Company:** Vans

<sup>36</sup> [www.mmaglobal.com/files/mobileadvertising.pdf](http://www.mmaglobal.com/files/mobileadvertising.pdf)

<sup>37</sup> [http://files.ctia.org/pdf/CTIA\\_Survey\\_YE\\_2012\\_Graphics-FINAL.pdf](http://files.ctia.org/pdf/CTIA_Survey_YE_2012_Graphics-FINAL.pdf)

**Description:** Prior to the Saint Valentine’s day Vans has created an attractive MMS campaign to send loved ones an MMS message to express that love. User needed just to go to the website, select a video, customize the message and enter the loved ones mobile phone number<sup>38</sup>.

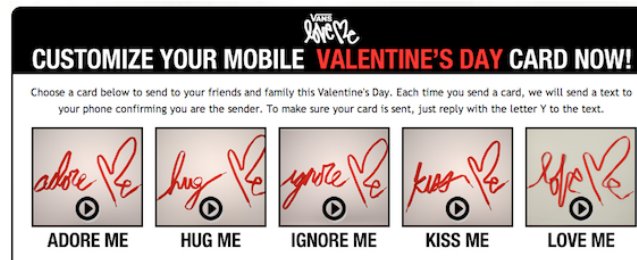


Figure 40. Vans case history. Site

Then within a couple seconds the loved one would receive an MMS message from the short code that looked like the following, where on a click a video was launched with a shoe laces picturing the phrase picked by a sender:

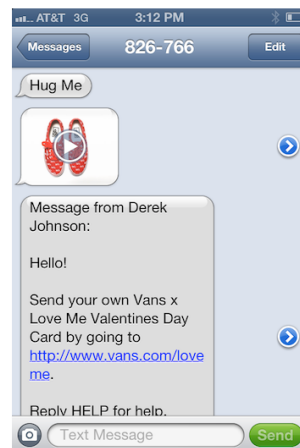


Figure 41. Vans case history. Message

## Results:

Vans used MMS as a great way to get message across and managed to drive engagement, that nowadays is seen as one of the cornerstones of a successful mobile campaigns.

Additionally, by using the channel Vans had driven loyalty since customers who opted-in to the program gave permission to the brand to message them about the latest products or specials.

<sup>38</sup> [http://www.tatango.com/blog/vans-launches-mms-campaign-for-valentines-day/?utm\\_medium=twitter&utm\\_source=twitterfeed](http://www.tatango.com/blog/vans-launches-mms-campaign-for-valentines-day/?utm_medium=twitter&utm_source=twitterfeed)

### 3. Keyword advertising

Keyword definition offered by Google:

“Keywords are phrases that you choose to determine when and where your ad can appear. They're matched to terms that people search for or web content that they view. Selecting keywords that are closely related to your ads can help you reach customers who are looking for what your business has to offer”<sup>39</sup>.

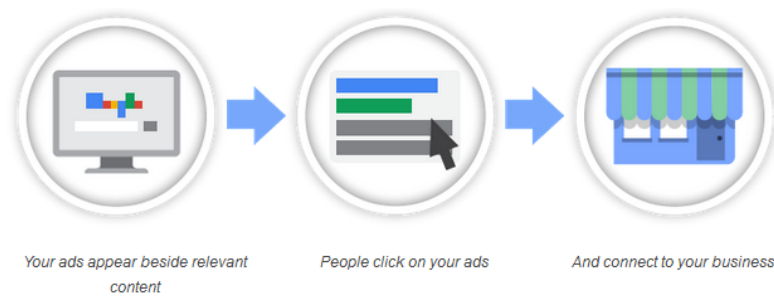


Figure 42. Keyword advertising flow

The keyword advertising on the mobile devices implies ads specifically targeted to the word(s) typed into a search box. These keyword targeted ads also appear on content sites based on search engine system's interpretation of the subject matter on each page of the site

The Keyword advertising on mobile allows acquiring visibility in the specific areas of search engines (sponsored links or sponsored panels). Advertiser normally pays on a Cost-per-click basis, meaning the predefined cost for each time when a mobile user clicks on the links and moves on to the advertisers landing page. The cost for each click made by users on their sponsored links is highly variable depending on the search engine and keywords of interest.

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<sup>39</sup> [https://support.google.com/adwords/topic/3119130?hl=en&ref\\_topic=3119122](https://support.google.com/adwords/topic/3119130?hl=en&ref_topic=3119122)

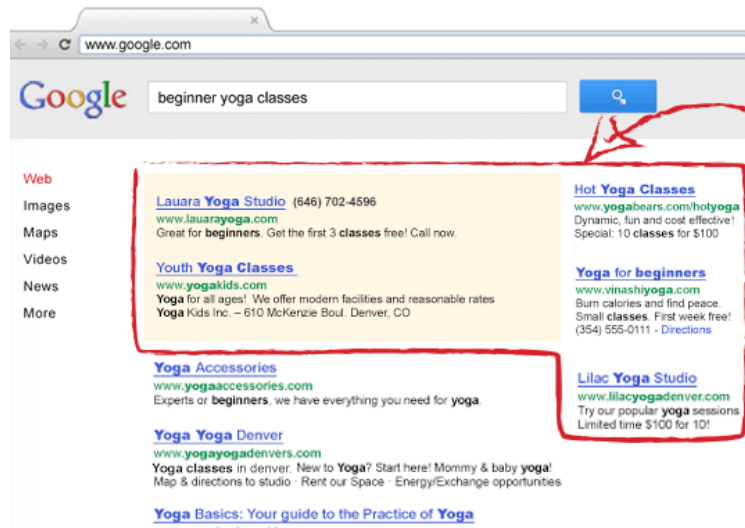


Figure 43. Example of sponsored links

This methodology allows to quickly reach high visibility in search engines, consequently offering an excellent way to gain brand exposure and attract qualified visitors to the website, giving also a possibility to have local, national or international ad distribution, along with an opportunity to target specific languages.

Another feature of the targeting capabilities, is the possibility to show the right creative, site link, app or extension based on user context and device capabilities. For example, you can show location extensions for customers near your store, on mobile, during business hours.<sup>40</sup>

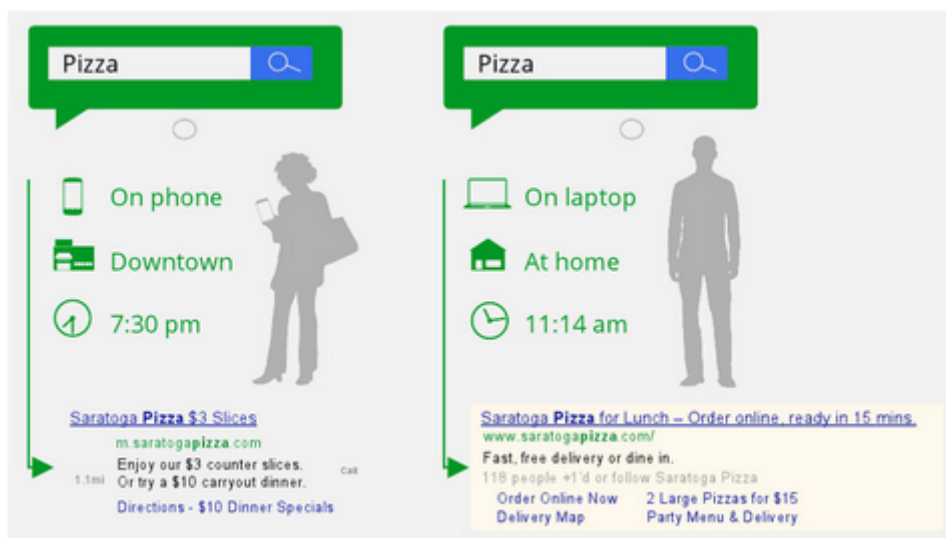


Figure 44. Keyword targeting capabilities

<sup>40</sup> <http://www.google.com/think/products/enhanced-campaigns.html>

There are several platforms that allow keywords campaigns setting, the most famous and popular are Google Adwords, Yahoo! Search Marketing, Miva Microsoft AdCenter and Looksmart. Each of them covers a number of search engines or third-party sites, which appear in the sponsored listings.

Actions initiated by click have different flows depending on the concrete need of the advertiser, in the typical example click leads to landing page, that could be represented by the home page of the website or by its specific section. Furthermore, it is possible to embed click-to-call function to the keyword ad, not only generating ad impressions and clicks, but also adding a possibility to get in touch with a prospective or existing customer right after the ad impression. For the advertisers interested in the app download boost the option to add a click-to-download link is provided



Figure 45. Keyword advertising. Various click-to actions

During the planning process advertisers mainly consider two aspects: the level of matching between the keyword and the ad text and the communicational effectiveness of the ad itself. Once these aspects are taken into the consideration by the advertiser he is offered a higher Click-through-rate (CTR), meaning an improved efficiency of the advertising campaign. The CTR could be monitored in real time meaning a possibility for the advertiser to keep track and optimize the performance at any moment, reaching a better ad relevance and exposure to the right audience.

As for the numbers, looking at the table mentioned previously in the chapter, we see that search advertising is still representing a very big part of the advertising spending, in 2013 it accounted for 51% of the overall ad spend on the biggest advertising market of the world-US.

**US Mobile Ad Spending, by Format, 2011-2017**  
millions

	2011	2012	2013	2014	2015	2016	2017
<b>Search</b>	<b>\$743</b>	<b>\$2,241</b>	<b>\$4,348</b>	<b>\$6,661</b>	<b>\$9,300</b>	<b>\$12,229</b>	<b>\$15,253</b>
<b>Display</b>	<b>\$547</b>	<b>\$1,848</b>	<b>\$3,809</b>	<b>\$5,988</b>	<b>\$8,661</b>	<b>\$11,571</b>	<b>\$14,499</b>
—Banners, rich media and other*	\$479	\$1,605	\$3,233	\$4,960	\$7,041	\$9,248	\$11,512
—Video	\$68	\$244	\$576	\$1,029	\$1,619	\$2,324	\$2,987
<b>SMS/MMS/P2P messaging</b>	<b>\$251</b>	<b>\$223</b>	<b>\$240</b>	<b>\$223</b>	<b>\$211</b>	<b>\$209</b>	<b>\$200</b>
<b>Other (classified, email, lead gen)</b>	<b>\$27</b>	<b>\$50</b>	<b>\$112</b>	<b>\$214</b>	<b>\$389</b>	<b>\$695</b>	<b>\$1,176</b>
<b>Total</b>	<b>\$1,568</b>	<b>\$4,363</b>	<b>\$8,508</b>	<b>\$13,086</b>	<b>\$18,561</b>	<b>\$24,705</b>	<b>\$31,128</b>

*Note: ad spending on tablets is included; numbers may not add up to total due to rounding; \*includes ads such as Facebook's Sponsored Stories and Twitter's Promoted Tweets*  
Source: eMarketer, Aug 2013

161792 www.eMarketer.com

Figure 46. US Mobile search spend<sup>41</sup>

And over the course of the years, according to the analysts, it is not going to let the display lead the race showing impressive growth rates

**US Mobile Ad Spending Growth, by Format, 2012-2017**  
% change

	2012	2013	2014	2015	2016	2017
<b>Display</b>	<b>238.0%</b>	<b>132.5%</b>	<b>59.5%</b>	<b>44.6%</b>	<b>33.6%</b>	<b>25.3%</b>
—Video	257.5%	166.5%	81.2%	57.4%	43.5%	28.6%
—Banners, rich media and other*	235.2%	127.3%	55.6%	42.0%	31.3%	24.5%
<b>Search</b>	<b>201.7%</b>	<b>118.8%</b>	<b>55.4%</b>	<b>39.6%</b>	<b>31.5%</b>	<b>24.7%</b>
<b>SMS/MMS/P2P messaging</b>	<b>-11.0%</b>	<b>3.1%</b>	<b>2.1%</b>	<b>1.2%</b>	<b>0.6%</b>	<b>0.5%</b>
<b>Other (classified, email, lead gen)</b>	<b>86.6%</b>	<b>231.2%</b>	<b>59.2%</b>	<b>69.8%</b>	<b>77.1%</b>	<b>67.7%</b>
<b>Total</b>	<b>178.3%</b>	<b>120.0%</b>	<b>56.0%</b>	<b>41.8%</b>	<b>33.1%</b>	<b>26.0%</b>

*Note: ad spending on tablets is included; \*includes ads such as Facebook's Sponsored Stories and Twitter's Promoted Tweets*  
Source: eMarketer, Dec 2013

166079 www.eMarketer.com

Figure 47. US mobile ad spending growth by format

As for the devices in terms of mobile search spend tablets have a lion's share of it, representing according to the research of IgnitionOne<sup>42</sup>, 63%, while mobile phones have 37%. Following the spend company indicates that Google dominates by far the search market, accounting for 77,3% of the advertising spend in the last quarter of 2013.

<sup>41</sup> <http://www.emarketer.com/Article/Mobile-Gains-Greater-Share-of-Search-Display-Spending/1010148>

<sup>42</sup> <http://www.ignitionone.com/en/research/product-listing-ads-drive-growth-digital-marketing-tablet/#>

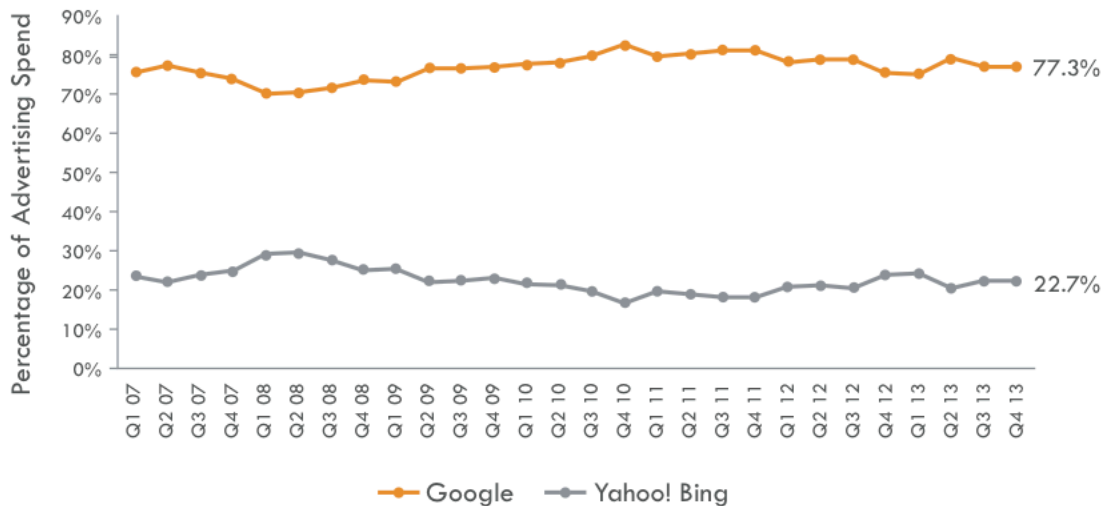


Figure 48. Search advertising percentage of ad spend by player

According to the report of global software company Kenshoo<sup>43</sup> Q4 2013 was the biggest quarter in paid search history fueled by another record-setting end-of-the-year online shopping season: Marketers spent more in Q4 2013 than any other quarter on record with a 19% Year-over-Year (YoY) and 29% Quarter-over-Quarter (QoQ) lift. In the Americas, three key paid search metrics - spend, click volume, and click-through rate -- reached their highest point over the last eight quarters. Marketers across EMEA drove volume and efficiency in Q4, with more impressions and more clicks at a higher click-through rate and lower overall CPC<sup>44</sup>

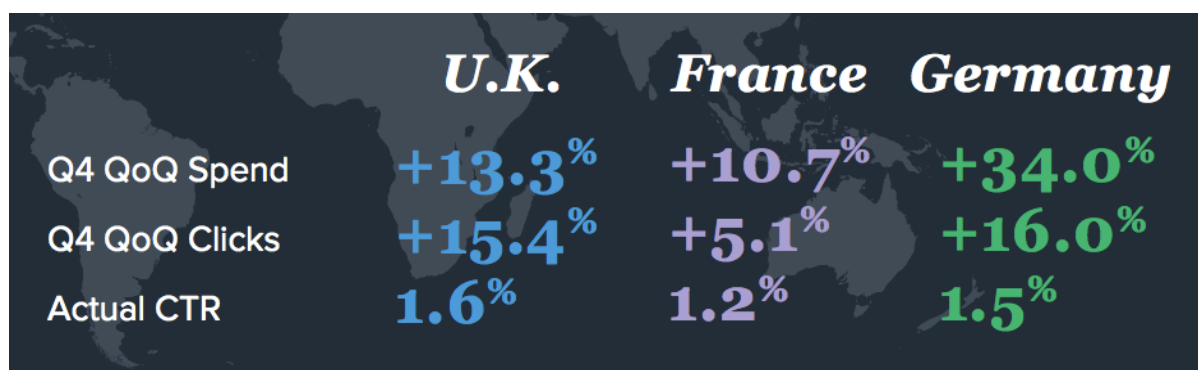


Figure 49. Quarter-over-quarter spend on search advertising in EU

Increased CPCs in Germany and France resulted in relatively higher lifts in spend vs. click volume, whereas the UK saw lower CPCs and, thus, increased campaign efficiency.

<sup>43</sup> <http://www.kenshoo.com/digitalmarketingtechnology/wp-content/uploads/2014/01/Kenshoo-Global-Search-Ad-Trends-Q4-2013-Americas.pdf>

<sup>44</sup> <http://www.kenshoo.com/digitalmarketingtechnology/wp-content/uploads/2014/01/Kenshoo-Global-Search-Ad-Trends-Q4-2013-EMEA.pdf>



Speaking about other big countries in terms of ad spending we can take a look at Australia and China, Both of which grew 6% in overall click volume, with increased CPCs in China contributing to higher QoQ growth in spend<sup>45</sup>.

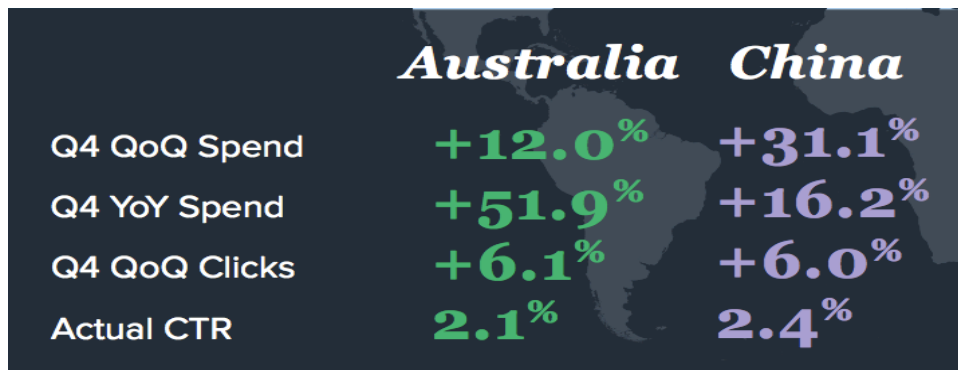


Figure 50. Quarter-over-quarter search ad spend in Australia and China



## Case history

**Company:** Nine west

**Description:** The fashion company worked to combine their text and Product listing ads (PLAs) to increase their overall exposure and brand engagement. Wanting to attract high-quality traffic from, the Nine west team expanded product type targets on PLAs, and launched individual “id” targets for each Nine West product as well. Product Listing Ads appeared when someone searched for their products on google.com and Google Shopping. An ad showed a picture of the item, the price, and store name. Customers who clicked on the ad were directed to the website.<sup>46</sup>

<sup>45</sup> <http://www.kenshoo.com/digitalmarketingtechnology/wp-content/uploads/2014/01/Kenshoo-Global-Search-Ad-Trends-Q4-2013-APJ.pdf>

<sup>46</sup> <http://services.google.com/fh/files/misc/en-googleshopping-ninewest-rkg-casestudy.pdf>

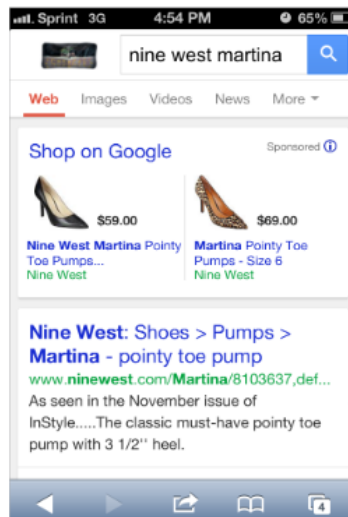


Figure 51. Nine West case history

### Results:

- Generated one-quarter of Nine West’s Google search revenue
- Conversion rate was 2.3X higher than overall search conversion rate
- Generated 15 percent of mobile search revenue
- Conversion rate was 2X higher than overall mobile search conversion rate

## 4. Display advertising

When designing a mobile display advertising campaign, there are multiple channels available to reach the potential or existing consumer. Mobile advertising is available on a number of platforms. Display ads can be delivered on WAP sites, full websites via mobile devices and inside apps. And each of the platforms requires a slightly different approach.

Accessing internet mobile devices use Wireless Application Protocol (WAP) browsers that automatically load a mobile website, that is also known as a WAP site. WAP sites can serve a variety of devices -- both powerful smartphones as well as those with less computing power. As sequence of the nature mobile, WAP sites are less graphically heavy than their desktop analogs and they are typically built with smaller screens in mind. As a rule of thumb mobile sites can be recognized by the "m." at the start of their URL. However, for the newest, advanced devices there is no problem with accessing both the WAP and full desktop websites.

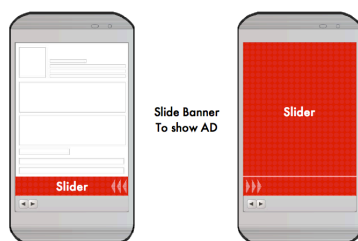
Mobile applications on the other hand are seen as a software or content that consumers download to or find pre-installed on their mobile phone and then resides on the phone. Examples include applications such as games, news readers and lifestyle tools. Downloads are accessible only to consumers with appropriate mobile phones.

Advertising in apps is considered to be slightly more complicated due to the fact that apps are not created equal. Each of them provides with a different customer experience. There are no standard layouts or user interfaces to make it easier for developing ads that run across many premium apps, although thanks to the efforts of organizations like Mobile Marketing Association(MMA) and Interactive Advertising Bureau(IAB<sup>47</sup>) the matters are becoming more standardized and transparent. In 2012 the latter has released<sup>48</sup> a new Standard Ad Unit Portfolio at its IAB Annual Leadership Meeting. Among these are the IAB Rising Stars Display ad units – new interactive ad units developed with digital publishers and agencies. The units comprise the following ones:

- Filmstrip



- Slider

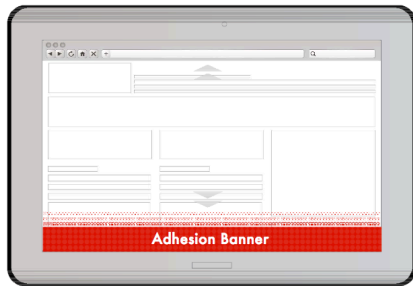


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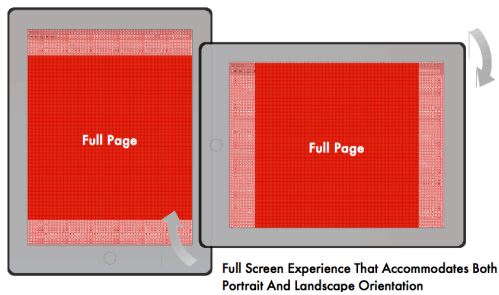
<sup>47</sup> <http://www.iab.net/>

<sup>48</sup> [http://www.iab.net/about\\_the\\_iab/recent\\_press\\_releases/press\\_release\\_archive/press\\_release/pr-020226\\_adportfolio](http://www.iab.net/about_the_iab/recent_press_releases/press_release_archive/press_release/pr-020226_adportfolio)

- Adhesion banner



- Full page



- Push



According to Marketing Vox<sup>49</sup> users are 2,5 times more likely to interact with a Rising Stars ad unit than a standard ad unit, spent twice as much time interacting with the ad and took less time to react to the ad—two times quicker than with standard ads. In addition, eye-tracking showed that users viewed ads longer, by 31%, with Rising Stars units versus standard

<sup>49</sup> <http://www.marketingvox.com/iabs-rising-stars-display-ad-units-lead-to-more-interaction-050689/>

formats. While Marketing charts<sup>50</sup> claims that the 6 mobile rising stars ad units enjoy a 9.3% interaction rate (slide, swipe, tap), almost double the rate for the standard mobile banner ad (5.2%)

Speaking about numbers, according to the report from Gartner<sup>51</sup>, global mobile ad spend will grow from \$13.1 billion in 2013 to \$18 billion in 2014, and hit \$41.9 billion in 2017, the end of Gartner's forecast period. With regard to the different ad formats used in the mobile sector, mobile display ad formats are collectively the single biggest category of ads, and will remain so throughout the forecast period, although this category will shift to mobile Web display after several years of higher growth in in-app display. Uptake of the audio/video format by the end of the forecast period is higher because the tablet form factor will drive video, and the tablet market continues to grow. eMarketer's forecast<sup>52</sup> of US mobile ad spending predicts that digital display spending will be still losing against the dominance of search, at an expected \$17.6 billion this year, including outlays on banners, video, rich media, sponsorships and other display formats, like Facebook's Sponsored Stories or Twitter's Promoted Tweets. Next year, combined spending on display formats will reach \$20.6 billion, close to search's expected \$21.6 billion in spending, and by 2015 display will pull ahead.

<b>US Digital Ad Spending, by Format, 2011-2017</b>							
<i>billions</i>							
	2011	2012	2013	2014	2015	2016	2017
<b>Search</b>	<b>\$15.1</b>	<b>\$17.3</b>	<b>\$19.6</b>	<b>\$21.6</b>	<b>\$23.2</b>	<b>\$24.8</b>	<b>\$25.6</b>
<b>Display</b>	<b>\$12.3</b>	<b>\$14.8</b>	<b>\$17.6</b>	<b>\$20.6</b>	<b>\$23.8</b>	<b>\$26.9</b>	<b>\$30.0</b>
—Banners and other*	\$7.6	\$8.6	\$9.5	\$10.2	\$10.8	\$11.4	\$12.2
—Video	\$2.0	\$2.9	\$4.1	\$5.7	\$7.0	\$8.2	\$9.2
—Rich media	\$1.7	\$1.8	\$2.1	\$2.4	\$3.4	\$4.4	\$5.4
—Sponsorships	\$1.1	\$1.5	\$1.9	\$2.3	\$2.6	\$2.9	\$3.1
<b>Classifieds and directories</b>	<b>\$2.6</b>	<b>\$2.6</b>	<b>\$2.7</b>	<b>\$2.8</b>	<b>\$2.9</b>	<b>\$3.0</b>	<b>\$3.1</b>
<b>Lead generation</b>	<b>\$1.5</b>	<b>\$1.7</b>	<b>\$1.9</b>	<b>\$2.1</b>	<b>\$2.2</b>	<b>\$2.2</b>	<b>\$2.3</b>
<b>Mobile messaging</b>	<b>\$0.3</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>
<b>Email</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.2</b>	<b>\$0.3</b>	<b>\$0.3</b>
<b>Total</b>	<b>\$32.0</b>	<b>\$36.8</b>	<b>\$42.3</b>	<b>\$47.6</b>	<b>\$52.5</b>	<b>\$57.3</b>	<b>\$61.4</b>

*Note: includes advertising that appears on desktop and laptop computers as well as mobile phones and tablets on all formats mentioned; data through 2012 is derived from IAB/PwC data; numbers may not add up to total due to rounding; \*includes ads such as Facebook's Sponsored Stories and Twitter's Promoted Tweets*  
Source: eMarketer, Aug 2013

161706 www.eMarketer.com

Figure 52. US digital spending by format

<sup>50</sup> <http://www.marketingcharts.com/wp/interactive/iab-says-mobile-rising-star-units-outperform-standard-banner-ads-30221/>

<sup>51</sup> <http://www.gartner.com/newsroom/id/2653121>

<sup>52</sup> <http://www.emarketer.com/Article/Mobile-Gains-Greater-Share-of-Search-Display-Spending/1010148>

## 4.1 Standard banner advertising

Mobile Marketing Association offers the following definitions for the Web and App banners<sup>53</sup>:

**Mobile Web Banner Ad** is a universal color graphics ad unit displayed on a Mobile Web site. The universal Mobile Web Banner Ad is defined as a still image intended for use in mass-market campaigns where the goal is a good user experience across all mobile phone models, network technologies and data bandwidths. In some cases animated mobile web ad banners may be available for supplemental use in campaigns to convey a richer experience. All Mobile Web Banner Ads must be clickable by the end user and may be placed in any location on a Mobile Web site. A Mobile Web Banner Ad may be followed by a Text Tagline Ad to emphasize the clickable character of the ad unit.

**Mobile Application Banner Ad** – is a universal color graphics ad unit displayed on a Mobile Application. The universal Mobile Application Banner Ad is defined as a still image(s), text or combination of these intended for use in mass-market campaigns where the goal is a good user experience across all mobile phone models, network technologies and data bandwidths. A Mobile Application Banner Ad can be clickable by the end user and may be placed anywhere in a Mobile Application (e.g., on the application main menu page, subpages or content pages).

Banner ad is similar to a traditional ad one would see in a printed publication like a newspaper or magazine, but it has the extra ability to bring a potential customer directly to the advertiser's web site or carry out an action required by the advertiser. In addition a banner ad has a dynamic capability. It is positioned in one place on a page, like a magazine ad, but it can present multiple images, contain animation and change look in a number of additional ways. Nowadays with a help of technologies banners can be not only static, but rather animated and dynamic.

These small rectangular advertisements are shown on all sorts of mobile web pages and mobile applications and vary considerably in appearance and subject matter, but they all share a basic function: once mobile consumer clicks on the he can initiate various types of engagement and interaction with the advertiser.

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<sup>53</sup> [www.mmaglobal.com/files/mobileadvertising.pdf](http://www.mmaglobal.com/files/mobileadvertising.pdf)



Figure 53. Banner advertising example

A click on a mobile banner ad on a mobile Web site or within a mobile app can create various interactions between a brand and consumers. According to Mobile marketer<sup>54</sup> some of the most common types of interactions are:

- **Click to Web** – This is when the user click on a banner and is brought to a dedicated landing page that goes into more depth about the initial offer that the banner mentioned.
- **App within an app** – This is when the user clicks on a banner ad within an application and is brought to a Web-like experience, without actually having to leave the app. This is a great experience because the user simply returns to the application after interaction with the ad unit is complete.
- **Click to call and click to text** – The user clicks to initiate a call or text message to communicate with the brand.
- **Click to rich media** – Most rich media ad units can be customized to the specific advertiser’s needs. But some of the most common executions are click-to-video, click-to-gallery and click-to-download.

In addition to the above stated types of possible click-to actions MMA<sup>55</sup> offers additional models, that apply to the mobile advertising in general and not necessarily to the display one:

- **Click to locate** (users find, for example, the closest car dealer or movie theatre, enabled by location-based services)
- **Click to order brochure** (users receive marketing materials by supplying their postal addresses)
- **Click to enter competition** (users enter text or sweepstake to win prizes)

<sup>54</sup> <http://www.mobilemarketer.com/cms/lib/12311.pdf>

<sup>55</sup> [www.mmaglobal.com/files/mobileadoverview.pdf](http://www.mmaglobal.com/files/mobileadoverview.pdf)

- **Click to receive email** (users receive an email and a link to online site by supplying their email address)
- **Click to receive mobile coupon** (users receive an electronic coupon on their mobile phone that can be redeemed immediately at a participating merchant)
- **Click to buy** (users make a purchase paid for with a credit card, added to their monthly mobile bill or using some other form of mobile payment)
- **Click to download content** (users download content, mobile applications, wallpapers or ring tones, onto their mobile phones)
- **Click to forward content** (users forward relevant content to friends, creating a viral campaign effect)
- **Click to vote** (users reply message ballot or poll from their mobile phone and provide marketers and brands with valuable research insights)

Banner ads are typically fairly simple pieces of text and images, but their strong presence in the mobile and their importance in Internet-based business is enormous.

On cellphones, ads are typically limited to two lines of text with 16 characters per line. However the actual size can vary significantly. The MMA is putting effort to reduce the variety to a more manageable number and offers nine sizes for the banners ranging from 120x20 to 320x50.

On average, banner ads deliver a 0.5-1.5% CTR, depending on where the ad is bought and placed. The click through rates maybe lower than those of other formats, but standard display banners remain one of the cheapest mobile ad formats. Especially when bought on a Cost-per-install basis, the format shows a high ROI and thus counts as one of the most popular ad formats for performance advertisers. Additionally, large display banners can be used as a valuable form of brand advertising, especially when bought on Cost-per-click and Cost-per-mile basis .

Currently, standard display banner ads offer the largest inventory available for mobile advertising. Many variables must be factored in, including the time of day, the publisher you



are advertising with, and different aspects of the ad. However, there is no limit to the volume of traffic provided.<sup>56</sup>



## Case history

**Company:** Crate and Barrel

**Description:** An American chain of retail stores specializing in housewares, furniture and home accessories ran a CPM campaign to drive mobile visitors to their mobile website from smartphone, iPod touch and iPad devices.



Figure 54. Crate&Barrel case history

## Results:

- iPad CPM ads drove a 15% CTR for Crate and Barrel.
- Overall CTR for Crate and Barrel CPM campaign was 3.48%, substantially higher than their average for online display.<sup>57</sup>

## 4.2 Progressive banner advertising

Apart from the unoriginal banners that are typically small in terms of size and occupy the space at the top or at the bottom of the page, market offers other banner advertising formats

<sup>56</sup> [http://www.trademob.com/wp-content/uploads/2013/11/Mobile\\_Ad\\_Formats\\_Explained\\_2013Nov.pdf](http://www.trademob.com/wp-content/uploads/2013/11/Mobile_Ad_Formats_Explained_2013Nov.pdf)

<sup>57</sup> <http://googlemobileads.blogspot.it/2010/10/retail-case-studies-in-mobile.html>

that have a much higher impact on the audience, consequently bringing better results to the advertising campaign.

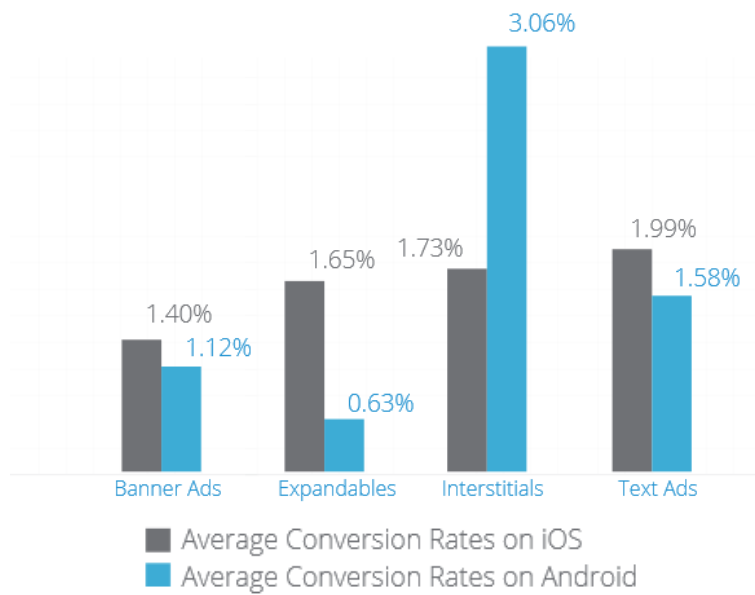


Figure 55. Average conversion rates by ad format<sup>58</sup>

### Interstitials:

In the unremittingly changing world of mobile display advertising, various types of ad formats now play a significant role in the achievement of customers' engagement. Savvy advertisers interacting with audiences within an increasingly limited and competitive space on the mobile screen must ensure continuous innovation and agility to capture desired consumer's attention.

The full-page interstitial ad is probably one of the most interesting solutions to this problem.

<sup>58</sup> [http://info.inmobi.com/rs/inmobi/images/InMobi\\_App\\_Insight\\_Report.pdf](http://info.inmobi.com/rs/inmobi/images/InMobi_App_Insight_Report.pdf)



Figure 56. Interstitial ad examples

**Mobile Interstitial Ad** - is a full-screen advertisement, which may be placed as a “bumper” screen for the launch and exit of the application, or as a splash or jump page within the application. It may be used as the landing page from an earlier ad banner or may be a stand-alone Interstitial. This Interstitial may also be active or static.<sup>59</sup>

Since an interstitial ad unit is usually around 10 times bigger than the size of a conventional banner ad and also because of how it appears within the flow of the content, this type of ad is much more likely to capture the user’s attention than other formats.

There are few types of interstitials, starting from static interstitials to rich media and video interstitials, and even timed interstitials, which are shown for a pre-defined time period. For apps, which typically have shorter app sessions, static interstitials are considered to be the most effective in driving engagement while for more engaging apps with longer app sessions, video interstitials deliver higher eCPMs. Static interstitials typically are observed to provide high CTR while video-interstitials are found to deliver superior engagement with the advertising brand.

Speaking about interstitial banners, we can mention also some relatively new types of banner advertising, one of which is called Postitial, where advertising comes in the form of presenting an advertisement to the user as he or she closes out of the application. As soon as the user hits the home button to leave the content, it is prompted to a full page ad space, which can be clicked out of simply by hitting the home button again, or touching the X button, prominently displayed at the top of the ad. These units are fetching huge revenues for

<sup>59</sup> [www.mmaglobal.com/files/mobileadvertising.pdf](http://www.mmaglobal.com/files/mobileadvertising.pdf)

developers that have implemented the space, and can be a great trade-off for the lost revenue seen with the change<sup>60</sup> in Google's Policy<sup>61</sup>

Smaato claims that publishers who have already integrated this new, full screen ad unit are seeing a 5x average increase in eCPMs and a 10% overall revenue uplift<sup>62</sup>



Figure 57. Postitial ad example



## Case history

**Company:** eBay

**Description:** The largest online marketplace decided to promote itself prior to the Christmas Eve to remain the top-of-mind among consumers and boost sales in the Christmas preparation period.

<sup>60</sup> <http://www.smaato.com/googles-new-ad-push-policy-how-its-affecting-advertising/>

<sup>61</sup> <http://play.google.com/about/developer-content-policy.html>

<sup>62</sup> <http://www.smaato.com/increase-your-revenue-and-ecpm-with-smaatoss-new-postitial-ad-unit/>



Figure 58. eBay case history

**Results:**

- High brand exposure and user engagement thanks to the usage of interstitial ads
- CTR 1,70%

**4.3 Video advertising**

Mobile video advertising is representing the third biggest category in terms of ad spend, after Search ads and Banner&Rich media ads. The ad share of mobile is still relatively small in comparison with the leading advertising formats, but it has a steady growth and is expected to account for \$1bln. of ad spending in 2014 in US only<sup>63</sup>



Figure 59. Mobile video ad flow

<sup>63</sup> <http://www.emarketer.com/Article/Mobile-Gains-Greater-Share-of-Search-Display-Spending/1010148>

According to MMA<sup>64</sup> the mobile video advertising types could be broke down as follows:

**Billboard Ad** – a static image or brand logo typically displayed full screen before or after the video content

**Bumper Ad** – a short video advertisement or sponsorship indent typically shown before or after the video content

**Pre-Roll Ad** – a video advertisement shown prior to the video content

**Mid-Roll Ad** – a video advertisement appearing as a break during the video content

**Post-Roll Ad** – a video advertisement shown after the video content has ended

**Book Ending Ad** – a Pre-roll video advertisement with a corresponding bumper ad from the same ad campaign appearing at the end of the video content

**Non-Linear Ad Breaks** share the mobile display with the streamed or downloaded video content for a given period of time. Ad unit formats include:

**Overlay Ads** are still/animated image advertisements that appear over the top of video content during playback. These ads can be semi-transparent or opaque and can be shown for the full or partial duration of the video content (appear/disappear effect). Variations include horizontal or vertical promotion banners, sponsorship skins (picture frames) and ad bugs.

**Companion Ads** are still/animated image advertisements that appear adjacent to video content during playback. Variations include drop-down horizontal banners or L-shaped banners that surround a resized video (shrink and surround)

Traffic volume that the advertiser can get on the market varies widely depending on format. For example, traffic will be higher with pre-roll and mid-roll ads since users must first view them before seeing the rest of their content. Generally speaking, videos have less traffic than standard banner advertisements, but the available inventory is increasing with the raising interest in this medium of display advertising.

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<sup>64</sup> [www.mmaglobal.com/files/mobileadvertising.pdf](http://www.mmaglobal.com/files/mobileadvertising.pdf)

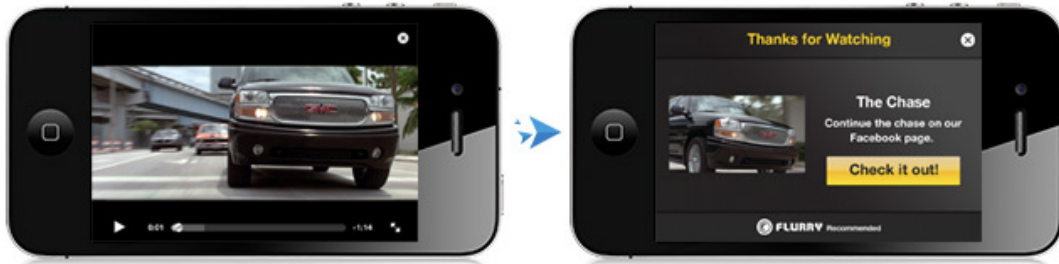


Figure 60. Mobile video ad example

Nowadays mobile video represents a “must-do” for many brands and Media agencies and the trend is ever positive, since the video, coming from the TV advertising represents the most comprehensive means of communicating the advertising message to the target audience.

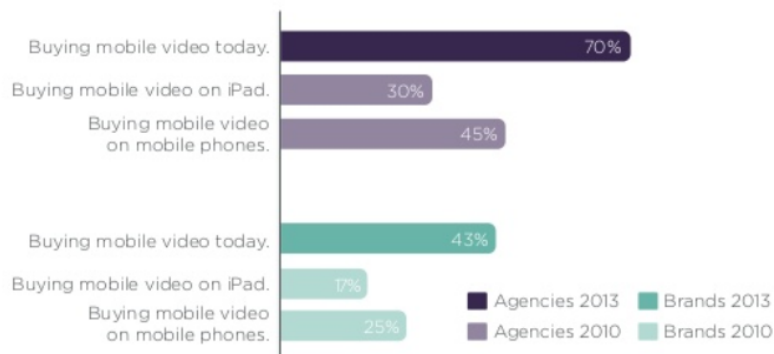


Figure 61. Mobile video buying trends<sup>65</sup>

As seen in the graph below brands carry out video display advertising mainly aiming at achievement of awareness of their product or service. However, it is to be noticed that in the Cost-per-download branch of the mobile advertising mobile video advertising is one of the most extensively used channels for acquisition of the new users and is surpassed just by the banner advertising.

<sup>65</sup> <http://blog.adap.tv/2013/10/22/adap-tvs-q4-2013-state-of-video-industry-report-video-grows-programmatically-across-screens/>

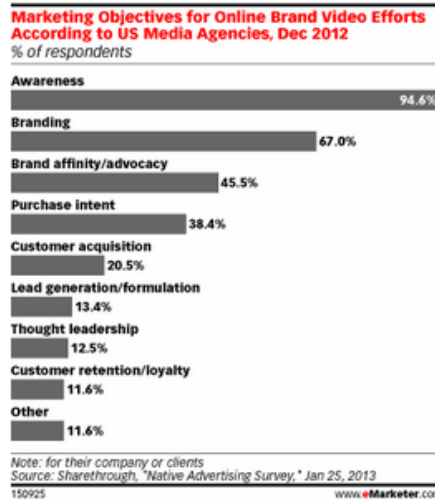


Figure 62. Marketing objective for Online brand video efforts<sup>66</sup>

Thanks to the escalation of mobile cleverness, quicker Internet speeds and a more connected society online, video ad spends keep growing at a significant pace. According to an eMarketer report<sup>67</sup>, online video ad spending was to reach \$4.14 billion in 2013, meaning an increase of 41.4% from 2012's numbers.

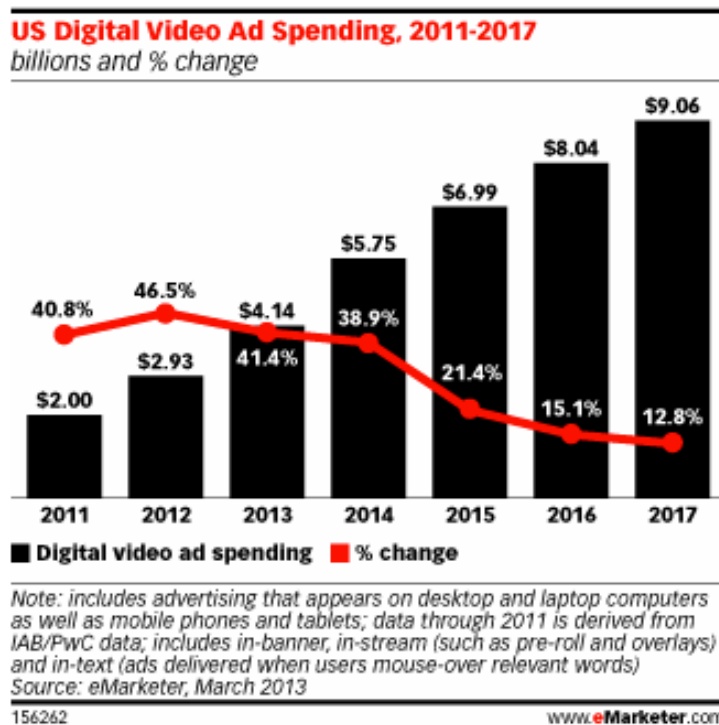


Figure 63. US Digital ad spending

<sup>66</sup> <http://www.emarketer.com/Article/Video-Advertising-Beyond-Top-of-Funnel/1010299>

<sup>67</sup> <http://www.emarketer.com/Article/Online-Video-Advertising-Moves-Front-Center/1009886>



The overall spends are expected to increase, with a prediction of \$9.06 billion dollar spend for 2017. Advertisers are flocking to online video because it provides with needed performance. The study shows that video ad-types bring increased brand awareness, message association, purchase intent and favorability.

It is interesting to note that not only brands can make the potential and existing customers aware of the new product as well as propose them to be involved into the further interaction with the brand. The possible interaction opportunities vary from simple redirection to the optimized m-site to social sharing that can potentially create a viral effect, helping the brand to gain an unpaid brand exposure thanks to the loyal consumers.

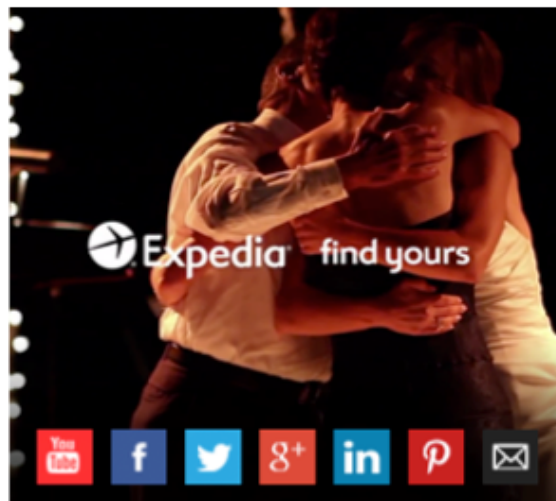


Figure 64. Mobile video interaction opportunities

Speaking about viral effect created by videos it is interesting to bring some examples to the table:

The Turkish Airlines Youtube campaign<sup>68</sup> launched on the 3rd December 2013 after some weeks had more than 133 million views, thanks to the participation of world basketball and football superstars Kobe Bryant and Lionel Messi and the viral effect created by the social sharing.

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<sup>68</sup> <http://www.youtube.com/watch?v=jhFqSlvbKAM>



Figure 65. Turkish Airlines Youtube campaign

The Volvo Trucks video campaign featuring Jean-Claude Van Damme that aired on the 13th November 2013 and in a month had around 60 million views on Youtube thanks to the the original idea of the footage and consequent viral effect generated by the Social media, bringing to the Volvo great brand awareness and gained sympathy from the young segment of the audience that one day may become members of the Volvo Truck owners family.

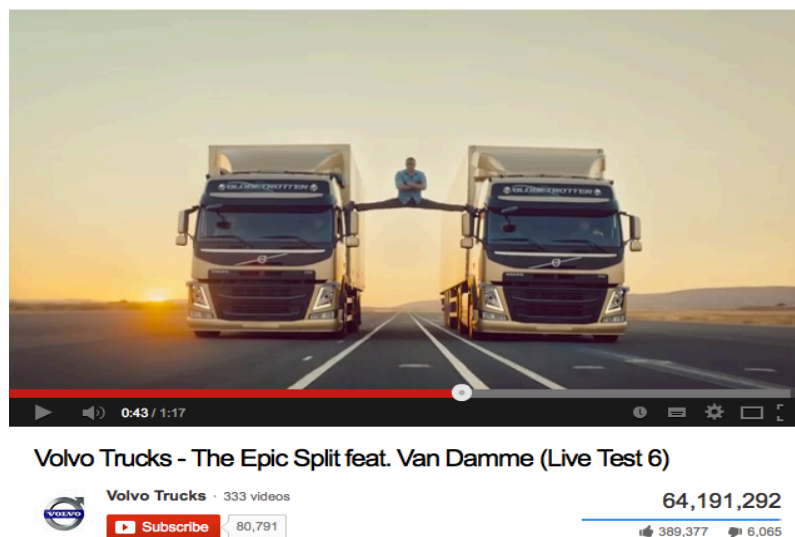


Figure 66. Volvo Youtube campaign



## Case history

**Company:** Sony pictures

**Description:** Sony pictures used mobile video to promote its new 3D computer-animated film “Hotel Transylvania” with objectives Convey film storyline & vibrant characters via an innovative, mobile video ad campaign, drive DVD purchases and Hotel Transylvania Monster Party App downloads.



Figure 67. Sony pictures case history

## Results:

- 841,000 completed video ad views
- 3,504 hours of video ads watched
- 7,7% “Shake Device” engagement rate
- 8,900 taps to Purchase DVD or Download an app<sup>69</sup>

<sup>69</sup> [http://adcolony.com/assets/pdf/adcolony\\_casestudy-sony.pdf](http://adcolony.com/assets/pdf/adcolony_casestudy-sony.pdf)

## 4.4 Rich media advertising

Rich media mobile ad could be depicted as advertisement, which provides users with an interaction and engagement opportunities that go beyond displaying text, static and animated graphics or video.

Typical display ads can either be static or animated with tools as Flash. They normally have only one interaction, meaning that when you click on them, you'll be taken to a target site. With rich media, you can have ads that expand when users click or roll over, offering are extensive possibilities for interactive content.

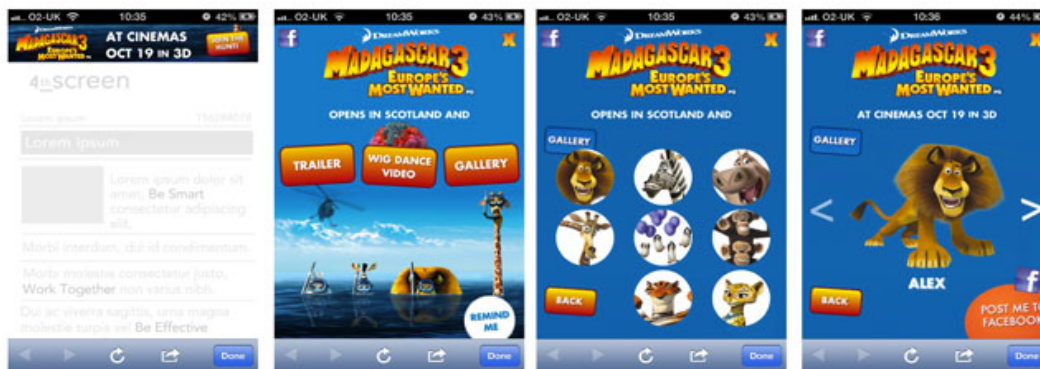


Figure 68. Rich media ad example

Some of the Rich Media units that are frequently observed in the mobile world include<sup>70</sup>:

**Expandable Ad:** a graphical banner element with one or more clickable content areas. Clicking on one of those content areas leads to the activation of an extended ad display area. This area temporarily overlays the core content and/or the original banner space during the user's interaction with the ad. The extended ad space can be used to display further content, solicit user feedback, play a short game or otherwise interact with the user. By clicking a close icon or by clicking outside the expanded ad display area, the user can make the ad expanded area disappear and reveal the core content and banner again for further use.

**Overlay Ad:** a graphical banner element with one or more clickable or sensitive content areas. Upon user activation, one or more graphical ad elements appear, overlaying the core content and/or the original banner space for a short period of time. The overlay element can appear anywhere on the screen, remain still or move across the screen, and can itself be still or use

<sup>70</sup> [www.mmaglobal.com/files/rmma.pdf](http://www.mmaglobal.com/files/rmma.pdf)

animated graphics. After the short display time period has elapsed or upon the user clicking anywhere on the screen, the overlay element immediately disappear and reveal the core content and banner again for further use.

**Interstitial Ad:** a full-screen graphical element with one or more clickable or interaction content areas. The ad displays for a short time period before disappearing and allowing the user to return to the core content. By clicking a skip icon, the user can make the Interstitial RMMA unit disappear and reveal the core content again for further use. Interstitial RMMA units may be placed as a bumper screen for the launch and exit of the application, or as a splash or jump page within an application. It may be used as the landing page from an earlier ad banner or stand-alone.

**Scrolling Ad:** a graphical banner element with clickable arrow icons (typically left and right end of the banner). Clicking on those icons allows the user to scroll through the banner content. This allows users to find more details or flip through multiple offers in the same banner asset. At any time, there is one or more clickable ad content areas (usually displayed between the arrow icons). Clicking on such content area will execute the interaction, e.g. by expanding (see Expandable RMMA Ad Unit), by linking to a micro site, etc.

**Cover Ad:** a graphical banner element (mainly used on touch screens) whereby a horizontal gesture over the banner leads to “rotation” of graphical elements (covers) within the banner content. This allows users to find more details or flip through multiple offers in the same banner asset. At any time, there is one clickable ad content area (usually the one cover displayed in the foreground). Clicking this content area will execute the interaction, e.g. by expanding, by linking to a micro site, etc.

Rich Media being one of the most compelling mobile ad units for the brand awareness campaigns provide with a numerous number of possible features that, as already stated before, a way beyond features provided by conventional ads(click-to-call, click-to-locate, click-to-download). The types of interaction are limited just by some phone specific characteristics and imagination of the advertiser and can include:

- Usage of phones accelerometer, providing with shake and tilt interaction options

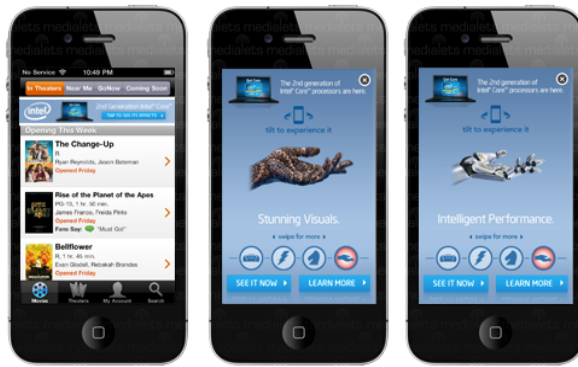


Figure 69. Rich media. Usage of accelerometer

- Drawable elements



Figure 70. Rich media. Drawable elements

- Image galleries



Figure 71. Rich media. Image galleries

- In-ad shopping bags

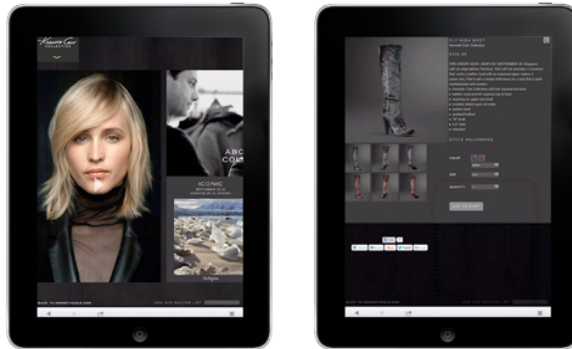


Figure 72. Rich media. In-add shopping bags

- Quizzes and games



Figure 73. Rich media. Quizzes and games

- Enhanced Social media sharing options



Figure 74. Rich media. Enhanced sharing options

- Transparent overlays



Figure 75. Rich media transparent overlays

- Vibration



Figure 76. Rich media. Vibration

The ability to serve rich media depends on both publisher and the mobile device. However, it is interesting to note that many WAP sites still do not fully support the Rich Media unites delivery, allowing the campaign execution just for a specific types of devices, namely iPhones and iPad, while Android and Blackberry remain as runner-up second-class citizens in this matter. This fact is quite surprising taking into account the lion’s share that Android holds on the market. As far as Blackberry is concerned it is to be stated that nonetheless they are losing ground, they still represent a big share of the financial community’s devices. Rich media can be served in-apps as well, however it is a tricky matter. The main problem is a lack of comprehensive coding standards, since apps do not share a unique coding standard, consequently requiring different codes from advertisers as well. This generates a source of



frustration for agencies since sometimes ads cannot just be re-purposed. It is not a trivial task to make Rich media perform for all apps across all devices.

The static banners , through the click leading to a landing page, can be effective, however nowadays consumers are quite connected to the increasingly interactive functionality of their devices and the high level of brand engagement is currently a prerogative of Rich Media ads. Aspects of real emotional involvement are the keys to success for an engagement quality, which can be the driving force of an advertising campaign that aims to achieve not only the brand awareness effect but loyalty and sales as well.

According to the Mediamind<sup>71</sup> usage Rich media boosts site visits three-fold, with video, six-fold, while Adform<sup>72</sup> provides with the data stating that Rich media ads have 200% higher CTR than standard banners, which is however still lower than the one of video ads, furthermore it is claimed that engagement rate of Rich media is around 9,9%, while non Rich media ads have something around 1,7%.

The advantages brought by the usage of Rich media units in the advertising campaigns could be summarized in the three following bullet points:

- Higher attention and interest capturing, even in case of non interaction
- Higher engagement rates in comparison with standard display ads
- Enhanced ad functionality, bringing the variety of possible click-to actions

According to, Celtra, the global leader for rich media mobile advertising and analytics across mobile devices, the list of the best practices for mobile rich media campaigns is the following:

**1) Develop clear goals for the campaign.** If the goal is brand building, customer acquisition or brand loyalty, a different number of pages, features and actions should be used. For brand building and brand loyalty, funnel ads or ads with multiple pages are ideal for driving consumer interaction and extending the time users spend with the brand. A simple rich media

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<sup>71</sup> [http://www.mediamind.com/sites/default/files/MediaMind\\_Rich\\_Powerful\\_Research.pdf](http://www.mediamind.com/sites/default/files/MediaMind_Rich_Powerful_Research.pdf)

<sup>72</sup> [http://www.adform.com/site/files/media/white-papers/Adform\\_Rich\\_Media\\_Benchmark\\_Europe\\_White\\_paper\\_Q3\\_13\\_Final.pdf](http://www.adform.com/site/files/media/white-papers/Adform_Rich_Media_Benchmark_Europe_White_paper_Q3_13_Final.pdf)

ad with a strong call-to-action is typically most effective in helping to drive customer acquisition.

**2) Determine which formats and features will drive the desired results.** Consumers want to purchase, research, discuss and interact with brands and their products. Through expandable ads with video, companies can provide extra information so users can satisfy their research goals. Sharing via social media allows brands to extend their brand message and make their campaign viral while enabling a brand dialog. Gaming encourages users to spend quality time with brands while playing users are focused and engaged with the brand. Ads based on dynamic content, such as location or weather, help to provide a personalized, relevant experience with the brand. Capabilities like tapping, swiping, tilting, shaking and painting provide a human touch.

**3) Brands and marketers need to design a consistent experience across multiple platforms.** There is no reason why experiences should be different across any of the platforms. Create one campaign that can be delivered across multiple platforms --including mobile Web, apps and tablets. HTML5 promises a consistent and rich user experience across multiple platforms.

**4) Build your ad with a rich media platform to save time and cost.** There is a better way of creating your next mobile advertising campaign than custom coding. A rich media ad creation platform enables rapid development of advanced rich media mobile ads without any software coding skills. When selecting a platform, make sure it optimizes elements for various OS platforms and device differences. The advantage is that you can create one ad and serve it across different platforms and distribution networks. The result – ads work flawlessly on all targeted devices without a lot of testing and optimization.

**5) Track your campaign across multiple properties and devices with universal reporting.** Effective rich media advertising metrics track users across platforms, enabling brands and agencies to track interaction and conversion throughout the campaign. Reports should also include detailed insight into user engagement so you can measure ROI and brand interaction across the entire campaign.

As for numbers, according to Juniper’s findings<sup>73</sup> rich media ad spend will surpass display ad spend in apps by 2018 as more engaging ad formats see huge uptake. As for engagement, Smartadserver<sup>74</sup> says that mobile rich media & mobile ad video ad units have experienced a huge growth in 2013 (respectively, x2.4 and x4.2).



Figure 77. Banner vs. Rich media CTR comparison

**Advertisers are increasingly ready to test innovative mobile formats.** Mobile rich media now accounts of 24% of delivered mobile ad banners and impressive mobile performances drag advertisers to mobile advertising, they seem increasingly interested in testing innovative mobile ad units.

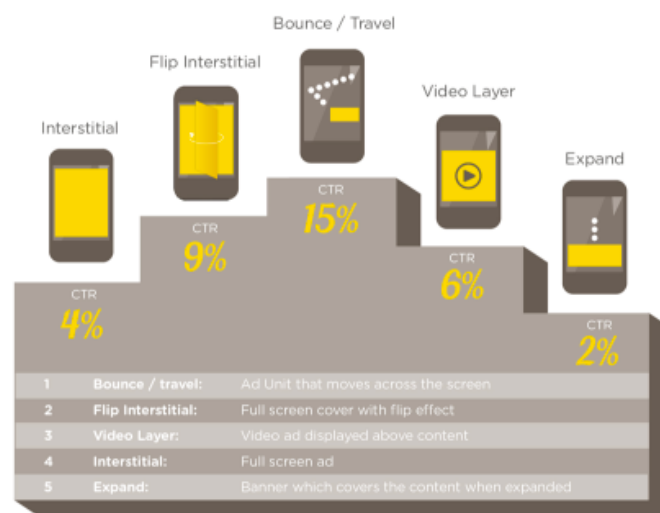


Figure 78. The most engaging Rich Media units

<sup>73</sup>[http://www.digitalstrategyconsulting.com/intelligence/2014/01/spend\\_on\\_inapp\\_advertising\\_set\\_to\\_soar.php](http://www.digitalstrategyconsulting.com/intelligence/2014/01/spend_on_inapp_advertising_set_to_soar.php)

<sup>74</sup><http://blog.smartadserver.com/2014/02/infographic-mobile-marketers-familiar-2014/#sthash.bxVpb3MS.dpuf>



## Case history n.1

**Company:** Adidas

**Description:** Adidas launched ‘Boost’, a revolutionary shoe with a new cushioning technology for its consumers in Philippines in February, 2013. The marketing campaign needed to target people who were always connected to their handset devices. Accordingly, the brand decided to focus on mobile as a medium to reach out to its audience and crafted an interactive HTML5 ad-unit which enabled users to “run” through difficult terrains, and also in different conditions. The ad-unit’s innovation lay in comparing an individual’s performance against other runners in the neighborhood, using the location tracking functionality and displaying the results on a custom map

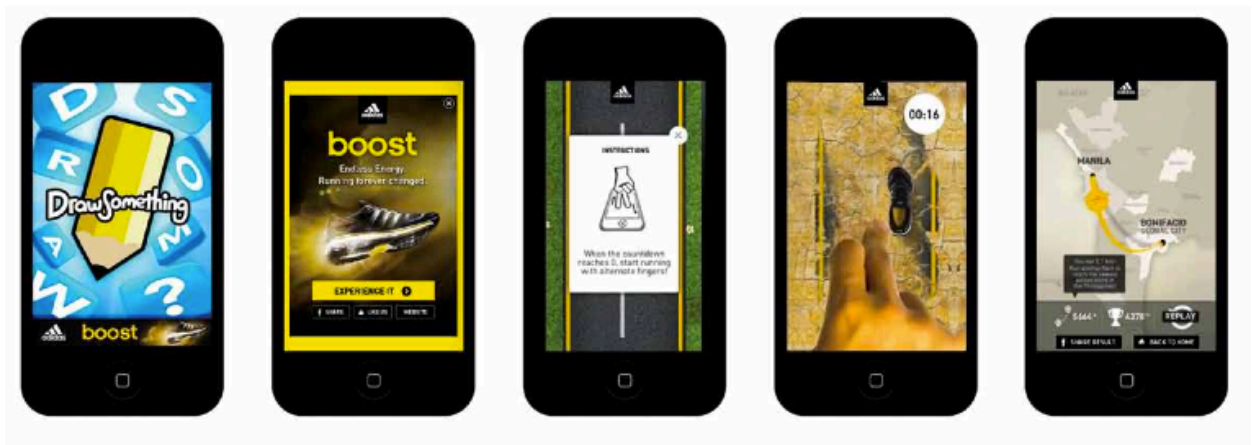


Figure 79. Adidas case history

### Results:

- Impressive user engagement with average visit duration > 60 seconds
- Average CTR was 1.27%, with a peak daily CTR at 2.02%<sup>75</sup>

<sup>75</sup> [http://www.inmobi.com/ui/uploads/case-studies/case-studiesAdidas\\_RunningFingers.pdf](http://www.inmobi.com/ui/uploads/case-studies/case-studiesAdidas_RunningFingers.pdf)



## Case history n.2

**Company:** Nokia

**Description:** As part of a multi channel campaign, Nokia wanted to build a mobile campaign that would be able to reach consumers in a relevant environment and educate them on the benefits of the Nokia Lumia smartphone and how it works. To do so a motion-activated rich media ad was created. The solution enabled consumers to discover the functionality of the smartphone in their own time by clicking through the different areas of the home screen. Once they arrive at each area, users had an option to explore the area and click for more information



Figure 80. Nokia case history

### Results:

- 0,8 CTR with a peak of 1,39%
- Average duration of visit 2 min 20 sec
- Average per cent of new visitors 79,3%

## 4.5 Other types of display advertisement

Apart from the mobile display ad categories mentioned in the previous subchapters, there are some other variations of display ads, that do not represent a massive share of the ad market, however some of the ad types discussed below are quite popular and are well-known by people spending a notable amount of time interacting with their mobile phones and more specifically with mobile apps.

### 4.5.1 Push notification advertisement

Push notification ads deliver small alerts to an Android phone's notification bar. When you swipe to pull down the notification bar from the top of your phone's screen, a corresponding ad shows up under Notifications

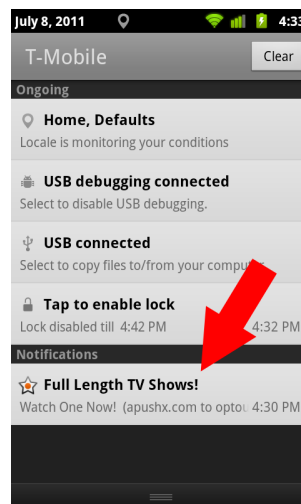


Figure 81. Push notification ad example

Basically, the actors operating on the advertising market bundle their adware into popular Android programs and users have hard times finding out the source of these intrusive ads, however there are apps on the market that being downloaded help to find out which app is the one bringing on the notification ads.

Apart from embedded adware, there are other options of delivering the notification ads, as an example, recently there has been a case with one of the Social media giants –Twitter, being accused of sending push notification featuring Dropbox's updates<sup>76</sup>.

<sup>76</sup> <http://www.businessinsider.com/report-twitter-testing-push-notification-ads-2013-9>

Good news for the mobile users is that recently Google updated its Play Store Developer Content Policy<sup>77</sup>, explicitly stating that apps and their ads must not display advertisements through system level notifications on the user's device, unless the notifications derive from an integral feature provided by the installed app. (e.g., an airline app that notifies users of special deals, or a game that notifies users of in-game promotions).

Meaning that somewhere in the near future the push notification ad business should face serious issues with the campaign execution.

Speaking about the effectiveness and efficiency of this campaign it is to be stated that according to the biggest player on the "Push market" - Airpush<sup>78</sup> the results are quite positive for the advertisers, bringing elevated CTR and conversion rate. In fact, Airpush Ranked #2 in the 2014 Forbes list of "America's Most Promising Companies"<sup>79</sup>, with 98 mln of 2013 revenues, underlining the power of innovative ad units, such as push notifications and other ones discussed below.

#### 4.5.2 Icon advertisement

Icon ads are sponsored shortcuts ("Icons") placed on the homescreen of an Android device icons. When you touch the icon, it launches a Web page-typically a search engine or Web service.



Figure 82. Icon ad example

According to Appflood claims<sup>80</sup> this type of advertisement is capable of bringing significant CTR and install rates.

<sup>77</sup> <https://play.google.com/about/developer-content-policy.html>

<sup>78</sup> <http://www.airpush.com/resources/case-studies/>

<sup>79</sup> <http://www.forbes.com/companies/airpush/>

<sup>80</sup> <http://appflood.com/blog/icon-ads-released>

### 4.5.3 Appwall advertisement

App walls are the advertising units that help users discover new free apps and special offers



Figure 83. Appwall ad example

This type of advertising is quite popular in the cost-per-download part of the performance mobile advertising campaigns. It is to be noted, that it is used extensively for incentivized app downloads as well, meaning that mobile users are presented with a wall containing different apps and they are rewarded with a specific quantity virtual currency for the defined set of actions (downloading an app, watching a video, completing survey, etc)



Figure 84. Appwall with incentivitation

### 4.5.4 Dialog advertisement

Dialog Ads launch in an unobtrusive manner when an app is in use and are available to engage with at the user's discretion.



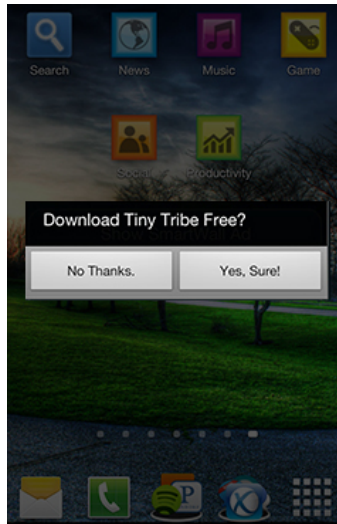


Figure 85. Dialog ad example

According to Airpush<sup>81</sup> Dialog Ads perform up to 2X better than traditional banner ads alone.

#### 4.5.5 Lock screen advertisement

As the name states this type of advertisement appears right on the lock screen of the mobile device and users are offered two options: swipe left accepting deal to watch a movie trailer, or whatever the chosen engagement is or they can swipe right and get back to using their phone.

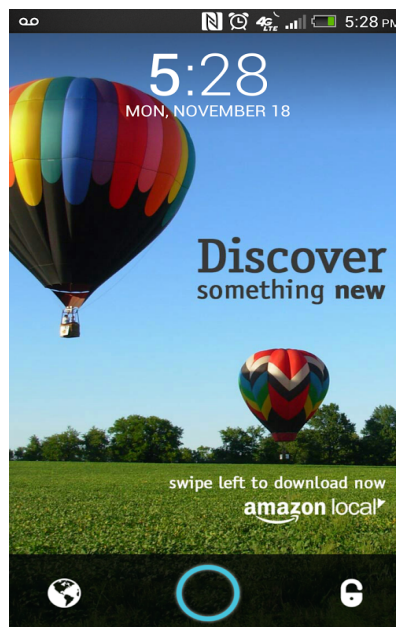


Figure 86. Lock screen ad example

<sup>81</sup> <http://www.airpush.com/>

Currently this type of advertising is offered just to the users who installed the application providing with this service, the reason for the mobile users is coming from the fact that the interaction with an ad is paid

## **5. Social media and native advertising**

Social medias nowadays are inevitable everyday destinations for millions if not billions of consumers, offering to advertisers incredible opportunities represented by native ad experiences and reinforced with targeting options according to specific demographics, social connections, interests, and habits. Generally speaking native advertising could be depicted as advertisement that permits brands to promote their advertising content into the experience of a site or an app in a non-interruptive way, integrated way. The principal traits of native advertising are solid visual incorporation, choice-based interaction and content-driven experiences. Creation of native content experiences, without any doubt, involves a more thoughtful and tailored execution approach (as matched with interruptive display ads). As a verification of the value brought by this new advertising medium many of the largest platforms were among the first to embrace the concept of native advertising. For instance, the leading platforms—Facebook, YouTube, Twitter, Tumblr and WordPress—have entirely adopted native advertising formats.

The social media advertising has all the reasons to be considered a serious lever to reach the audience that is relevant for the advertiser in each specific case. It is important to note that social media advertising in the majority of the cases has a native look and feel of the platform.

As claimed by CEO of the Sharethrough: “The future of digital marketing is going to be native. Advertising experiences like banners, boxes, buttons and pop-ups are permanently giving way to ad experiences that are native to a publisher’s property”.<sup>82</sup>

The research conducted by eMarketer<sup>83</sup> in the US approves of the above stated, claiming that the social media market players hold the best positions in terms of importance of advertising platforms.

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<sup>82</sup> [http://strlabs.wpengine.netdna-cdn.com/wp-content/uploads/2012/11/ForbesInsights\\_Sharethrough\\_GoingNative.pdf](http://strlabs.wpengine.netdna-cdn.com/wp-content/uploads/2012/11/ForbesInsights_Sharethrough_GoingNative.pdf)

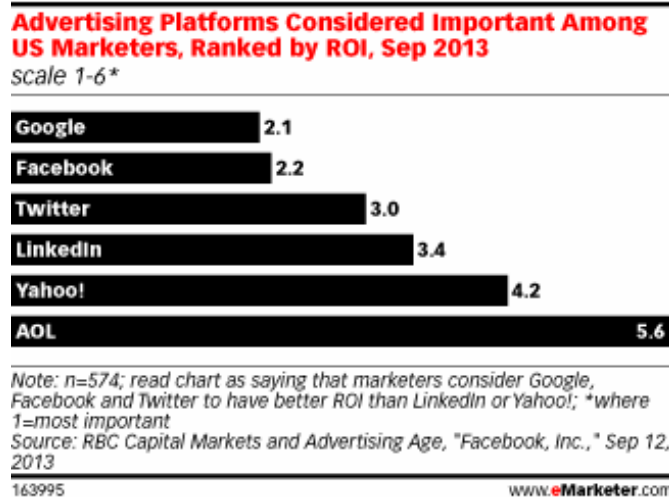


Figure 87. Advertising platforms considered important

Even if Google cannot be fully associated with the Social media advertising world, it has two major services: Google+ and Youtube that are fully social and are part of the social media indeed. However, Google is followed by pure Social medias: Facebook, Twitter and LinkedIn.

To understand the power of social media advertising it might be enough to take a look at the graph below<sup>84</sup> that clearly shows that Facebook became the second company according to the ad revenue sharing, being surpassed just by the almighty Google, however the Facebook's share is expected to grow, getting some 9% only on US market. The numbers in per cent terms might not look very impressive, but when translated into monetary ones they become self-explanatory: Facebook's 7,4% means some \$3.15 billion.

<sup>83</sup> <http://www.emarketer.com/Article/Year-of-Social/1010386>

<sup>84</sup> <http://www.emarketer.com/Article/Mobile-Growth-Pushes-Facebook-Become-No-2-US-Digital-Ad-Seller/1010469>

**Net US Digital Ad Revenue Share, by Company, 2012-2015**  
 % of total digital ad revenues

	2012	2013	2014	2015
Google	40.9%	39.9%	40.8%	42.3%
Facebook	5.9%	7.4%	8.2%	9.0%
Microsoft	6.2%	5.9%	5.7%	5.4%
Yahoo!	6.8%	5.8%	5.4%	5.0%
IAC	2.5%	2.5%	2.3%	2.2%
AOL	2.5%	2.3%	2.1%	2.0%
Amazon	1.2%	1.4%	1.8%	2.0%
Twitter	0.6%	1.0%	1.6%	2.2%
LinkedIn	0.4%	0.5%	0.7%	0.8%
<b>Total digital* (billions)</b>	<b>\$36.80</b>	<b>\$42.58</b>	<b>\$48.09</b>	<b>\$53.36</b>

*Note: includes advertising that appears on desktop and laptop computers as well as mobile phones and tablets, and includes all the various formats of advertising on those platforms; net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; \*data through 2012 is derived from IAB/PwC data*  
 Source: company reports, 2012 & 2013; eMarketer, Dec 2013

166311 www.eMarketer.com

Figure 88. Net US digital Ad revenue share

Shares of LinkedIn and Twitter seem to be relatively small (0,5% and 1% respectively), however the reader again should not be fooled by the numbers, even these small shares are bringing some billions to the founders of the Social media giants.

Social network ad spending is on the rise around the world, and spending per user is going up in every region even as new users continue to flock to social platforms. North America far outpaces any other region in spending by this metric, according to eMarketer estimates<sup>85</sup> of January 2014, and will continue to do so for the foreseeable future.

<sup>85</sup> <http://www.emarketer.com/Article/Social-Ad-Spending-per-User-Remains-Highest-North-America/1010505>

**Social Network Ad Spending per Social Network User Worldwide, by Region, 2012-2015**

	2012	2013	2014	2015
North America	\$19.03	\$26.05	\$32.82	\$39.89
Western Europe	\$10.24	\$12.04	\$13.71	\$16.17
Asia-Pacific	\$2.95	\$3.36	\$3.60	\$4.12
Central & Eastern Europe	\$1.36	\$1.87	\$2.21	\$2.54
Latin America	\$1.41	\$1.78	\$2.17	\$2.39
Middle East & Africa	\$0.27	\$0.37	\$0.50	\$0.66
<b>Worldwide</b>	<b>\$5.14</b>	<b>\$6.18</b>	<b>\$6.97</b>	<b>\$7.98</b>

*Note: includes display, search, video and other forms of paid advertising appearing within social networks, social games and social applications; excludes spending by marketers that goes toward developing or maintaining social network profile pages or branded applications*  
*Source: eMarketer, Jan 2014*

167617

www.eMarketer.com

Figure 89. Social Network Ad spending worldwide

eMarketer estimates advertisers will invest \$32.82 on social network advertising per social network user in North America in 2014, up from just over \$26 in 2013. That’s more than double per-user spending expected in Western Europe, the No. 2 social network ad market by this measure. Spending per user drops off sharply after the first two slots, with third-place Asia-Pacific only reaching a projected \$3.60 in social network ad spending per user.

Speaking about budget distribution among the Social medias it is evident that Facebook has a lion’s share, having Twitter and Youtube as runner-ups with an equal 13% share, that is around 5 times less than the one held by the Social giant-Facebook.

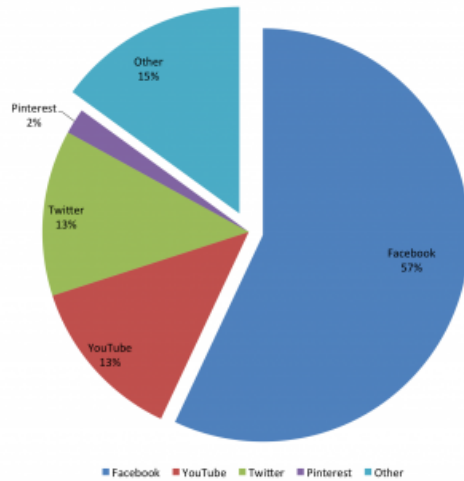


Figure 90. Budget distribution among social medias

Marketers are turning to native advertising to deliver content that merges with the experience of the publisher’s property. U.S. native-ad spending on social media was expected to hit \$2.36 billion, or 39% of total U.S. paid social ad in 2013 according to a report from market research company BIA/Kelsey. The report forecasts that social native ad spend will grow 93% to \$4.57 billion by 2017<sup>86</sup>.

In December 2013 IAB revealed its new whitepaper<sup>87</sup> that highlights six core interactive ad formats that are currently being used within the native advertising landscape and they are the following:

- **In-feed units**



Figure 91. IAB in-feed native ad units

<sup>86</sup> <http://www.emarketer.com/Article/How-Native-Ad-Campaigns-Shaping-Up/1010064>

<sup>87</sup> [http://www.iab.net/about\\_the\\_iab/recent\\_press\\_releases/press\\_release\\_archive/press\\_release/pr-120413](http://www.iab.net/about_the_iab/recent_press_releases/press_release_archive/press_release/pr-120413)

- **Paid search units**



Figure 92. IAB Paid search native ad units

- **Recommendation widgets**



Figure 93. IAB Recommendation widget ad units

- **Promoted listings**



Figure 94. IAB Promoted listing ad units

- **IAB standard ads with “native” element units**

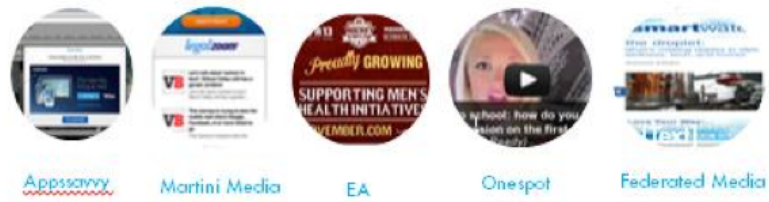


Figure 95. IAB Standards ads with native element units

- **Custom**

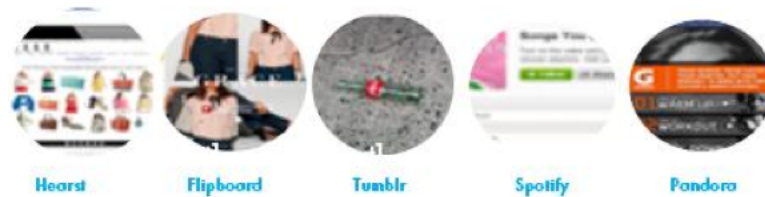


Figure 96. IAB Custom native ads

Speaking about Native advertising in comparison with traditional banners Vice President of TapSense provides with the following insights<sup>88</sup>:

### **Mobile Banner Ads: Strengths**

- **Massive Reach:** Mobile banner ads are currently supported by a large numbers of publishers. The format is also standardized and managed by trade associations like the IAB (Internet Advertising Bureau) and MMA (Mobile Marketing Association). This means advertisers can get massive reach through the format. Billions and billions of banner ad impressions are available on mobile daily.

<sup>88</sup> [http://www.cmo.com/articles/2014/3/14/mobile\\_native\\_ads\\_vs.html](http://www.cmo.com/articles/2014/3/14/mobile_native_ads_vs.html)



- **Inexpensive Format:** Relative to most channels, banner ads remain low cost. Search, sponsorships, print, and television all have high price points and are almost impossible to buy in low quantities. Banner ads can be purchased easily in small amounts and are available to advertisers with the smallest budgets.

- **Highly Flexible:** The format supports a multitude of unique targeting options. There are retargeting options, look-alike targeting options, data segmenting options, publisher-specific targeting systems--all available in almost every country around the world.

### **Mobile Banner Ads: Weaknesses**

- **Accidental Clicks:** Some estimates put the number as high as fifty per cent.<sup>89</sup> This number is not a huge surprise when the touch screen nature of most smartphones is taken into account. It does pose a problem for marketers; since a significant portion of those clicks are wasted, it skews brand measurement down and drives up cost.

- **Tiny Sizes:** The limited screen real estate offers brands and advertisers a sub-par creative experience at best. It's a challenge to communicate any message more complex than a logo and tagline. The rich and captivating experience of television is the reason that the format still commands the bulk of advertising dollars.

- **Poor Performance:** On mobile, banner ad performance overall has seen low click-through rates and even lower engagement metrics. Performance starts to look really bad once you see that some of the clicks you do get are in fact accidental. One study found that the average CPM payout to publishers in mobile is a meager \$0.75 Another study found that you're more likely to survive in a plane crash than click on a banner ad<sup>90</sup>.

### **Mobile Native Ads: Strengths**

- **Strong Performance:** While the format is still new and data is limited, early tests have shown strong performance and significant return on investments for marketers. In only a year's time, Facebook has been able to scale its native ads business to over \$1 billion in revenue, which means mobile native ads must be working extremely well for a certain segment of advertisers.

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<sup>89</sup> <http://www.businessinsider.com/error-rate-for-mobile-ad-fat-finger-clicks-2012-10>

<sup>90</sup> <http://unbounce.com/online-marketing/native-ads-vs-banner-ads/>

- **No Creative Development:** Most mobile native ad products don't require a significant investment in creative resources. This is great for marketers who want to test with a limited budget and have limited resources. Creative development for digital advertising is a significant barrier for many marketers.

- **Targeting Options:** Most native ad products have rich first-party data targeting options that can be difficult to access through another method. For example, accurate male-female targeting is possible, as is relationship status targeting.

### **Mobile Native Ads: Weaknesses**

- **Currently Limited:** Scalable native advertising models are limited. Outside of Facebook, most native ad products are still new and in early testing stages. At-scale native ad buying and campaign management tools are still emerging.

- **Fragmented And Nonstandardized:** The formats are not currently managed by the IAB and MMA. Each publisher is free to create its size and style, with different functionality and options, which makes at-scale campaign management tough.

As for the ways the advertisement is offered in the Social media we can make the following summary for each of the most popular advertising platforms.

## 5.1 Facebook

- Ads

These ads appear on the right of a user's Facebook profile and in newsfeed. Some of them have no social interaction component, however the majority of them have embedded ad engagement logic. The types of these ads vary from event and offer ads to photo and video ads, including app download ads as well.

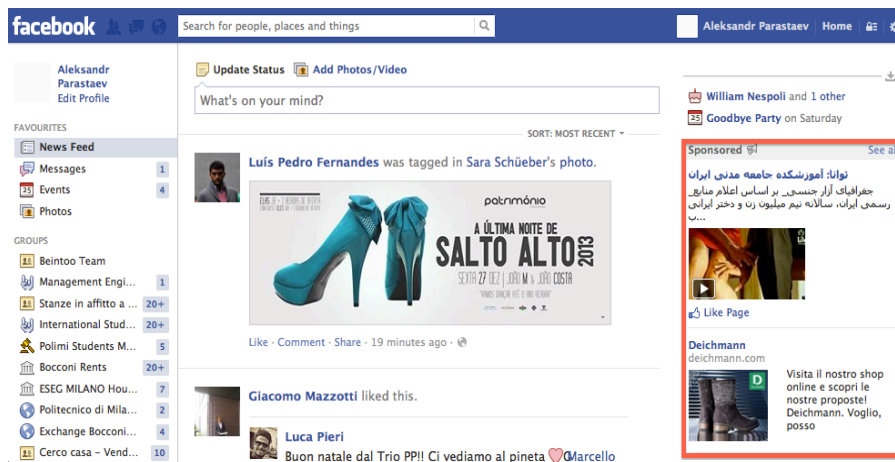


Figure 97. Facebook right hand side ads

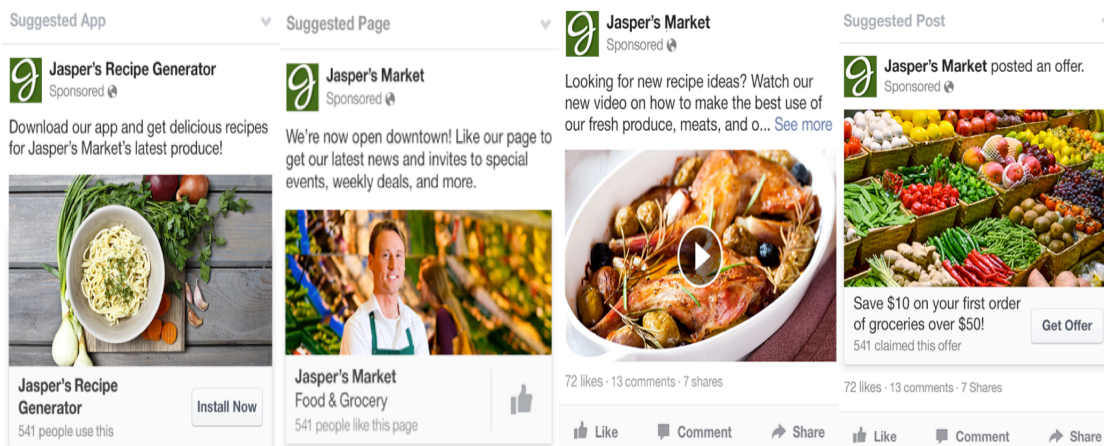


Figure 98. Facebook examples of app download, page, video and photo ads

- **Sponsored story**

A Sponsored Story is a post produced as someone interacted with something the advertiser is promoting. So a Sponsored Story would be generated if someone liked a page of the advertiser, played a game, checked-in or confirmed participation in an event for example. This story will then appear to the user's friends' newsfeeds allowing them to get engaged with the add liking it, commenting it or sharing it.

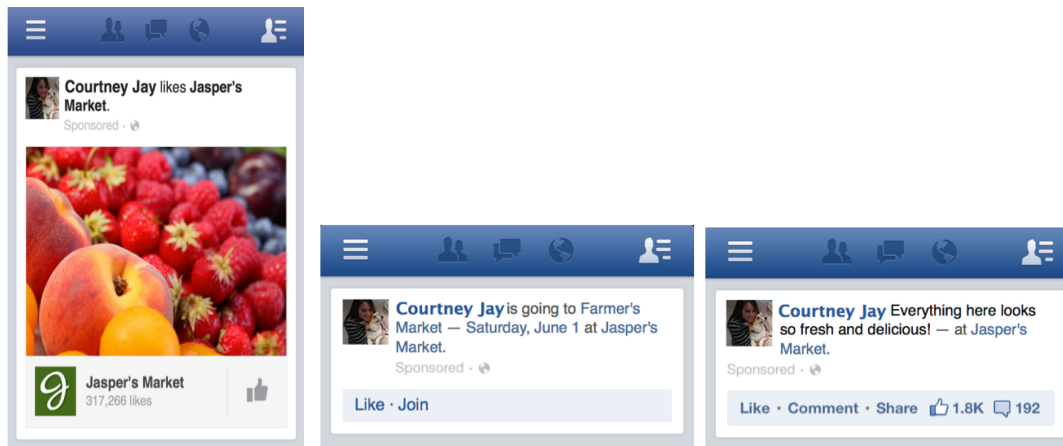


Figure 99. Facebook examples of Sponsored story ads

- **Sponsored search results**

This type of ad was eliminated in the mid-2013<sup>91</sup>. However, the logic was the following: Sponsored search results appeared when users performed a specific search for a Page, place, application or user. When the ad was clicked, users were directed to advertisers Page, app, event or any landing tab.

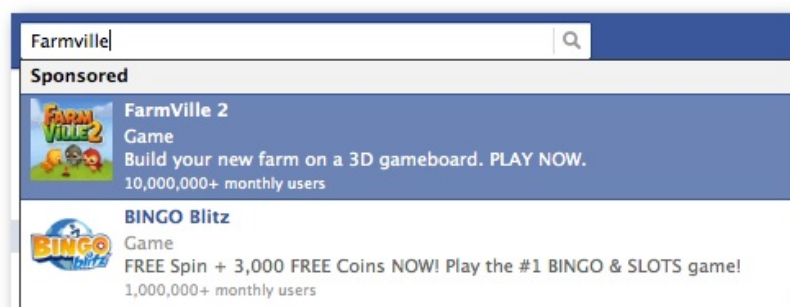


Figure 100. Facebook sponsored search results

<sup>91</sup> <http://www.insidefacebook.com/2013/06/13/facebook-eliminating-sponsored-search-results/>

As for the Mobile advertising revenues, Facebook earned earns 53% of ad revenue from mobile, or \$1.37 billion of its \$2.59 billion in revenue in Q4 2013<sup>92</sup>. The result comes from 556 million daily mobile users up from 507 million in Q3, and 945 million monthly mobile users up from 874 million. Overall, Facebook hit 757 million total daily users and 1.23 billion monthly users up from 1.19 billion in Q3 2013. Facebook reached 49% of ad revenue from mobile in Q3 2013 up from 41% in Q2 and 30% in Q1. But now 53% of its \$2.59 billion in revenue came from mobile. On the earnings call, Facebook said Q4 was its first billion dollar mobile ad revenue quarter, and it made nearly as much on mobile in Q4 2013 as it did from mobile and desktop in Q4 2012. The boost has been driven by Facebook’s mobile app install ads that help developers get their apps discovered outside of the cluttered app stores. This quarter Facebook also introduced new mobile app re-engagement ads that can get users back into apps they downloaded and forgot about<sup>93</sup>.

## 5.2 Twitter

- **Promoted accounts:**

Allows the advertiser to get the account in front of more people who are similar to the existing followers of the account, suggesting accounts that people don’t currently follow and may find interesting and helping introduce an even wider variety of accounts people may enjoy.

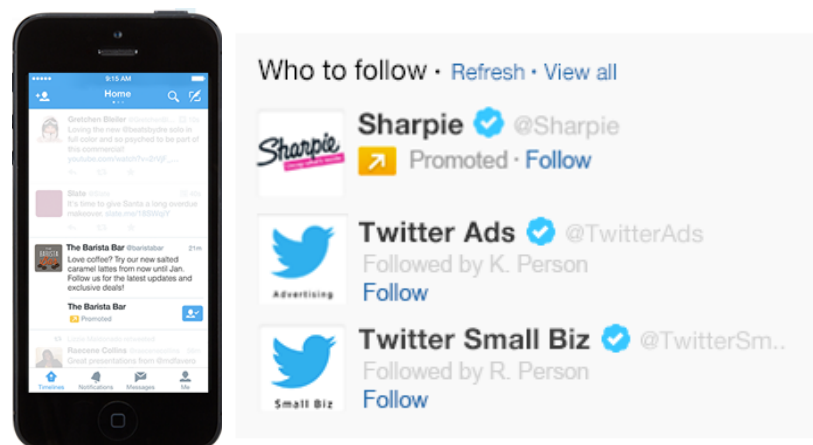


Figure 101. Twitter promoted accounts

<sup>92</sup> <http://investor.fb.com/eventdetail.cfm?EventID=139165>

<sup>93</sup> <http://techcrunch.com/2014/01/29/facebook-is-a-mobile-ad-company/>

- **Promoted tweets**

Promoted Tweets are ordinary Tweets that businesses and organizations want to highlight to a wider group of users. The promoted tweets appear in user’s timeline as well as in the search results

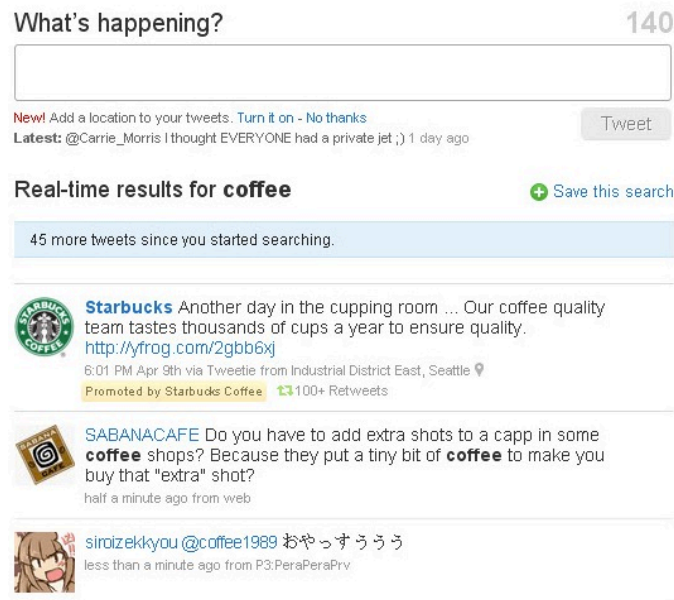


Figure 102. Twitter promoted tweets

- **Promoted trends**

Trends are popular topics being discussed at the present moment. Promoted trends is a powerful tool since these Trends are placed prominently next to a user’s timeline getting a mass exposure.

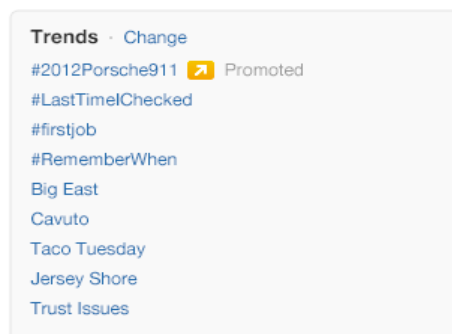


Figure 103. Twitter promoted trends

As for the revenues, Q4 2013 ad revenue on the Twitter platform grew to \$242,7 million, of which mobile advertising accounted for more than 75%. The MoPub mobile ad exchange, acquired during the quarter, delivered \$8 million in revenue<sup>94</sup>.

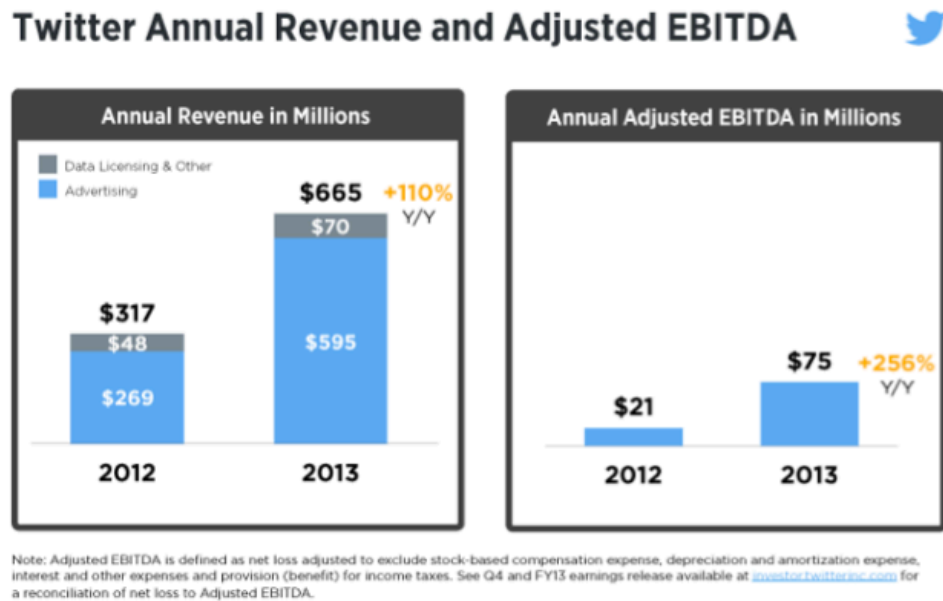


Figure 104. Twitter Annual revenue

The revenue growth in comparison with 2012 is more than 100%, that gives the investors who took part in Twitter’s IPO<sup>95</sup> bright perspectives.

<sup>94</sup> <http://techcrunch.com/2014/02/05/twitter-crushes-in-fourth-quarter-with-revenue-of-242-7m-eps-of-0-02-241m-monthly-actives/>

<sup>95</sup> <http://www.nydailynews.com/news/national/twitter-public-new-york-stock-exchange-article-1.1509472>

### 5.3 Youtube

- Masthead mobile video ads

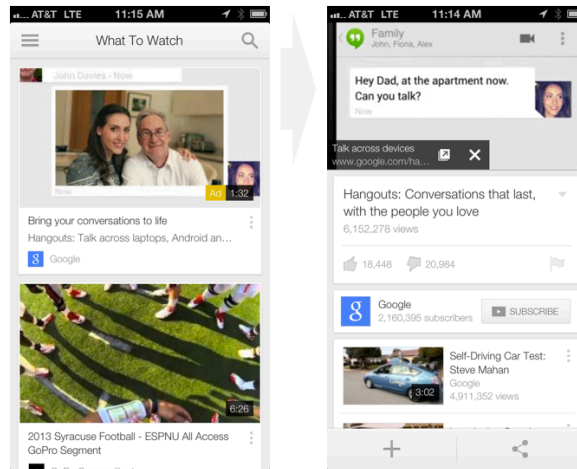


Figure 105. Youtube masthead mobile ad

- Mobile banner ads

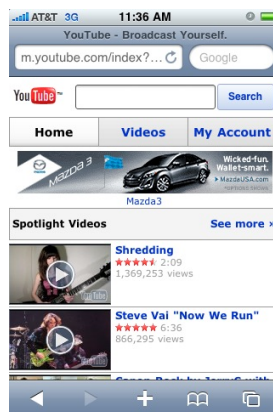


Figure 106. Youtube mobile banner ad

- Before videos

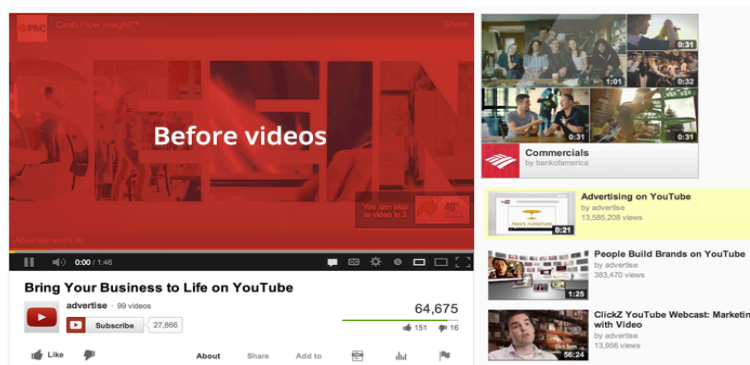


Figure 107. Yotube Before video ads



- **Beside videos**

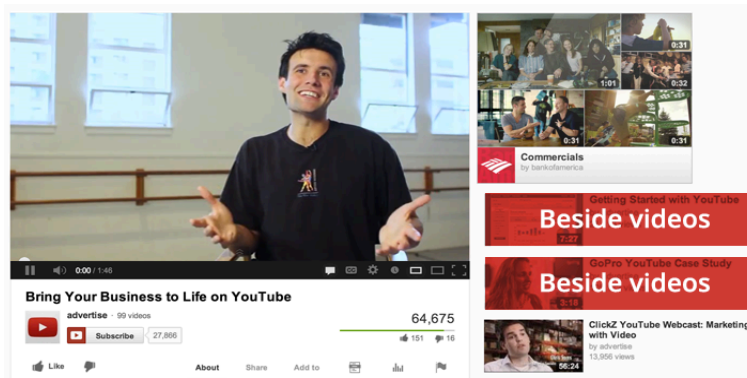


Figure 108. Youtube Beside video ads

- **In-search results**

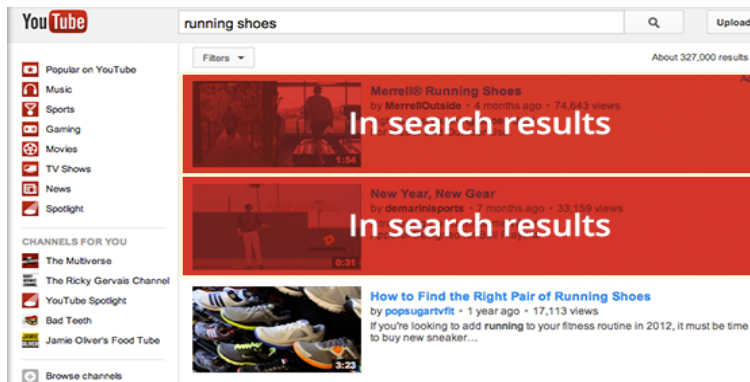


Figure 109. Youtube In-search results ads

- **Homepage and result page advertisement(could contain a Rich media or video units)**

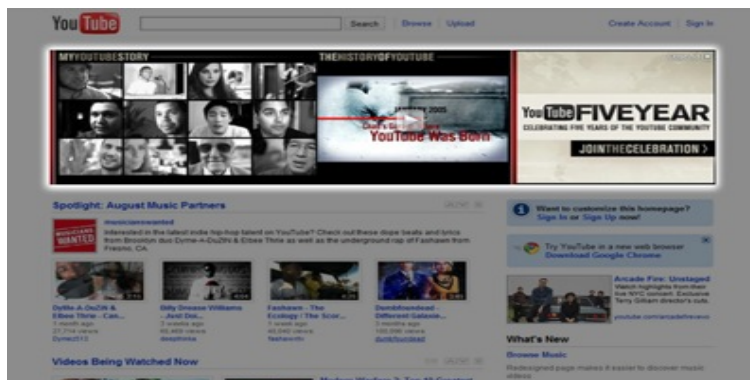


Figure 110. Youtube home and result page ads

As for the numbers, Youtube reports some \$350 million quarter revenues coming from mobile channel. With faster wireless networks and accelerating adoption of smartphones and tablets, U.S. mobile video-ad sales are projected to expand to \$2.69 billion in 2017, increasing more than 10-fold from last year<sup>96</sup>

While mobile native advertising market is dominated by the social media giants other players of the mobile industry, not surprisingly, also prefer to stick to the trend, since the usage of standard display advertising is often overlooked by the typical consumer. Furthermore, standard display ads, especially banners do little in the way of evoking a positive emotion, quite often being perceived as a hindrance to the content they are together with. eMarketer<sup>97</sup> agrees with the above mentioned stating that premium publishers are on the lookout for a way to stand out—and offer advertisers an experience that doesn't compare with a typical banner or video ad, supporting the statement the figures show that only in US in 2013 Digital sponsorship account for around \$2 billion and is expected to grow steadily through out the forecasted period.

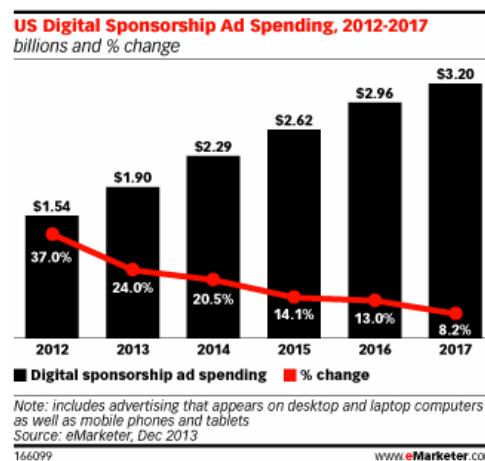


Figure 111. US digital sponsorship ad spending

One of the examples of the native sponsorship mobile advertising campaigns could be a case of Chevrolet partnering with Weather Channel to promote its new truck layering an image of the truck above a photo of the landscape. The result was a visually attractive ad that didn't interfere with the user experience.

<sup>96</sup> <http://www.bloomberg.com/news/2013-06-05/google-s-youtube-triples-mobile-sales-amid-wireless-shift.html>

<sup>97</sup> <http://www.emarketer.com/Article/Premium-Publishers-See-Hope-Native-Sponsorships/1010402>



Figure 112. Weather channel native advertising example

Native advertising can be encountered even when going through the trivial human check procedure, where a user normally writes down the words seen on the screen.



Figure 113. CAPTCHA native advertising example

Another example of native ad integration could be Tango messenger that has introduced two native ad unit presentations within the app: one is expanded unit in the News feed and another is a compact version in the Chat tab

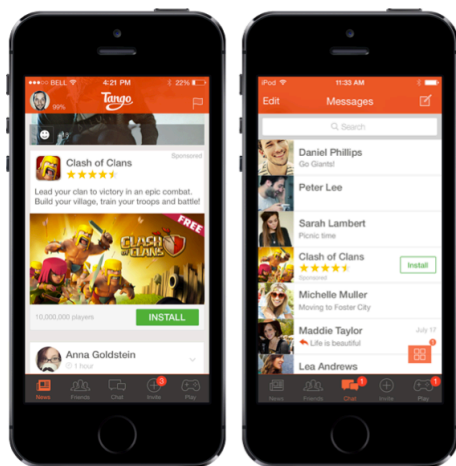


Figure 114. Tango native advertising example



## Case history n.1

**Company:** Pepsi

**Description:** Pepsi Max created a viral video for the web in which UK magician Dynamo takes a tour of London while levitating next to a bus. This video was launched on Facebook, which Pepsi Max was confident could be a vehicle for mass reach<sup>98</sup>

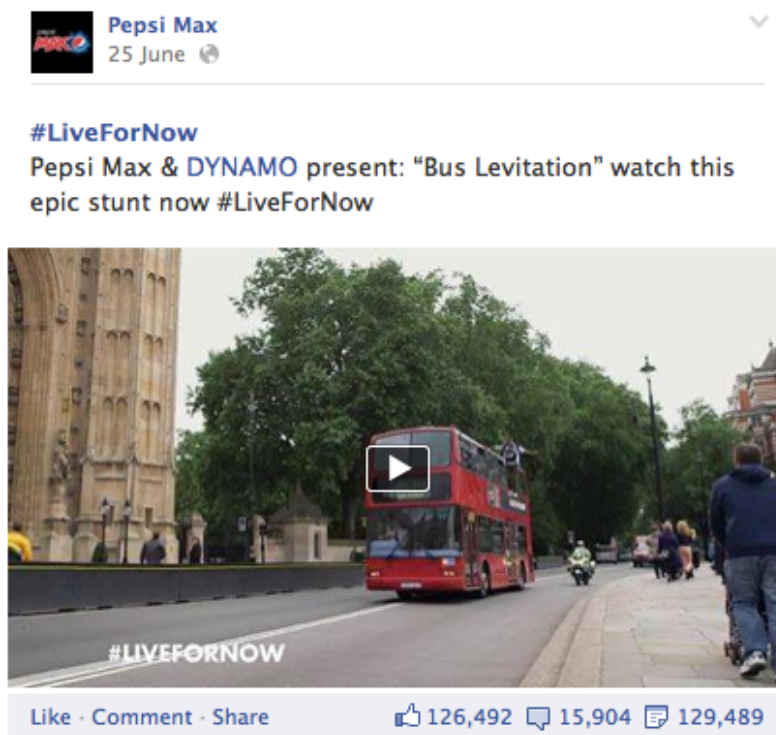


Figure 115. Pepsi case history

### Results:

- 18.7m unique people reached
- 2.4m paid media video plays
- 600k viral video plays
- 23% engagement rate
- £0.04 cost per view
- +100k shares/likes

<sup>98</sup> <https://www.facebook.com/business/success/pepsimax>



## Case history n.2

**Company:** Porsche

**Description:** To unveil the 2012 model, Porsche wanted to evoke that rich history and build excitement among sports car enthusiasts. The launch of the seventh generation of the 911 sports car became a special opportunity to connect with car lovers and create a campaign that would move them to talk and share. In the days leading up to the unveiling of the new 911, Porsche began to seed the hashtag [#2012Porsche911](#) using Promoted Tweets to build buzz around the big launch. These Promoted Tweets featured photos and videos that highlighted the history of the car. They also included links to teaser videos that would be featured in greater depth at launch.<sup>99</sup>



Figure 116. Porsche case history

## Results:

- 87% engagement rate
- 594% increase in daily followers
- 300% increase in positive brand sentiment

<sup>99</sup> <https://business.twitter.com/success-stories/porsche>

## 6. Augmented reality advertising

Mashable.com offers the following definition of the AR<sup>100</sup>: Augmented reality is a live, direct or indirect, view of a physical, real-world environment whose elements are augmented by computer-generated sensory input such as sound, video, graphics or GPS data. It is related to a more general concept called mediated reality, in which a view of reality is modified (possibly even diminished rather than augmented) by a computer. As a result, the technology functions by enhancing one's current perception of reality. By contrast, virtual reality replaces the real world with a simulated one. Augmentation is conventionally in real-time and in semantic context with environmental elements, such as sports scores on TV during a match. With the help of advanced AR technology (e.g. adding computer vision and object recognition) the information about the surrounding real world of the user becomes interactive and digitally manipulable. Artificial information about the environment and its objects can be overlaid on the real world.

Augmented reality apps and browsers include layers of metadata about physical objects which have been geotagged: either by the developers of the app/browser in question or (in the case of open solutions) by third-parties, increasingly including members of the public. The apps/browsers then identify where the user is via the GPS (Global Positioning System) in the handset and which direction he or she is facing via the digital compass: this combination allows the handset to recognize what the viewer will be seeing via the camera viewfinder and thereby which (if any) items within that view have been geotagged. The tags can be detected either through a simple 2-D barcode (e.g. a QR code) or through markerless tracking/image recognition. In both cases, the app/browser "hunts" for a tagged object, and, once it has located it, tracks it and imposes a digital overlay<sup>101</sup>.

In its advertising use Augmented reality technology brings to life any creative media with interactive features that help consumers discover, share and interact with brands, products or services.

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<sup>100</sup> <http://mashable.com/category/augmented-reality/>

<sup>101</sup>

<http://www.juniperresearch.com/shop/products/whitepaper/pdf/Mobile%20AR%20White%20Paper%202009%20v1.pdf>



Figure 117. Mobile augmented reality example

Nowadays the use of Augmented reality has the following capabilities:

- Provide “wow” experiences for users to discover and share
- Integrate mobile into the overall multi-channel marketing campaign of advertiser
- Increase the reach of print media and packaging
- Convert viewers to customers by integrating m-commerce pages on linking to online storefronts

Currently Augmented reality as an advertising channel is still in its infancy, but initial trials show that it is both effective and engaging, meaning a big potential for the future of marketing. The technology is still on its way to perfection, however there are many high tech companies such as Google that offers Augmented Reality features on its social platform. The major hurdle to implementation of Mobile Augmented reality is the necessity to install special app developed by each publisher to watch the ad. In the future it is expected to have an app that would be a standard application to view augmented reality via a mobile device, giving a possibility to enjoy all the different types of ads from all the advertisers making it more comfortable for customers and consequently bringing more advertisers to use this advertisement channel.



## Case history

**Company:** Volvo

**Description:** For the release of the S60, Volvo decided to target a younger demographic. To do this, they created a YouTube masthead that allowed users to play the Augmented Reality Driving Game with their phones. To do so the augmented reality game and interactive banners were developed.

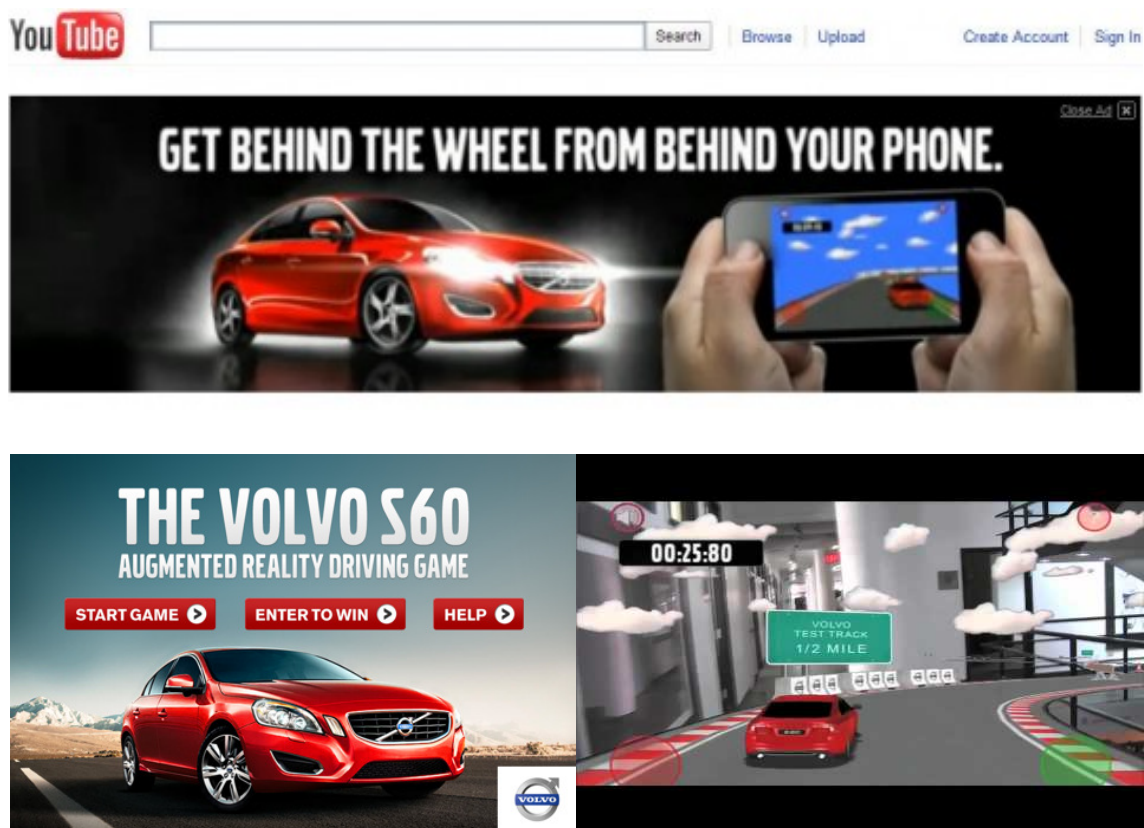


Figure 118. Volvo AR case history

## Results:

- 9.6% interaction rate
- 192,319 engagement clicks in masthead
- 293% increase in traffic to volvocars.com



## 7. Multi-screen advertising

Smartphones have become the foremost element of our daily media interactions with the world, TV does not command our full attention any more, since it has become the device that is quite frequently used in parallel with other screens.

The multi-screen experience, that could be also called “second screen” or “dual screen” or refers to an additional device, normally tablet or smartphone that is used simultaneously with the main screen to carry out actions related or unrelated to the content being consumed from the primary screen.

Survey conducted by Razorfish and Yahoo<sup>102</sup> reports that 82% of users indulge in multi-screen activities while viewing TV. While Google underlines<sup>103</sup> that Web-surfing and Social media activities rank as the primary activity engaged in while watching TV

Other activities include leisure activities like shopping, info searching or trip planning.

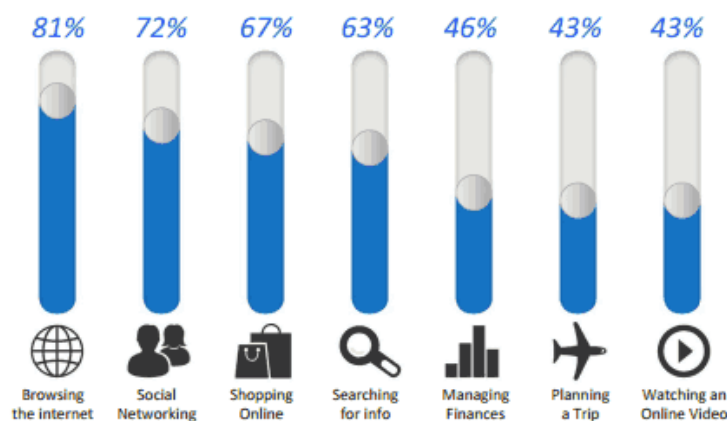


Figure 119. Second screen activities while watching TV

The rising trend of multi-screening gives a notable opportunity for marketers to get in touch with TV viewers through their devices. TV spectators are already exploiting mobile devices while watching the primary screen and are eager to augment the experience through their mobile devices.

As a consequence, savvy marketers take advantage of it offering profounder and broader engagement through creation of targeted content that connected with the television experience.

<sup>102</sup> <http://razorfishoutlook.razorfish.com/download/RazorfishOutlookReportVol10.pdf>

<sup>103</sup> <http://www.google.com/think/research-studies/the-new-multi-screen-world-study.html>

For instance, Twitter is encouraging TV advertisers to introduce hashtags in ads and promotional spots to accelerate social dialogues. In addition to that "Promoted Tweets" and "Promoted Trends" can be run on Twitter to complement TV-based campaigns.

One of the examples of Twitter usage could be the Polar Bowl campaign that Coca-Cola created for the Super Bowl. The campaign was featuring two Coke brand bears which in almost real time reacted to the Super bowl game as well as the halftime show and the commercials that were running in the meantime.

In addition the bears commented via @CocaCola on Twitter. The campaign brought impressive results with 9 million consumers across various platforms keeping track of Polar Bears' performance. Other example could be Pepsi with its campaign offering a free bottle of Pepsi to those who tagged the commercial utilizing Yahoo! tool, that makes possible a sharing of the current media consumption. While "Old Navy Records" campaign incited users to tag commercials with Shazam to download the music tracks for free<sup>104</sup>

Nowadays experiences that move flawlessly from one screen to another are becoming more of a market need. And it goes far beyond a mobile-optimized web site, it rather means a consistent communications approach with the experience on mobile devices working together with other communication means. In practical terms it could mean a mobile-optimized site that is aware of what is happening in the TV commercials and maybe even what's going on in the current program — particularly if it's live.



## Case history

**Company:** Heineken

**Description:** Heineken launched a multi-screen campaign that let the fans watch UEFA Champions League matches on TV while they play the game in real-time.

The game could be played on a PC, iPhone, iPod touch or Heineken Facebook page. To score points, players anticipated events unfolding on the pitch live and make decisions on what will play out. When a key event occurs, the app triggered in real-time a 'Match Moment' and

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<sup>104</sup> [http://mediadecoder.blogs.nytimes.com/2011/02/17/old-navy-replaces-mannequins-with-music/?\\_r=0](http://mediadecoder.blogs.nytimes.com/2011/02/17/old-navy-replaces-mannequins-with-music/?_r=0)

gamers are asked to choose from outcome options. Players could compete and share scores with their friends, via Facebook, as well as other players around the world



Figure 120. Heineken case history

## Results:

- 78% mentions increase over other UEFA Champions League sponsors.
- 70% of all visits to the Star Player download pages coming from Facebook and Twitter
- 63% of Star Players coming back at least once after their first play<sup>105</sup>

## 8. Audio advertising

Audio ad is a high impact unavoidable type of advertising delivers short-targeted audio messages during app usage or alongside the gameplay. Basically users would hear a message an in case they want to accept the deal they can shake the device to be redirected to the desired landing. Audio ads provide developers with an opportunity to take an advantage of full screen app experience, while still monetizing their loyal users.

<sup>105</sup> <http://www.akqa.com/#/work/heineken/star-player>



Figure 121. Audio ad

According to Leadbolt audio ads outperform the usual banner advertising in terms of all engagement aspects <sup>106</sup>.

The industry giants are also involved in the Audio ad advertising, for example Spotify is offering audio ads <sup>107</sup> that play your audio commercial between songs as well as Apple with its relatively new service- iTunes radio provides advertisers with an opportunity to serve audio ads during the broadcasting. <sup>108</sup>

## 9. Location based advertising

Location-based advertising is a type of advertising that incorporates mobile advertising and location-based service. Generally, the technology is used to identify mobile users' location and provide them location-specific advertisements right on their mobile phones.

According to Mobile Marketing Association <sup>109</sup>, there are the following types of location based targeting:

<sup>106</sup> [http://www.leadbolt.com/developers\\_units.php](http://www.leadbolt.com/developers_units.php)

<sup>107</sup> <https://www.spotify.com/uk/about-us/advertisers/ad-specs/audio-ads/>

<sup>108</sup> <http://adage.com/article/digital/big-marketers-sign-apple-s-itunes-radio/243734/>

<sup>109</sup> [www.mmaglobal.com/files/MobileLBSWhitepaper.pdf](http://www.mmaglobal.com/files/MobileLBSWhitepaper.pdf)

1. **Navigation:** Provides driving, walking, or other directions; often “turn by turn”.  
Examples: Operator-branded navigation applications, Google Maps, Nokia's Ovi Map.
2. **Geo-fence Services:**
  - a. **Friend/family finder/tracker:** Ability to locate other trusted users in real-time (i.e. friends or family, by consent), or see where they last “checked in”, be notified when they are nearby, receive periodic alerts or alerts based on position (i.e. geo-fence).  
Examples: Loopt™, MyFriendGPST™, AT&T FamilyMap™ RunKeeper, and Trail Tracker (activity Tracking), Asset tracking.
  - b. **Enterprise Fleet Tracking and Timecarding:** Allows businesses to use employee and/or asset location for business purposes (i.e. verify asset is at the intended location). Example: Telenav™.
3. **Mapping, Travel and Point of Interest:** View current location on a map relative to points of interest. Examples: WHERE™, Snocator™, MapQuest™, Public Transportation Routes.
4. **Geo-tagging:** Uses location to provide additional context to a picture or message.
5. **Location Sharing:** Connect with nearby users who have chosen to expose their profile publicly. Search profiles of other users based on preferences (i.e. distance, age, gender, interest/keywords, etc.) Examples: Foursquare, Facebook Connect.
6. **Check-in Based Contest and Games:** Reward the user (typically with discounts or coupons) for visiting retailer locations and “checking in”. LBS are used to verify that the user was at or near the retailer location when checking in. Examples: MyTown™, Gowalla™, Foursquare™, Rumble™.
7. **Local Search:** The defining characteristic of effective mobile local search is the ability to match location with user-specified intent thus enabling the user to search and discover what is nearby. Examples: Poynt, WHERE™, Yelp™.
8. **Local/Hyperlocal Content:** A contextual experience based on a specific locale. For mobile local search, the user's location and specified intent are the most significant components. Examples: Local weather conditions, local sports scores, in-store services.

Marketers have many choices to location enable a campaign based on campaign objectives. They include:

- **Geo-targeted Text and Display Advertising:** The paid placement of a promotion or sponsorship message within mobile media that is integrated with LBS. Two types of targeting are common:

**User Targeting:** Advertisers who wish to only reach users in a certain geographic area can use this type of targeting.

**Message Targeting:** Presenting a different message to users based on their location.

- **Embedded Icons:** (Sponsored embedded advertising) the sponsorship deals can be map-embedded or on-the-page/in-app. Sponsored embedded advertising that displays without a search term but is based on end-user's interests and / or brand affinity. Icons or logos displayed in maps or augmented reality to help user determine relevant proximity/location.
- **Search (aka: Local Directory Advertising):** Advertising for listings of local merchant retailers. For example, CitySearch, Dex, YellowPages all fit in this category. Generally these campaigns will include some form of user targeting to show listings only to users in a relevant geographic area.
- **Location Triggered Notifications:** Uses proximity information ( Wi-Fi, Bluetooth, GPS or Network-based) to provide App Alerts or Messaging based on user preferences and opt-ins. These services can be automated (vs. requiring a check-in or app) and can run on both smart and feature phones. Once opted-in, alerts are delivered whenever a consumer is nearby a store, and can be tailored to a specific location (e.g. incorporating address or directions) and an offer specific to that nearby store.
- **Location Branded Application:** The usage of LBS technology to enhance brand-owned mobile media services. Media brands are the most ardent supporters of these apps.
- **Check-in Based Contests and Games: Reward the user** (typically with discounts or coupons) for visiting retailer locations and “checking in”. LBS are used to verify that

the consumer was at or near the retailer location at the time the consumer is checking in.

- **Click-to-X Routing:** Routing either calls, data from broad campaigns to local call centers or localized information. For example a nationwide auto dealer might use LBS to route calls from a nationwide click-to-call campaign to the nearest local auto dealer based upon the consumer's precise location.

While IAB<sup>110</sup> offers the following view on the location-based advertising:

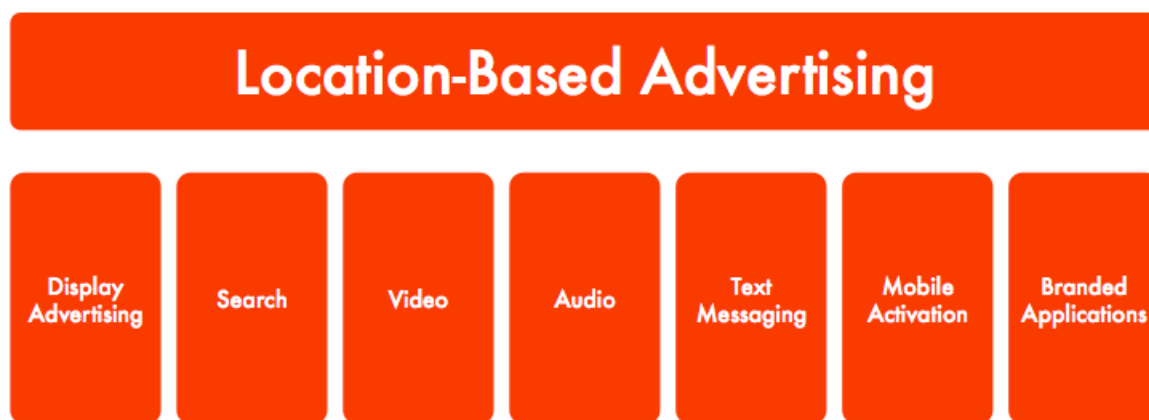


Figure 122. Location-based advertising types

- **Display advertising** is messaging that users see when browsing and using applications on a mobile device. Display can incorporate static (text and graphics) and rich media (embedded audio and embedded video).
- **Search advertising** appears when users submit queries in search engines, maps, directories and applications.
- **Video ads** are commercials before, during, or after content—whether that's streaming video, animation, gaming, or music videos in a player environment.
- **Audio ads** are :60, :30 or :15 second audio clips delivered in-stream, typically between songs in mobile music apps, often with companion mobile display ads.
- **Text messaging**, or SMS (Short Message Service), can contain up to 160 characters and can be transmitted instantaneously. More than 95 percent of mobile phones are capable of

<sup>110</sup> <http://www.iab.net/media/file/IABMobileLocalBuyer%27sGuide.pdf>

receiving SMS. Nearly all mobile phones now support MMS, or multimedia messaging, which incorporates sound, photos and video. Mobile activation enables traditional media (print, TV, radio, outdoor) to generate digital interaction. Audiences can be directed to text SMS short codes to register for promotions, vote on contests and entertainment (e.g., American Idol), support causes, and more. Similarly, QR codes can direct a device's browser to a specific URL that provides information, registers users for events, and even automatically adds information to device calendars and address books.

• **Branded applications** are apps that marketers create and offer for download in an app store (e.g., Apple App Store, Google Android Marketplace). Advertisers across a wide range of categories—from retail to media to packaged goods—can create mobile apps that perform a se.

There are two general types of ad targeting for local mobile, and eight levels of targeting precision currently available, according to the IAB document mentioned above. The two general types are geo-fence and geo-aware targeting. Geo-fencing is relative to a place; it involves establishing a radius around a physical location (e.g., bar, restaurant, store) and serving ads to mobile consumers who are within that range. The range can be set from hundreds of feet (within stores) to several miles (suburban and rural locations). Geo-aware targeting is relative to a device; it's establishing a range around the device location and serving ads that recommend actions within the user's reach. There are eight levels of precision, determined by how location data is processed. From most precise to most general, they are:

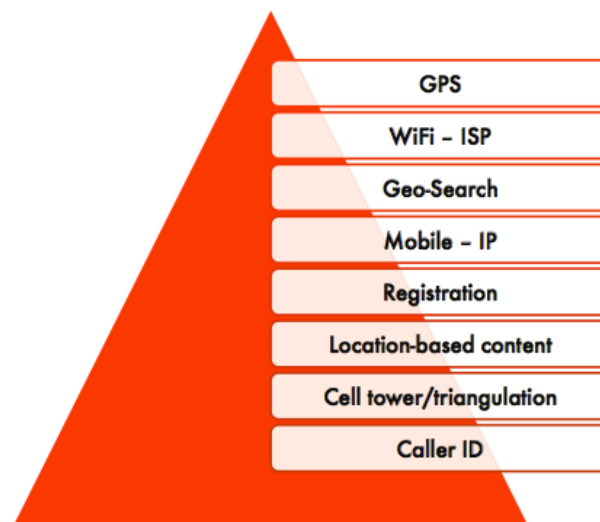


Figure 123. Location based targeting



It's important to know how these targeting levels are achieved—how the data is parsed—because the nature of the data flow determines what you can actually do. For example, precision does not guarantee scale or reliability.

**GPS**, or Lat/Long as it's called in the trade, relies on the device to pick up signals from the orbiting Global Positioning System satellite network. Users opt in to access location-specific content (e.g., maps and movie listings). GPS is the most accurate in places with clear lines of sight skyward. Because GPS is hampered indoors and among tall buildings, and users have to activate the feature, the applicable number of location-enabled phones varies. For this reason, GPS is typically supplemented with cell tower triangulation and Wi-Fi access point information.

**WiFi – ISP** estimates a user's location within the radius of a wireless network access point (e.g., in a home or store). The user's device has to be connected to the network. This geo-location method is accurate at the DMA level and, frequently, on a neighborhood level.

**Geo-Search terms** are relatively accurate determinants of a user's location because the person actually enters them (e.g., city, state, ZIP) in a search bar or map (e.g., weather or restaurant delivery). Geographic specificity is determined by the search terms. While a person can be in one place while searching for results in another, entering geo-search terms verifies a user's intention of retrieving information for that locale.

**Carrier IP** identifies a device by a numerical identifier (assigned by the carrier) that allows it to receive information across networks. Because it is integral to the device itself, it is one of the more consistent (though not most precise) forms of targeting.

**Registration data** assigns location according to a user's account address. Geographic specificity ranges from country to state level, depending on the type of registration data being collected. Like geo-search, registration cannot account for mobility.

**Location-based content** assumes proximity to a Web page containing local content (e.g., local newspaper). The nature of the content indicates the reader's local interest and intent, though not current location.

**Cell tower/triangulation** identifies all the devices operating within its range. It's accurate at the market level where there are multiple towers in proximity to users (e.g., dense urban areas). Because carriers control cell data, marketers can't really target on this basis. The data typically refines GPS information from the device.

**Caller ID** identifies the origin of a caller’s phone by area code—either through call-capture or app registration—but cannot confirm the person’s location. Mobile phone numbers are portable, so a 917 (New York) caller may actually be in, say, Mobile, AL. Caller ID comes into play principally with text advertising.

The ways the data is gathered from a device could be presented in the following way:

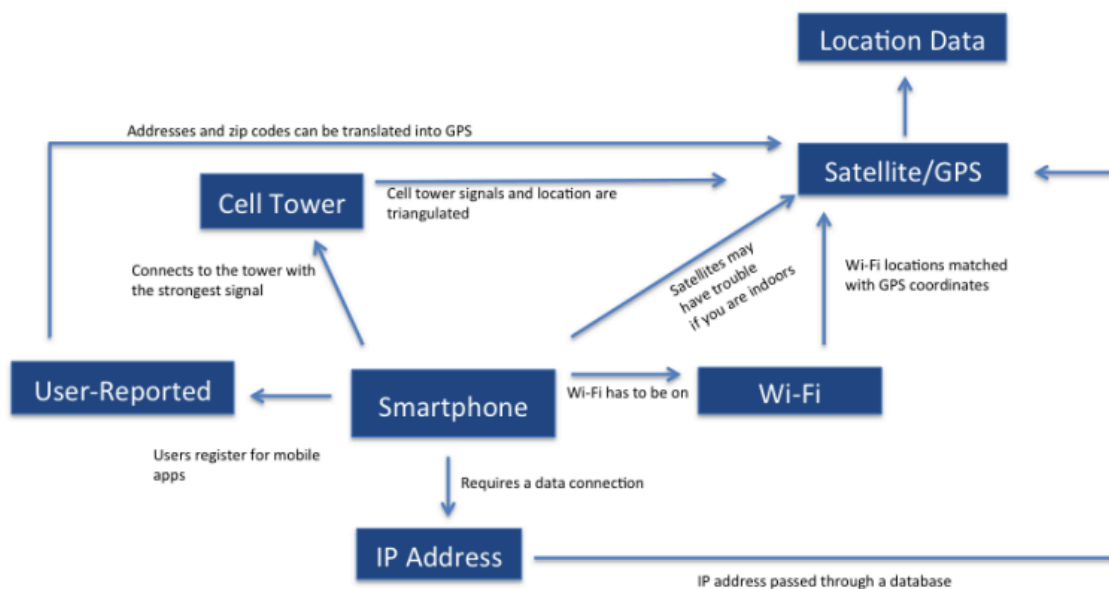


Figure 124. Location data collection

While evaluating different options of location precision, there are some key points to keep in mind. MMA’s Location based whitepaper mentioned before suggests the following ones:

**Cost:** In some cases, there is a cost to the publisher associated with obtaining location data. Often these costs are per-transaction (i.e. one location “lookup” or “dip”). Sometimes the costs are on a per-subscriber, per month basis. In other cases (i.e. a downloadable application on smartphones), location data is free.

**Reach:** Reach reflects the number of consumers (or devices) which are addressed by a given LBS solution. For example, if a given campaign only runs on Bluetooth, it’s “reach” is limited to consumers with an active Bluetooth connection enabled.

**Location Identification Yield:** Yield represents the percentage of all location requests that are fulfilled. No LBS provider or system is perfect. For example, GPS or A-GPS will not work indoors. A60% yield means, 60%of all LBS requests were fulfilled.

**Latency:** Latency is the amount of time it takes to fulfill a request. For example a high accuracy location request, using GPS, could take sixty seconds or more to be fulfilled. Whereas, a low accuracy location request using Wi-Fi or Cell ID might be much faster.

**Accuracy:** Accuracy measurement reflects a degree of uncertainty with the location data provided, and is often expressed in Meters (M).

Without any doubt, the possibility to pinpoint a user’s current location and deliver appropriate and contextualized ads in vicinity of their surroundings in instantaneous moment by using search, display, or messaging advertisement is a game-changer in the world of mobile advertising.

By understanding where the consumers are in the present moment, brands can encourage consumers with relevant offers and messages, which would relate to their location, bringing a better response rate and a customer satisfaction.

Usually, while speaking about location-based advertising two concepts are mentioned: geo-aware and geo-fence. Geo-aware is coverage a geographical region, for example a region or city, while geo-fence serves ads within an identified location, for instance a 1-kilometre radius from a store of the advertiser.

According to the research conducted by Verve<sup>111</sup> mobile campaigns leveraging location targeting outperformed non-location targeted campaigns by a factor of 2x and the best results are brought by Geo-aware tactic.

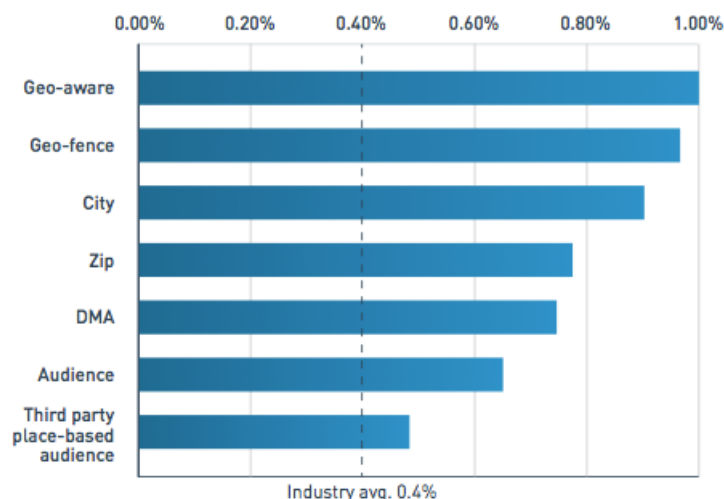


Figure 125. Location based advertising CTR by Targeting tactic

<sup>111</sup> [http://www.vervemobile.com/pdfs/LIR/LIR\\_web.pdf](http://www.vervemobile.com/pdfs/LIR/LIR_web.pdf)

Accuracy of location-based targeting ranges from a country level, to regions, to cities, to zip codes, streets and even specific retail outlets. There are mobile advertising networks asserting a capability to deliver contextualized and relevant ads to a mobile user within a couple of steps from the advertiser's location.

The application of the location-based advertising is massive, varying from retailers to gambling industry that exploits options of geo-targeting around live events, such as race or football matches with a scope of driving into their brick-and-mortar location, for instance

The accurateness with which specific mobile device can be located differs depending on the technical method used and the information available to location-based advertising value chain members. Nowadays, the bulk part of geo-location traffic is attributed much in the same way as online, using the IP address from WiFi networks to extract latitudinal-longitudinal coordinates.

Speaking about advertising formats delivered on location base BIA/Kelsey report<sup>112</sup> could be mentioned. The research conducted in US shows that search remains the dominant destination for the location based advertising spend, being followed by display advertising and SMS.

<b>US Local Mobile Ad Spending, by Format, 2012-2017</b>						
<i>millions</i>						
	2012	2013	2014	2015	2016	2017
<b>Search</b>	<b>\$704</b>	<b>\$1,354</b>	<b>\$2,416</b>	<b>\$3,613</b>	<b>\$4,560</b>	<b>\$5,664</b>
—% change	-	92.3%	78.4%	49.5%	26.2%	24.2%
<b>Display</b>	<b>\$379</b>	<b>\$725</b>	<b>\$1,185</b>	<b>\$1,716</b>	<b>\$2,115</b>	<b>\$2,744</b>
—% change	-	91.3%	63.4%	44.8%	23.3%	29.7%
<b>SMS</b>	<b>\$101</b>	<b>\$124</b>	<b>\$135</b>	<b>\$146</b>	<b>\$154</b>	<b>\$162</b>
—% change	-	22.8%	8.9%	8.1%	5.5%	5.2%
<b>Video</b>	<b>\$38</b>	<b>\$83</b>	<b>\$160</b>	<b>\$248</b>	<b>\$370</b>	<b>\$515</b>
—% change	-	118.4%	92.8%	55.0%	49.2%	39.2%
<b>Total</b>	<b>\$1,222</b>	<b>\$2,286</b>	<b>\$3,896</b>	<b>\$5,723</b>	<b>\$7,199</b>	<b>\$9,085</b>

Source: BIA/Kelsey, "Annual US Local Media Forecast 2012-2017: Mobile Local Media"; eMarketer calculations, April 4, 2013

155133 www.eMarketer.com

**Figure 126. US local mobile ad spending by format**

As for the monetary values, by 2017, spending on location-targeted mobile advertising is expected to reach \$10.8 billion, which would represent a 52% share of all mobile ad dollars. Juniper Research recently predicted that spending on smartphone and tablet advertising and marketing programs would grow from \$13.1 billion in 2013 to 39.3 billion in 2018. The combination of smartphone proliferation, a surge in application storefront launches and new developments in hybrid positioning technologies are expected to help drive revenues

<sup>112</sup> <http://www.emarketer.com/Article/Location-Data-Pumps-Up-Mobile-Performance/1010348>

from mobile location-based services (MLBS) to more than \$12.7 billion by 2014<sup>113</sup>. According to “Mobile Location-based Marketing Solutions Analysis and Market Forecast 2013-2018”<sup>114</sup> Location-based mobile advertising spend is expected to represent 65% of total mobile advertising revenue by 2018.

Nonetheless the immense opportunities there are some hurdles on the way of massive implementation of location-based mobile advertising. For instance, mobile network operators might have a prepossession against sharing user’s location data to third parties, making it hard to mobile advertising networks to pinpoint a user’s location utilizing a 2G or 3G network to deliver a location-based advertising. As a result mobile ad networks rely mainly on location-based information, such as user’s IP address supplied over WiFi, and to some extent on footprint of applications that offer a GPS sharing option to their mobile users. Another problem arises when a user is located in a mall or a shopping street, making it not an easy task to deliver the right advertising message or discount coupon. The cumulative impact of these factors is affecting negatively the advancement location based advertising business models, however according to a February report from Econsultancy<sup>115</sup> 27% of companies worldwide planned to implement location-based marketing in 2013, and 34% intended to invest in mobile advertising. Furthermore, as seen in the Business Insider’s report<sup>116</sup> local advertising is expected to overcome the national one in the time span of a couple of years.

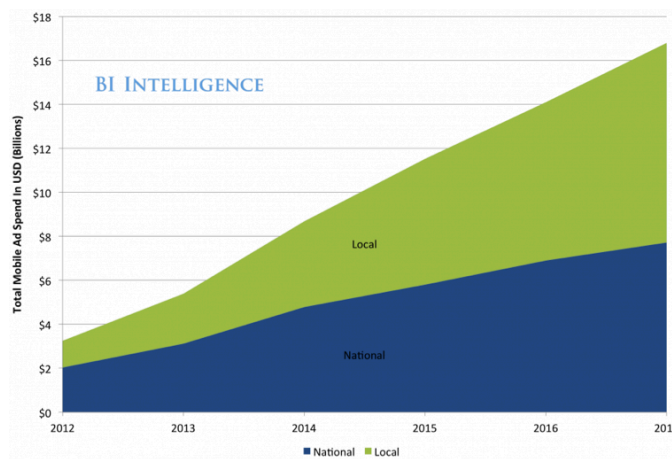


Figure 127. Local vs. National ad spending

<sup>113</sup> <http://www.juniperresearch.com/viewpressrelease.php?pr=180>

<sup>114</sup> <http://www.researchandmarkets.com/research/rxxgc5/mobile>

<sup>115</sup> <http://www.emarketer.com/Article/Real-Time-Location-Data-Gets-Bigger-Slice-of-Mobile-Targeting/1009675>

<sup>116</sup> <http://www.businessinsider.com/local-mobile-marketing-exploding-2013-6>

Speaking about barriers on the way to faster adoption of the Location-based advertising apart from technological ones discussed above the main hurdle is represented by the privacy. According to research<sup>117</sup> published in September 2013, 54% of respondents said it was very important to them to keep their location private when accessing the Internet.

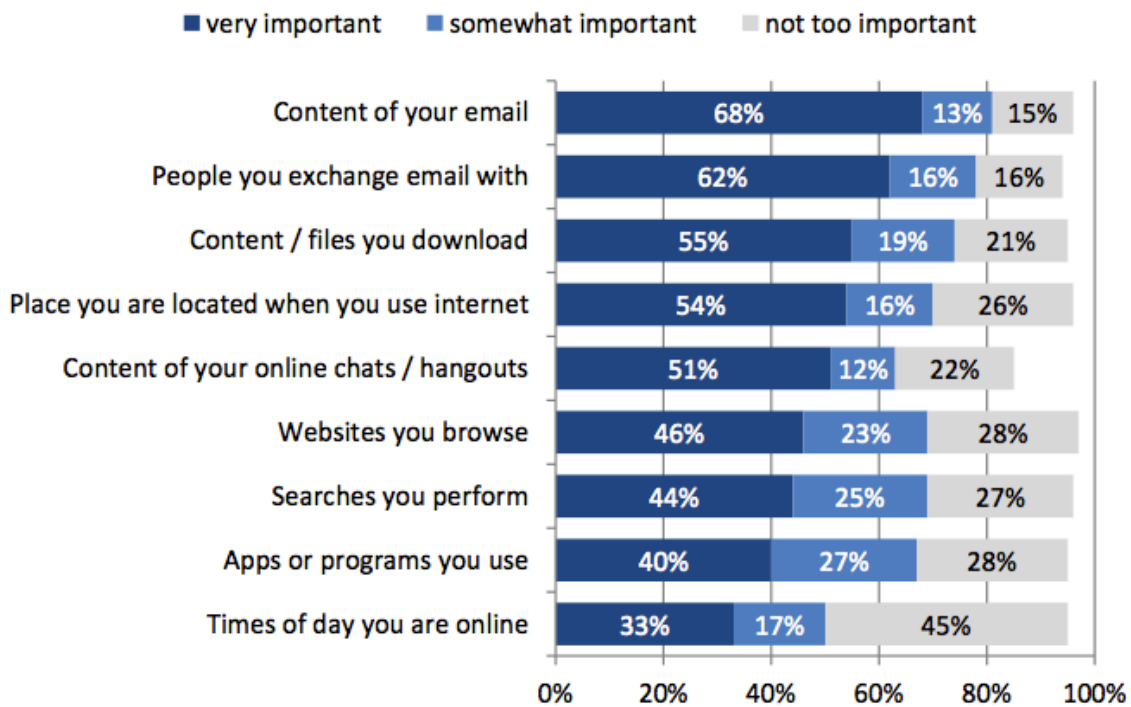


Figure 128. Privacy research

Sometimes, internet users are not trying to be completely anonymous. They say they want to stay unobserved or tracked by certain people or organizations. According to this research 28% of respondents said they had tried to hide their activities from advertisers. This could become a hurdle for mobile marketers who rely more and more heavily on location data collected from smartphones. To address the issues MMA mentions the following general considerations:

**Notification:** It is appropriate to notify the end-user about how their location information will be used, disclosed and protected so that a potential LBS user can make an informed decision whether or not to use the service or authorize the disclosure. This notice should be optimized for display within a mobile device so it is easy for end-users to navigate and read.

**Opt-in:** It is appropriate to obtain user consent before initiating a precise location fix or disclosing precise location information to provide requested services or sharing such precise

<sup>117</sup> [http://www.pewinternet.org/files/old-media//Files/Reports/2013/PIP\\_AnonymityOnline\\_090513.pdf](http://www.pewinternet.org/files/old-media//Files/Reports/2013/PIP_AnonymityOnline_090513.pdf)

location information with third parties. Messaging, Bluetooth, In-App and Mobile-web marketing campaigns should be designed in such a way that the user's consent and explicit opt-in is obtained before delivering any alerts, marketing or content to the user.

**Opt-out:** It is appropriate to allow end-users to revoke their prior consent to the:

- Collection of precise location information by the marketer, or;
- Disclosure of precise location information to all or specified third parties.
- **Security:** Reasonable security measures should be used to ensure that a user's information is secure and not shared with non-affiliated third-parties. The need for effective security measures is heightened with respect to products and services targeted to children.
- **Data Retention:** It is appropriate to limit the data retention of consumer data to as long as that data is commercially useful ensuring privacy and security.
- **Relevance:** In exchange for consenting to provide precise or directly providing geographic location information, users should be provided with relevant, useful information.



### **Case history**

**Company:** Hewlett-Packard

**Description:** HP launched a geo-aware campaign with a goal to increase awareness of a brand among consumers and drive traffic to physical retail locations that sold new printer. Multiple targeting strategies were leveraged to reach the right consumer who is in the market for a new printer at the right place and time. Geo-aware expandables, along with tap-to-call and tap-to-map features were utilized



Figure 129. Hewlett-Packard case history

### Results:

- 2,4% CTR
- Achieved advertising goals
- Engagement rates exceeding the industry average<sup>118</sup>

## 10. Retargeting advertising

Retargeting that is also known as remarketing, is a form of targeted advertising, where the advertising message is targeting consumers based on their previous interactions with a brand, specifically after these actions did not result in a sale or effective conversion

Retargeting is a powerful tool in hands of a digital advertiser because it allows an efficient usage of advertising spends on users who are already familiar with the advertiser's brand, having recently demonstrated their interest, therefore it comes as no surprise that digital marketers who use retargeting features see a higher ROI than from most other digital channels.

Usually the flow works in the following way: potential customer visits a website of an advertiser, but leaves without any positive for the advertiser action. Later while surfing the mobile web they see the advertisers ad recaptured thanks to the retargeting, bringing them back to the site of the advertiser and consequently converting them to the real customers. But this is not the only flow, according to Chango<sup>119</sup> the retargeting could be broke down to 7 different strategies:

<sup>118</sup> [http://www.vervemobile.com/pdfs/LIR/LIR\\_web.pdf](http://www.vervemobile.com/pdfs/LIR/LIR_web.pdf)

<sup>119</sup> <http://www.chango.com/resources/articles/retargeting-secrets-the-7-types-of-effective-retargeting>



## **1) Search Retargeting**

When a user performs a search on any major search engine, what they are really doing is raising their hand, and telling the advertiser exactly what they want. This is where search retargeting comes in. With Search Retargeting, advertisers can actually engage those users who have not yet visited your site, but have searched for terms related to your product.

## **2) Site Retargeting**

Site Retargeting is among the most popular and powerful retargeting tools out there. Advertisers start by placing a snippet of code on their website, usually in the form of a pixel. This means that whenever a user lands on the advertiser's page, cookies are dropped into their browser to remind them about your product while they're out surfing the web.

If you look at the history of site retargeting, it's not hard to see how it has evolved and matured over the years. But it's evolution is far from complete. Enter Programmatic Site Retargeting (PSR), which is now being hailed as the latest and most innovative brand of site retargeting out there.

The main distinction between PSR and traditional Site Retargeting has to do with the type of information collected from visitors to a web site. PSR relies on so many more data points from a given publisher. Keywords searched for before coming to the site, time spent on site, value outcomes (video views for instance) and pages visited inform a visitor score. The visitor score determines how valuable is an user and how often should we serve ads to that user. By managing user activity in the cloud, you can query site visitors in real time.

## **3.) Social Retargeting**

This brand of retargeting is highly underused, yet highly effective. In the early days of social retargeting, it simply looked at how users interacted in their social circles. Now, it monitors micro-content consumption. That is, new forms of social retargeting keep a close eye on what users are reading, clicking on and sharing.

#### **4.) Email Retargeting**

Email is still very much the preferred medium for business communications. In fact, billions upon billions of emails are transmitted all over the world on a daily basis. This means email retargeting for your email campaigns can really come in handy. Email retargeting gives the power to leverage subscriber data to further segment media investment. For instance, one can place a pixel on someone that hits the unsubscribe button, and exclude them from retargeting efforts.

#### **5.) SEO/SEM Retargeting**

SEO/SEM like social retargeting, is often underused. SEO retargeting gives better insight as to why a user visits your site

#### **6.) Contextual Retargeting**

One of the most beneficial aspects of contextual retargeting is its ability to bring in new prospects. This means that advertiser can actually use retargeting in other ways than engaging existing users. With contextual retargeting advertisers are simply leveraging data on their site users' interests.

#### **7.) Engagement Retargeting**

Engagement retargeting delivering high-quality, engaging content for previous site users or like-minded web searchers. This can be anything from an interactive game to a helpful tool that increases productivity on the web. As you can see, there are several strategies for retargeting site users. Even if you were to stick to site or search retargeting, your ROI would improve dramatically.

It is important to notice that mobile retargeting greatly differs from online retargeting in approaches to track and target. Cookies are not dominating mobile platforms as they do with their online counterparts and division across devices, operating systems, browsers and apps makes traditional online ad tracking quite complicated, furthermore as stated by CNN<sup>120</sup> 30% more time is spent in app than browsing the mobile web. That is why Device IDs (the

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<sup>120</sup> <http://edition.cnn.com/2012/01/20/tech/mobile/apps-web-gahran/index.html>

Android ID and Apple IDFA) come into play to be unique user identifiers, however there are several other ways to retarget mobile users:

- **Statistical analysis of device usages**

This approach makes use of big data sets and machine learning to make guesses that a mobile device user and a desktop device user represent the same person. Considerations might contain the websites visited, wifi networks used, daytime of the connection and other relevant pieces of information.

- **Mobile cookie**

The nature mobile devices harshly restrict this method. But in some cases for instance when a user utilizes cookies to log into their mail to stay signed in, advertising technology provider can sync cookies to re-target this user, example being Google Display Network re-targeting users on mobile devices in mobile websites if they already have a desktop cookie on them and are signed into Google web services via the mobile web.

Before Device ID targeting occurs, a retargeting platform usually analyses a user behaviour and divides users into different groups to ensure that the right advertising message is delivered at a right time. The parameters to cluster users might be the following: frequency and timing of the app engagement, frequency of in-app purchases if any, record of in-app engagement i.e. level achieved. When implementing retargeting ads, it's important to use the correct mix of advertising formats. It is always better to use interstitial banners, along with the standard one to bring an impressive CTR and conversion rates.

Speaking about real world examples of retargeting offered by the industry leaders opportunities offered by Twitter and Facebook seem to attract attention of savvy advertisers:

**Twitter:**

In December 2013 Twitter announced<sup>121</sup> the global availability of *tailored audiences*—a new way for advertisers to define your own groups of existing and potential customers, and connect with them on Twitter with relevant messages.

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<sup>121</sup> <https://blog.twitter.com/2013/more-relevant-ads-with-tailored-audiences>

With tailored audiences advertisers can reach those users on Twitter who have shown interest in advertiser's brand or his merchant category even away from Twitter. For instance, hotel brand wants to advertise a promotion on Twitter and they'd prefer to show their ad to travel enthusiasts who have recently visited their website. To get the special offer to those people who are also on Twitter, the hotel brand may share with Twitter browser-related information (browser cookie ID) through an ads partner. Twitter in its turn can then match that information to Twitter accounts in order to show the matched users a Promoted Tweet with the travel deal. The end result is a highly relevant and useful message for the user. Advertisers will continue to receive the same reports that include how many users saw or clicked on an ad, without identifying who saw it or clicked on it.

Cookie retargeted ads could make sure the ads users see on Twitter are about things they actually want. For example, if a user visited the pricing webpage for a Financial Times subscription, it could later retarget him or her with promoted tweet, which the user is likely to click as he was already considering buying a subscription.



Figure 130. Twitter retargeting example

### Facebook retargeting:

Facebook Exchange provides with retargeting ads on the right hand panel as well as right in the users news feed. Research carried out by MDG<sup>122</sup> evidences that news feed ads have a CTR that is around 50 times higher that the one of the ads on the right panel, additionally news feed ads offer a 59% lower CPC, that seems to be a very good news for digital advertisers.

Additionally, there is a fresh feature «Custom audiences» that according to Facebook<sup>123</sup> allows advertisers to target their Sponsored Stories or ads to a specific set of users with which they have already established a relationship on/off Facebook. Audiences can be defined by

<sup>122</sup> <http://www.mdgadvertising.com/blog/a-marketers-guide-to-retargeting-on-facebook-infographic/>

<sup>123</sup> <https://developers.facebook.com/docs/reference/ads-api/custom-audience-targeting/>

The biggest advantage is the ability to retarget users on mobile devices since 68%<sup>124</sup> of them access Facebook from their mobile devices. In addition, advertisers are presented with an opportunity to use demographic information from the users' Facebook accounts to improve their future retargeting campaigns.

Another example of successful retargeting is coming from collaboration between Expedia and mobile ad technology provider Drawbridge<sup>125</sup>, which Expedia hired to pinpoint when a mobile user is probably the same person as a user who had recently done searches at Expedia's website via a desktop browser. Drawbridge was eventually able to re-target 38% of the desktop visitors on mobile devices, or about 54 million users. The campaign received travel industry marketing award in the 2013 Digitals.<sup>126</sup> Drawbridge makes it work by noticing common patterns in cross-screen metadata by analysing records of when ads have been served to those devices. It uses this anonymized metadata, such as desktop and mobile devices that use the same Wi-Fi signal at similar times of day, to make educated guesses about when a mobile device user may be the same anonymous user who previously visited a website on a desktop browser.



### **Case history**

**Company:** Mobile.de

**Description:** Germany's largest online automotive marketplace ran a mobile retargeting campaign for their app in order to re-activate dormant and churned app users. Having built a large user base mobile.de decided to re-engage their app users to maximize in-app retention and engagement. As a first step the thorough analysis of users followed by segmentation was carried out, using the data collected during the previous campaigns. The users were divided into three categories.

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<sup>124</sup> <http://www.kpcb.com/insights/2013-internet-trends>

<sup>125</sup> <http://www.tnooz.com/article/how-expedia-ads-now-trail-you-from-desktop-to-mobile/>

<sup>126</sup> <http://thedigitalsawards.com/>




	<b>Openers</b> Users who have opened the app but don't regularly use it.	15 %
	<b>Browsers</b> Users who have used the app (searched for an automobile, for example).	80 %
	<b>Generators</b> Users who have made a call or sent an email through the app.	5 %

Figure 131. Trademob case history. User clustering

The campaign focus was to maximize the user retention and pushing more users through the conversion funnel. Therefore the main emphasis was put on the the users who still did not perform revenue-generating actions.

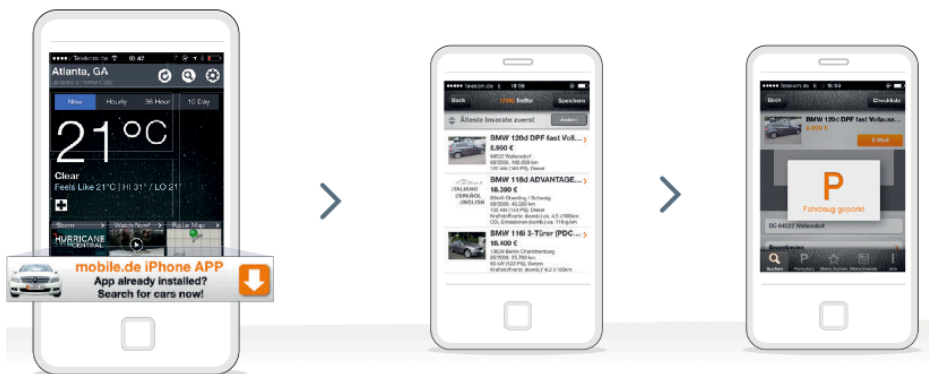


Figure 132. Trademob case history. Conversion flow

## Results:

- 62% lower cost to generate a valuable lead
- 150% higher conversion rate<sup>127</sup>

<sup>127</sup> [http://www.trademob.com/wp-content/uploads/2013/10/mobile.de\\_11-10\\_web\\_A5.pdf](http://www.trademob.com/wp-content/uploads/2013/10/mobile.de_11-10_web_A5.pdf)

## **CHAPTER 3: ACTORS IN THE CHAIN OF MOBILE ADVERTISING**

The aim of the Chapter 3 is to explain in more details the value chain of Mobile Advertising and describe each segment of the chain, its actors and each actor's strengths and weaknesses. After defining the basics of mobile advertising, the media units and the functioning of the system, it is important to analyse each actor in order to understand more clearly the overall ecosystem of mobile advertising, with a special focus on display mobile advertising.

The variety of types of actors is high and the complexity of the mobile advertising ecosystem is even greater taking into consideration the dynamicity with which the market and industry develop which makes mapping of the value chain even harder. It is important to indicate clearly the flows by which the advertising message is being passed from the brand to the desired audience.

It is essential to know at the beginning that the mobile advertising landscape and ecosystem are not strictly defined as the online or traditional advertising's ecosystem. The rules, borders and the flows vary with the different combinations of devices, operators and operating systems. In mobile advertising, players such as ad networks, ad exchanges, real-time bidding platforms, and many other "ad-solution" providers, seem to offer everything to everyone, while claiming the best and the most varied and advanced targeting technologies, best data and the access to the most premium applications and publishers. As all of the players are reaching for scale and the latest advertising technology, the exact border lines between these entities are becoming more and more blurry and changing continuously.

Nowadays, many actors present their clients data about the performance, data and inventory that they can provide with but in a complex landscape as the one of mobile advertising, it is extremely difficult to determine which companies have the best pallet of offerings that meet the client's needs and help the advertisers to reach their goals.

Before going into detailed analyses, it is worth explaining the overall functioning of the Mobile Ad Ecosystem in a simple way, illustrated by the BI Intelligence:

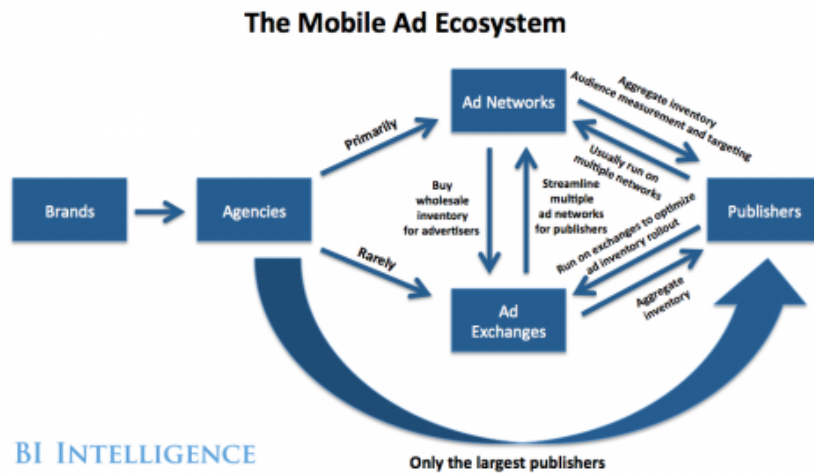


Figure 133 - The Mobile Ad Ecosystem<sup>128</sup>

As it can be seen, on one side, we have “Brands” and companies that wish to pass a brand’s message to their targeted audience. In most of the cases, “Brands” (Advertisers) have their preferred specialized “Agencies”. The media agencies are in charge for understanding and developing the brand’s message and designing creative solutions through which the message will be communicated to the audience. Furthermore, media agencies are in charge of developing the marketing mix and media plan, all together with the budget spend. Being responsible for the media plan and the budget, agencies are doing a media buying for their client, using the most appropriate sources of mobile traffic, targeting appropriate audience and measuring the performance of the mobile advertising campaign, paying special attention to the ROI and other key performance indicators set up by the client.

In mobile advertising, the mobile device and mobile applications are the medium for transmitting the brand’s message. Mobile applications are being developed and managed by the “Publishers”. These companies have several revenue streams: from charging application’s download, selling of its in-app items and premium content to the selling of the advertisement impressions, the so-called inventory. Using the application’s inventory (mobile traffic), the brand’s message is being communicated to the desired audience.

<sup>128</sup> BI Intelligence “The Mobile Ad Ecosystem”



Aside being specialized for application's development, publishers frequently have dedicated sales teams for selling their inventory as the goal is to sell all of the app traffic, trying to monetize every usage of its application. Except in the cases when working directly with the brands and media agencies, publishers are selling its traffic on a wholesale basis, selling impressions upfront, sometimes for a lower prices than in the case of direct cooperation with the brands, not willing to lose the momentum and not monetize the usage of its product.

In 2013, there were more than 100Bln downloads<sup>129</sup> of more than 1.3M mobile applications currently available at the top app stores. This data, in combination with the existence of more than 100.000 publishers<sup>130</sup> all around the globe makes things even more complex when it comes to the efficient distribution of the brand's message through mobile channel. Very often, brands are in doubt where to seek inventory for their campaigns and what is the best source of traffic that will enable them to reach the objectives of the campaign.

Taking previously mentioned data into consideration it is logical to think that the "Agencies" go very rarely to the publishers directly, as it would require a lot of resources in order to select the best sources and establish quality and long-term relationships. The direct contact normally happens in case of big publishers that possess vast user base and can guarantee premium high quality traffic. In order to diversify the sources of traffic, and target wider audience, agencies have a task of providing their clients with different channels and finding solutions that will help the message to be heard by different target groups.

All the players inbetween, that are working as mediators in the communication between the brand and its audience, can be summarized into 2 main categories: "Ad Networks" and "Ad Exchanges". Brands and its media agencies are using "AdNetworks" and "AdExchanges" that buy on a wholesale basis and aggregate inventory from different sources (publishers). Doing this, they can provide good audience measurement and targeting, that helps the agencies to monitor the performance of the brand's campaigns.

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<sup>129</sup> Source: "Gartner Report", September 2013

<sup>130</sup> Flurry – "The state of the apposphere", 2013

### 3.1. Mobile Advertising Ecosystem

After having a brief overview how the mobile advertising ecosystem functionates, it is good to go into more detailed analysis of the ecosystem and get familiar with the segments within, as well as with the actors:

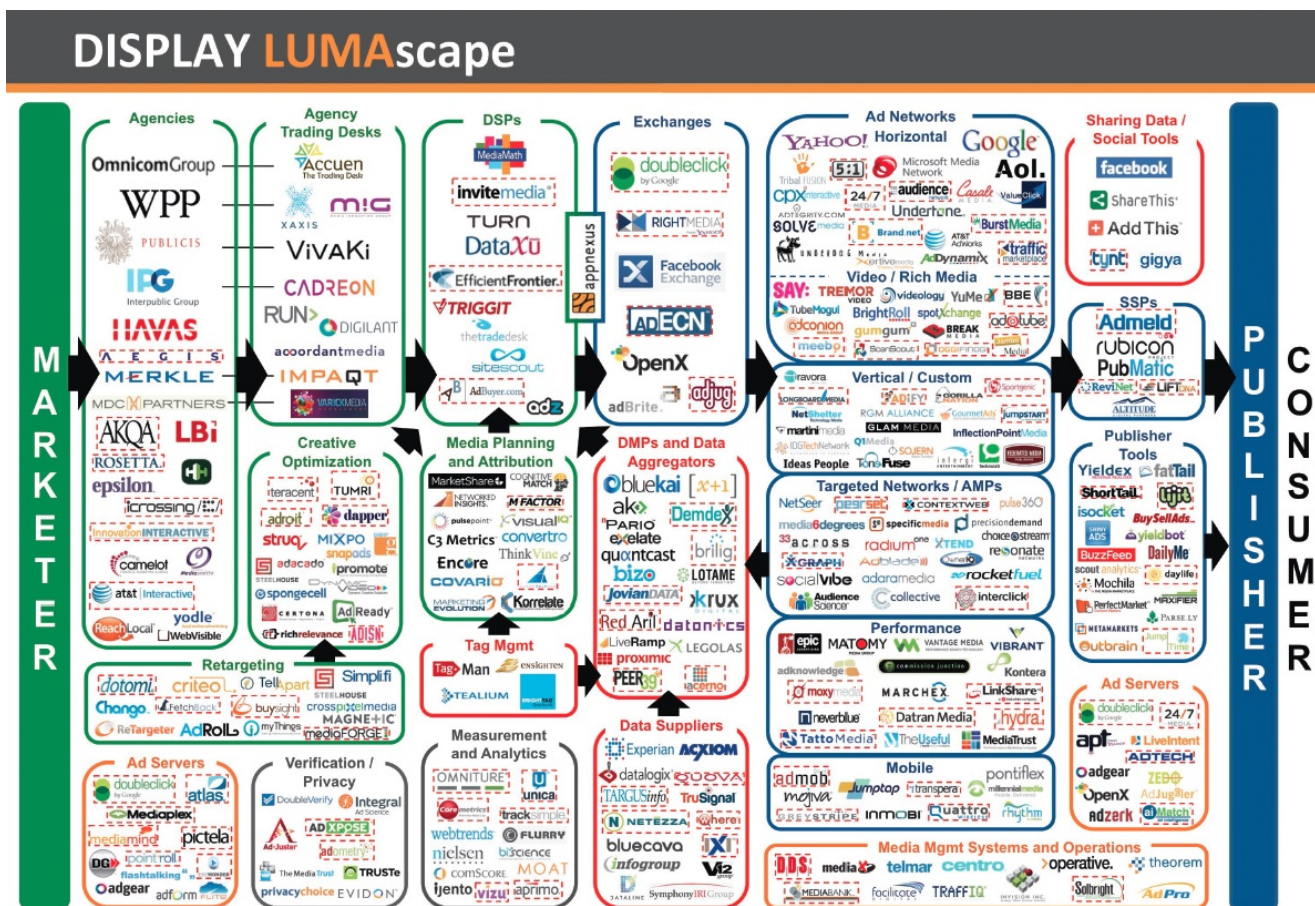


Figure 134 - Mobile Advertising Ecosystem : Actors

One of the most used and referenced landscape of mobile display advertising is the one of LUMA Partners LLC<sup>131</sup>. It includes all the digital media sectors, from display, search, video, mobile, social, mcommerce, gaming and marketing technology. In the following sections, we will go into more details about the actors such as Advertisers, Media Agencies, Publishers, AdNetworks, Technology providers as well as DSP and SSP Segment.

<sup>131</sup> LUMA Partners LLC : Resource Center

### 3.2 Advertisers

While mobile advertising still occupies less than 3% of total of World’s advertisement spend, with the total expected spend of some \$13.6Bln<sup>132</sup> in 2014, the list of biggest spenders in mobile advertising is slightly different from the one of traditional advertising ecosystems.

According to the Millennial Media report, the biggest spenders in mobile advertising, by vertical sectors/industry in 2013 were:

- |                       |                     |
|-----------------------|---------------------|
| 1. Entertainment      | 6. Automotive       |
| 2. Consumer goods     | 7. Travel           |
| 3. Retail             | 8. Technology       |
| 4. Telecommunications | 9. Restaurants      |
| 5. Finance            | 10. Pharmaceuticals |

All in all, the mobile spend growth across all the industries in 2013 was more than 100%. The biggest growth measured pharmaceutical industry (744%), news companies (530%), sports companies (411%), followed by the consumer goods companies (357%) and the entertainment companies (264%)<sup>133</sup>.

The mobile advertising activities of the companies are carried out together with its Media Agencies that are managing other advertising campaigns as well. Advertiser defines the budget and decide about the exact allocation of the funds to the each desired advertising channel. All the further steps are being executed by the side of the agency, as the advertising sector evolves and becomes more and more complex.

Furthermore, the possibilities of mobile channel are still not fully known to the advertisers, so the task of Media Agency is to educate and present to advertisers the world of mobile advertising.

Advertisers' Campaign Goals

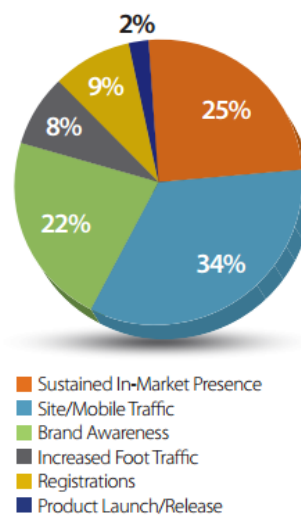


Figure 135 - Advertisers' goals the

<sup>132</sup> eMarketer “Worldwide Ad Spending Forecast”, 2013

<sup>133</sup> Millennial Media “S.M.A.R.T. Report”, December 2013

After indicating the objective of its mobile campaign, all the things related to the choice of the media units and formats, targeting and tracking solutions, as well as buying the inventory, are up to the media agency.

Companies are slowly adopting their campaigns for the mobile channel. According to the IAB reports, the average spend of the U.S. companies on mobile advertising, in 2013, was \$242k which represents an increase of more than 100%. Furthermore, more than 30% of U.S. advertisers that are investing in mobile channels are spending more than \$0.3M on different mobile campaigns.

Being new in the world of mobile advertising, companies are not afraid to experiment with the formats and, together with their media agencies, push the all industry forward. Some of the advertisers with the best mobile campaigns in 2013 were:



Figure 136 - Macy's m.campaign

The big U.S. retail chain allocated significant funds to its mobile channel, with the objective of strengthening its mcommerce strategy. By testing new formats and advertisement units, Macy's is one of the pioneers of driving the in-store traffic and online sales in mobile advertising. Neary 12% of its \$1Bln advertising budget is invested in digital channels<sup>134</sup>. In September 2013, Macy's launched a campaign that was consisted out of expandable banner, containing an interactive game. The built-in game demanded consumer to type in the word, by guessing what is in the picture. Words were associated with the brand and its product (shoes, bags, etc.). After clicking on the ad, consumers were redirected to the Macy's mobile site

where they could continue with the shopping. This campaign aimed at increasing the brand awareness and driving additionally traffic and sales for the Macy's mobile site.

Another good example of adoption of mobile channel as a source for acquiring new users, building brand awareness and increasing sales, is the Mondelez International. The snack-food company has proven to be one of the leading spenders in mobile advertising industry after announcing that in 2013 it has allocated to mobile 10% of all of its 2013 marketing spend. Mondelez International has invested significant amount of funds and energy in developing its

<sup>134</sup> Benchmarkemail.com and the Macy's. INC Fact Book 2013

mobile applications, sites, running mobile advertising campaigns and exploring the world of augmented reality for more of its 50 brands.

"Boldness in mobile is a sure recipe for success, as Mondelez International has demonstrated in 2013," said Mickey Alam Khan, editor in chief of Mobile Marketer and Mobile Commerce Daily, New York.<sup>135</sup>

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<sup>135</sup> Mobile Marketer

### 3.3. Media Agencies

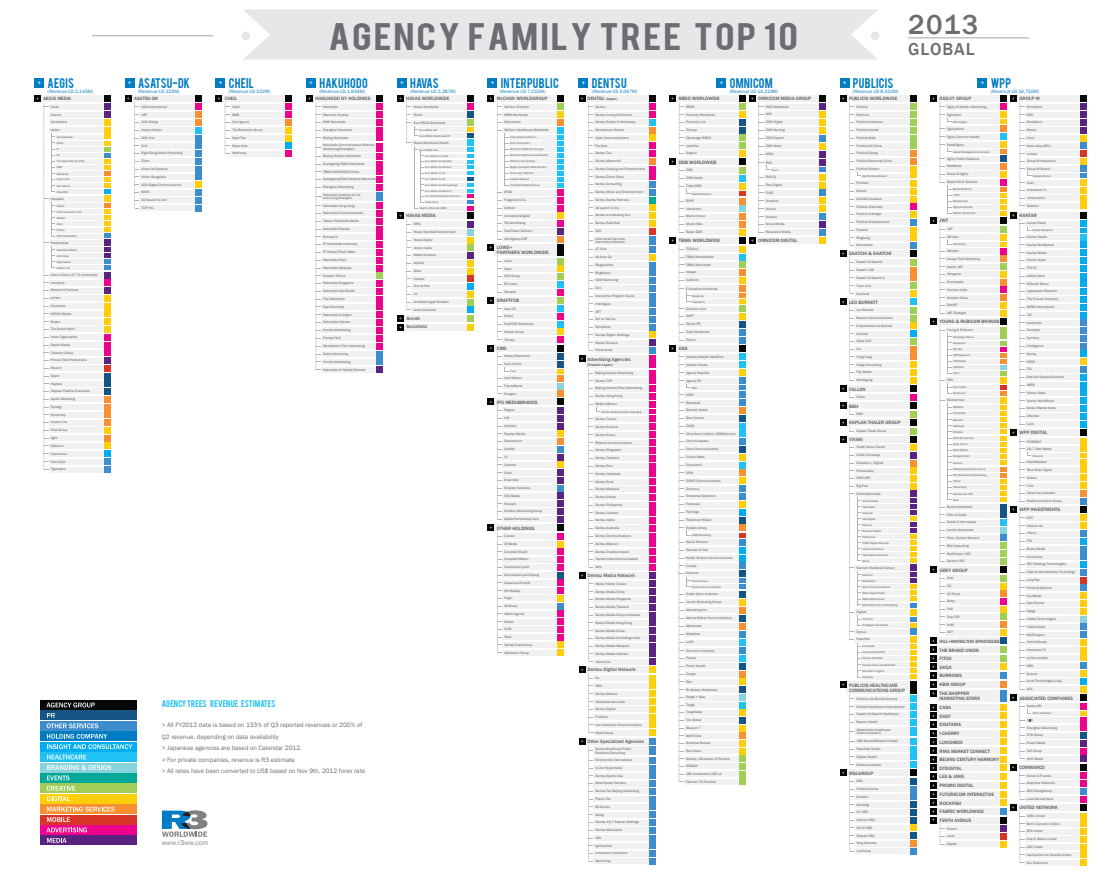


Figure 137 - Top 10 Media Agencies and their subsidiaries

Media Agencies have a roll of managing the client’s advertising budgets and execute the media plans. Some of the main activities are development of a clear communication strategy, a media plan (media and marketing mix) and acquiring necessary advertising space for transmitting the message through the various channels, e.g. media buying.

Basically, a media agency makes sure that a marketing message appeals to consumers, appears in the most appropriate place, at the right time and that the client/advertiser pays the best price for it.

With the development of measurement tools, techniques and methodologies, media agencies extended their proposal by offering to the clients an opportunity to be closer than ever before to its consumers by in-depth monitoring and analyzing of the results of the campaigns. Good reporting is essential in “new media” world because only by truly understanding the consumer and the performance of its message, companies will be able to differentiate

themselves from the competitors and respond to the expressed and non-expressed needs in short-time.

Some of additional skills that media agencies possess are the skills related to understanding of consumer behavior. This is one specific skill that many agencies pay attention to since by clearly understanding what motivates a particular target group of end-users, as well as what is their behaviour, agencies can establish a strong tie for transmission of the brand's message and effective communication between end-user and the brand.

As mobile advertising is still in its development phase, media agencies have an additional task of promoting the new channel and all the possibilities it carries. Advertisers are often not aware of the tools and way of displaying their message through the mobile channel. For this reason, big media agencies, traditionally strong in offline and standard online advertising, are opening specialized departments, or sub-agencies that are entirely focused on developing skills and knowledge in the field of mobile advertising. Very often, media agencies are conducting series of educational workshops and seminars on the topic of mobile advertising, all with the objective of increasing the usage of the channel.

In most of the cases, media agency is consisted out of several departments, groups of people, specialized for executing particular tasks and phases of overall advertising processes and strategies. These departments could be:

- Account Department

This department is the first touch point with the potential client-advertiser. Its account managers and account executives serve as a liaison between the media agency and the client. As a first touch point, the role of account executive is very important as it is a person that needs to understand clearly client's needs, desires and objectives as it will later communicate it to the other departments. In practice, account executive creates a brief that gives an overview of client's desires and gives directions to the creative department. The most critical information acquired from the client are: message to be transmitted, target audience and its patterns of behavior. Once the other departments finish with the tasks, account department communicate solutions to the client and waits for the approval.

- Creative Department

Department that is usually the core of an advertising agency. It is consisted out of art director, creative director, designers, editors, copywriters and others. The creative

teams could be permanently employed or could be employed on a project basis or totally outsourced (Creative Media Agencies). The main task of a creative department is to generate ideas that will be used for transmitting the advertiser's message into a banner, video or any other creative solution that will deliver the key message to the end-user. This department usually receives information from the client about the message that he wants to transmit. Afterwards, creative department works with its designers on developing several examples of the advertisement that will be finally approved by the client.

- Production Department

Once designed by the creative department and approved by the client, production department initiates activities needed for the development of the creative solution. This department takes care of production of all the creatives that will be used for the advertising campaigns (Video, printed material, banners, etc.). This could be executed in-house, in a agency's production studio or it could be done externally. In the case of collaboration with the external bodies, Production Department is in charge for contacting the suppliers and making agreements with them. This department also carries responsibility for the quality and accuracy of all creatives that will be used during campaign.

- Media Buying Department

The media buying department is in charge for media planning and focuses its work on planning of advertisement placement for each campaign. Its task is to negotiate the conditions of displaying the advertisement on different channels that are predefined by the media plan. Furthermore, it needs to assure acquisition of the best price/quality sources of traffic in order to achieve desired performance and quality level, while keeping the cost of the campaign under the budget limitations and specifications. Majority of media agencies use external media buying services as large companies have higher negotiation power than the smaller ones, as they can reach certain prices based on the purchased volumes.

As already mentioned, in some cases, media agencies are employing companies that are specialized in some of the segments of advertising. They can outsource services of media buying department or creative department. This all depends on the level and volume of services offered by a specific agency. Media agencies can offer full and general advertising service, covering a complete range of media and creative services, taking care of media



buying across all advertising channels (traditional, online and mobile). On the other hand, agencies can offer specialized services, concentrating on specific sector such as creative solution production, media buying, financial services, etc. In order to understand better media agencies, it is good to make division of them based on the services that they are providing.<sup>136</sup>

#### 1) Full Service Agencies

Big size agencies that deal with all the stages of advertisement process. These companies offer advertisers a full range of communications and marketing services and they are involved in planning, creation and production of advertisements as well as selecting the appropriate media and channels for the campaigns. They can also provide services that include market research, strategic market planning, interactive marketing and web site design, mobile application development and public relation. One of the biggest pros, when speaking about employing a full service media agency, is that they provide a “turn-key” operations and services, as well as solutions for the advertising campaigns.

#### 2) In-House Agencies

This agencies are operating under the brand’s management and are part of advertisers organizational structure, or in a “daughter-company” relation with the advertiser. Advertisers, big brands, are deciding on this step, of creating an in-house media agency, with the objective of decreasing the advertising costs and increasing the overall control of the agency’s activities. Even though under the ownership and operating control of the advertiser, in-house agencies are usually outsourcing some of the media agencies services.

#### 3) Creative Agencies

Creative agencies are specialized in providing creative services, e.g., the designing and creation of advertisement that will be used in campaigns. Creative agencies are usually used when the companies that are providing a full service do not have time to develop a creative solution and/or when they would like to receive an “out of the box” ideas and solutions. In most of the cases, creative agencies do not provide any additional service to the client.

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<sup>136</sup> Payam Hanafizadeh; Mehdi Behboudi - „Online Advertising and Marketing“, 2012

#### 4) Media Buying Agencies

The main focus of media buying agencies is buying and selling of media traffic. These companies could also be employed in order to schedule and manage time slots bought at different channels.

#### 5) Industry Specialized Agencies

Agencies that are specialized for specific segment and particular activities. These agencies are operating in specific field of advertiser's activities (health care, medicine, tourism, etc.). They could have also creative departments and media buying but they are mainly specialized in marketing communication area and the market research field.

Aside of above mentioned media agencies, there are agencies specializing for search engine optimization (SEO Agencies) and social media agencies. But with the advancement of new, mobile channel of advertising, especially in the past couple of years, starting from 2008, a new segment of media agencies has arrived. The new type of agencies could be defined as:

#### 6) Digital Agencies

Digital Agencies are specializing in development of new creative solutions that can respond appropriately to the growing demand in the digital world. These agencies are providing innovative solutions for mobile devices, developing mobile applications, banners, rich media units and all the other creative components needed for usage through the digital channel, mobile in particular. These interactive agencies are also offering wide range of services, from design and development to marketing services and consultancy for the mobile digital world.

Due to the fast and radical changes of conditions on the market, the exact boundaries between different types of agencies are becoming more and more blurry. Increased competition within the advertising value chain has initiated significant transitions from one sphere into another, as the new gap has appeared – a mobile channel. It can be noticed that in 2013 there have been many acquisitions of big media agencies, full service providers, of medium-sized and big digital agencies, specialized for mobile advertising. This goes in favor of the growing importance of mobile channel, and the need for the in-depth knowledge of how the mobile advertising functionate and what are the opportunities to be seized.



### **3.4 Publishers**

Publishers are companies/individuals that focus on creating and developing an engaging content, either an mobile site or a mobile application, that serves as a medium for advertisers to address to the users of the content/service provided.

Publishers are actors in the value chain of mobile advertising that are providing content through which the brand's message is transmitted. Like that, they are positioned at the end of the value chain, in the final stage of the process of activating the mobile advertising campaign. Beside the fact that publishers are providing traffic for the advertiser's campaigns, they are also providing buyers of the traffic with certain data and reporting tools needed for successful targeting and execution and monitoring of the campaigns.

Based on the size, type of content and services provided, technologies used for the development of m.sites or applications, we could split publisher segment into several categories such as: Mobile Operators, Online Publishers, Traditional publishers and Application Developers.

### 3.5 Mobile Operators

This segment was the first to offer direct marketing services to the advertisers and media agencies, from SMS to the best targeting technology. At the beginning of mobile advertising, when all telecommunication business was based on the GSM technologies, mobile operators were offering SMS advertising content while later, with the adoption and spreading of GPRS technologies, mobile operators owned the portals through which the end-users were accessing the web content. These portals were managed by the operators that were selling the advertisement space directly to the companies interested in utilization of the emerging channel.

It is worth mentioning that the fast growth of the mobile advertising was initiated only after the big telecommunication operators enabled the flat rate usage of GPRS technology. The flat rates enabled users to access freely and browse the Internet via mobile phones without any restrictions, on first place – cost restrictions. Once mobile operators enabled usage of 3G Technology on a flat rate basis, traditional web publishers started to monetize their mobile sites as now they had open access to the growing base of end-users. Additionally, flat rate system enabled a big switch of online AdNetworks companies towards new channel, as well as opening of new companies in the industry, with the exact same principles that were applied in the online advertising ecosystem.

Even though the introduction of the flat rates decreased the dominant position of the telecommunication companies in the mobile advertising, big mobile operators continued investing significant resources into making the direct display advertising more effective. This was done by developing new and better targeting technologies.

Being a partner close to the end-user, many advertisers, AdNetworks, as well as gaming publishers, are utilizing services and solutions of Mobile Operators. Some of them are:

- USSD Flash Notification: Unstructured Supplementary Service Data  
A service of displaying a message to the end-user, that is not storable as in the case of SMS. It is a flash message that serves for displaying content to the end-user and is automatically erased after reading it. It is considered as a very effective tool for informing consumers about the new updates (application developers), new products or near by promotions (Location-based-services).

- Push Notification SMS: Submitting and delivering advertising messages directly to the end-user SMS inbox. Users that agreed for receiving messages (opt-in), are usually being informed about the new products, discounts and offers of the advertisers. One of the best characteristics of this service is the high opening rate of nearly 95%, within average 15 minutes<sup>137</sup> after receiving, while the average conversion rate, of people that responded on the call-for-action, is between 25-30%<sup>138</sup>. For the business such as restaurants, retailers and others that have a need of reaching consumers quickly, this characteristic represent an uncomperable feature that SMS posses over other ways of delivering a mobile adveraismen.
- Discount coupons/vouchers: The most used way of distributing the digital loyalty promotional coupons and vouchers. Recently, Apple has successfully launched its product “Passbook” for storing the digital coupons but the distribution of coupons and vouchers by SMS posses the highest redemption rate KPI. The simple fact that backs the statement is that SMS has the highest read rate of anz existing form of direct mobile marketing that means that, vouchers delivered through an SMS are more frequently redeemed. Furthermore, this type of digital coupon/voucher is always with the consumer, which increase probability that it will be redeemed.
- Application stores: In some cases, Mobile Operators possess their own mobile application stores with which they are targeting the network’s users. With m.applications developers, MO works on a revenue share basis.

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<sup>137</sup> [www.jatxt.com](http://www.jatxt.com)

<sup>138</sup> Infobip Push Notification

### 3.6 Online Publishers

When it comes to the online publishers, they are the one that are integrating the advertisements into their online provided content, web sites. In mobile advertising, online publishers are those that are developing mobile optimized sites, with the users accessing it using their mobile Internet connections.

With the adoption of the flat rates and the increased usage of mobile devices as the medium for accessing internet, online publishers with already developed web sites realized the increasing opportunity of optimization of the landing pages and their content for the mobile usage. Mobile channel has become a powerful distribution channel for the content publishers. In most of the cases, online publishers adopt similar business models and approaches like the ones they were using on the web, when it comes to the monetization of its content and generated traffic connections.

Some of the companies dominating this segment are, among the others: Yahoo!, Google, Wikipedia, Amazon, Twiter, etc. The exact top 10 most visited mobile sites ranking in 2013:<sup>139</sup>

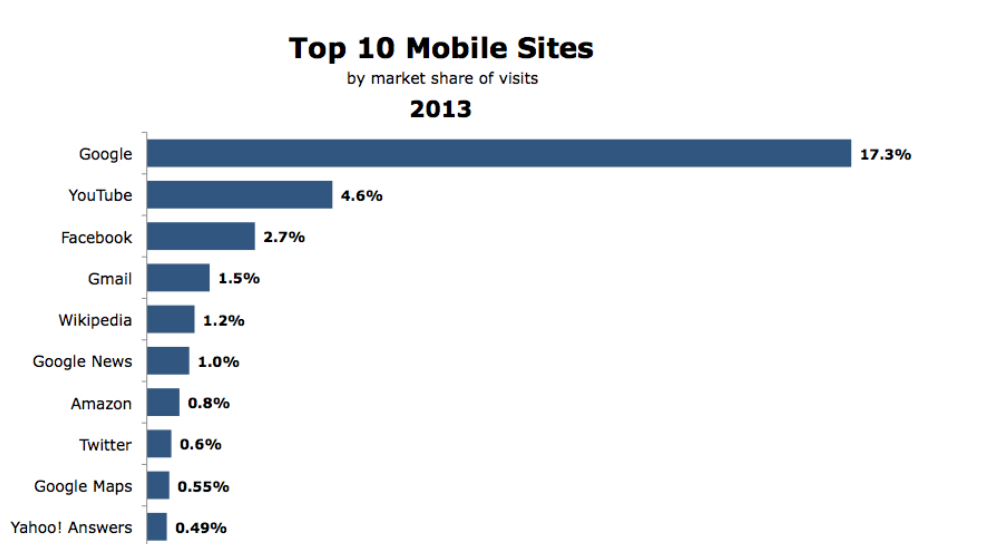


Figure 138 - Top visited m.sites

Special attention should be given to the social networks, publishers such as Facebook, Twiter and Google as they could be a perfect example of impact of mobile advertising and the potential it carries.

<sup>139</sup> Hitwise

Here the reader could be presented with a Facebook example. The World’s biggest social network, currently claims to have more than 1.23Bln registered users and 900M+ Mobile Monthly Active Users.

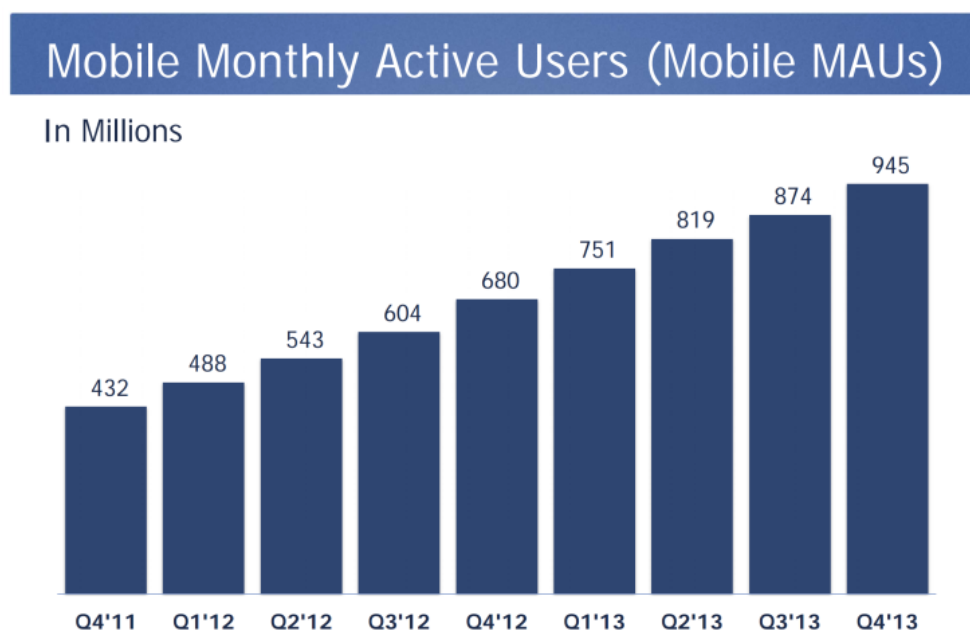


Figure 139 - Facebook Mobile MAU

The impact that mobile advertisement has on Facebook’s revenues is clear when taking into consideration that approximately 53% of it’s ad revenues are coming from the “small-screens”: mobile phones and tablet devices. In Q4 2013, Facebook generated US \$1.37 billion from mobile advertisement.<sup>140</sup>

Its success in mobile advertising, Facebook owes to its mobile application that had driven the growth of the revenues, from zero in 2011, to \$1.37Bln in 2013. Company has made a serious shift on the business side and it took an advantage of the new medium. Furthermore, it introduced native banners that exposes users to the very advanced creative solutions that do not disturb them when browsing the content. Facebook knows a lot about its users and for that reason, being relevant, well-targeted and full-screen sized, Facebook’s News Feed banners record good CTRs.

<sup>140</sup> Facebook Q4 and Full Year 2013 Earnings



According to some sources, Facebook does not have high CTR and it can range from 0,05% to 0,4% (Google's users record 8% CTR for a search campaigns(first commercial)).<sup>141</sup> The reason for this is in the fact that the primary business and purpose is to be a social-networking platform, rather than a content provider (like in the case of Google). At the same time, many companies are reporting very high CTRs, that goes as high as 6.5% for their wall posts, and 40% view rates for mobile video campaigns (while the industry average is approximately 25% for the in-banner video advertisement).<sup>142</sup>

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<sup>141</sup> BusinessWeek.com; Sarah Smith – Facebook's ex Online Sales Operation Manager

<sup>142</sup> Dominic Rushe, The Guardian article on Facebook performance in Q4 2013

### 3.7 Traditional Publishers

Traditional publishers are actors such as: newspapers, magazines, radio stations, TV stations, etc. They are the ones that, in a traditional advertising value chain, are providing a “one-way” communication with the consumers. An expression “one-way” communication is used since it describes in the best way the effects of a 30 second commercial spot, a paid radio commercial, space in the newspaper or photo in a magazine. The message is transmitted to the wide audience but the exact reach and effects of it, as well as the feedback from the audience, are hard to record.

Even though the consumers spend more time online, on the mobile device, than on TV, the investments in traditional advertising are still three times higher than the ones in online marketing.<sup>143</sup> Nevertheless, this trend is expected to decrease in the upcoming years as the performance measurement tools are becoming much more advanced in digital, mobile channel, than in the traditional one.

With the development of mobile channel, the big traditional publishers recognized a signal for switching from “offline” to “digital” channels, in order to reach new consumers. The shift in consumer behavior is more than evident and the mobile devices are becoming a “first screen” and touch point. In order to keep the pace with the development of new advertising channel, the so called “traditional publishers” need to keep investing in innovative solutions that will enable them to capture their spot in the emerging advertising ecosystem.

Some of the most common transitions are e-editions of magazines and newspapers, as well as optimization of their online content for mobile usage. Radio stations and TV stations are turning to the mobile through cloud solutions and live online streamings, as well as to the development of the mobile applications. All this movements are enabling traditional publishers to maintain their revenues and monetize presence in mobile channel as well as in the traditional one.

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<sup>143</sup> Morgan Stanley report on Mobile Advertising Trends 2013

### 3.8 Application Developers

When talking about the application developers, we talk about the companies/individuals working on developing a mobile applications as a standalone/core business of specific companies. In this segment, we do not cover companies that are developing mobile applications as an extension of already existing business, such is the case in Traditional Publisher segment, case of Italian “CDS”.

Mobile application development itself is a process of creation of an application software intended for usage at the low-power handheld devices such as smartphones. On mobile phones or tablet devices, applications could be pre-installed from the side of OEM, or they could be downloaded from the various mobile application platforms. Some of the most commonly used technology platforms for developing the mobile applications are: Andorid, Bada, BlackBerry, Firefox OS, Sailfish, Palm, Symbian, Windows and iOS.

Currently, Google operating system Android, and Apple’s iOS operating system are powering more than 90% of smartphones sold each year. In fact, with 81.9% of the market share, Andorid is the most popular operating system, while iOS is second with 12.1%. Windows Phone are 3rd with 3.6%, followed by BlackBerry with 1.8%<sup>144</sup>

The Application Developers segment is growing year by year and in 2013, this segment occupied 60% of 529.000 jobs created directly by the App Economy, within the EU 28 only.<sup>145</sup> The biggest group withing the application developers are mobile game developers. This data is not surprising taking into consideration that 90% of smartphone users play a game throught the mobile devices at least once a week.<sup>146</sup>

Currently the most successful business model in m.gaming industry is “freemium” model in which users do not pay for base gaming features but onfly for accessing full features of the game. While big part of revenues comes from In-app purchase, approximatelly 40%<sup>147</sup> of all revenues for mobile application developers comes from ads.

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<sup>144</sup> Gartner, report on Global Smartphone Sales 2013

<sup>145</sup> VisionMobile, Plum Consulting: “European App Economy”, September 2013

<sup>146</sup> Kathy Crosett: “Mobile Game Marketing to Increase – Marketing Forecast from Ad-ology”

<sup>147</sup> eMarketer.com

### 3.9 AdNetworks

A mobile advertising network, also known as Mobile Ad Network, is a company that tends to connect advertiser with the publisher or m.site that wants to host the advertisement. One of the key functions that a mobile ad network has is to aggregate the advertisement space supply from the publisher side, and match it with the market's demand from the advertiser's side. The most common inventory of ad networks are third-party m.sites and mobile applications, who work with the network for a fixed fee, or more common, for the ad revenues share.

“A mobile ad network is a system that allows advertisers to advertise on mobile sites or within mobile apps without having to deal directly with each mobile site or app individually. In many mobile ad networks, ads are bought in a virtual market place where advertisers bid to place ads paying a higher price the more targeted the ads.”<sup>148</sup>

The Mobile Ad Networks use a central ad server in order to deliver the brand's message to the consumers as it allows targeting and tracking options for the advertiser, as well as reporting on the performance of the campaign. This last mentioned features makes the key difference in comparison with the analog media alternatives.

In the world of mobile, the Advertisement Network tends to sell the inventory of m.sites and minor mobile apps, which are a good base for addressing to a wide audience but still providing tools for good targeting of a large audience. Mobile Ad Networks usually aggregate m.sites and minor mobile apps that are dealing with a wide range of topics, and offer it to the media agencies and brands on a large scale. The revenues for Ad Networks are coming from the margins and differences between the selling price of the publisher and the one for which the inventory is sold to the media agencies. In practice, there could be noticed two main different business models:

- “Arbitrage Ad Networks” – selling the aggregated inventory that publishers did not manage to sell directly to the media agencies and brands. This simple mediation between two sides helps a lot both to the publishers (since they fully monetize their m.sites and the mobile applications) and the advertiser (that saves significant resources by not searching on its own all the available small publishers in order to collect satisfactory volume of inventory for its campaigns). While buying from

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<sup>148</sup> Mobithinking.com

publishers on a CPM (cost per thousand impressions) basis, mobile ad networks are selling to the media agencies and advertisers on a CPC or CPA basis (cost per click / cost per acquisition). In this way, the advertiser pays on the performance basis (for an action by the consumer: click or acquisition), while ad network can earn significantly more on a difference between the CPM and the eCPM (effective CPM). In a way, the Ad Network takes certain risk, but at the same time, increase its potential gain.

- “Vertical Ad Network” – Collecting the inventory from a very specific sources in order to satisfy the need of the advertiser for addressing a specific target audience. Aggregation of this type of the inventory gives an opportunity for Ad Networks to require a higher prices as the search for this kind of traffic itself is an expensive one, and the results of campaigns running through vertical networks usually show better results.

As already indicated, big publishers sell directly when they have an exclusive and straight connection and relationship with advertisers or their media agencies. The remnant inventory is being sold through the mobile ad networks. On average, publishers sell 20-50% of their total inventory through ad networks. On the other hand, smaller publishers usually sell entire traffic through ad networks, not risking to lose the opportunity to monetize the usage of their application or visits of its m.site.

As mobile advertising is growing with a high pace, and it is expected to reach \$20.6Bln by 2015<sup>149</sup>, together with the high growth of mobile device’s users, one of the common ways to get new customer’s attention is to do it through mobile ad networks.<sup>150</sup> In the past couple of years, mobile advertising industry has seen many new players, especially in the segment of Mobile Ad Networks. Some of them will be specially analyzed in the case history section and one of the biggest are InMobi, Jumtap, Millennial Media and Tapjoy while some of the online advertising giants have recognized the growing importance and potential of mobile advertising and have recently activated their resources in this new market (Yahoo Network, Real Media, AdBrite and Google Ad Network).

With so many players in the market, companies operating in the mobile ad network segment start developing unique strengths that would allow them to differentiate from the rest of the market and the competition. Depending on the type of traffic that advertiser search for, it can

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<sup>149</sup> Gartner

<sup>150</sup> Peter Hamilton, Partner and CMO “HasOffers” and [mobileapptracking.com](http://mobileapptracking.com)

address to different adnetworks. Is it building the brand awareness, increasing the visit of m.site, looking for more clicks to the site, driving the download of the mobile application or increasing the sales and directing consumers to the mcommerce landing pages? Each mobile ad network claims to possess specific strengths and technologies needed for reaching any of its client's goals. In a saturated market such as mobile advertising, and especially in the segment of ad networks, companies are developing strengths in one of the following fields:

- Positioning – many Mobile Ad Network are claiming to be the best, biggest and the World's leader in the sphere of mobile advertising. The reality is that it is hard to measure precisely how big one network is. The reason for this is that there is a lack of disclosure of data (revenues, impressions per app/m.site) by the Ad Networks. Furthermore, it is difficult to discuss about the quality of the network and its inventory as companies do not disclose the exact m.sites and mobile applications where the advertisement campaign will be run. This represents one of the risks advertisers are facing as it might happen that the campaign will be run on a m.site or application that they did not want to be associated with. For all the above-mentioned reasons, Mobile Ad Networks pay special attention and put a lot of effort to positioning themselves properly in the value chain, trying to have an open and honest relation with all of their partners.
- Relevance, Targeting, Monitoring – as the mobile advertising is gaining importance and advertisers are investing more and more money in it, the expectations of the mobile campaigns and its performance are increasing as well. Exactly for this reason it is important for advertisers and ad networks to run advertisement on the m.sites and mobile applications that are relevant one with each other. In order to achieve this, the intelligent contextual engines need to be built into the ad servers of the ad networks. Furthermore, ad networks are investing significant resources in improving their targeting, measuring and monitoring capabilities, as the programmatic is getting more traction in developed mobile markets (US 56% annual growth). This is why the rise of programmatic leads to a serious reshuffling of the overall industry. It can be

noticed that many mergers and acquisitions in 2013 and beginning of 2014 had the aim of increasing the scale or providing data-focused programmatic ad trading.<sup>151</sup>

The Mobile Ad Network market can be divided into several segments and categories, based on different parameters and variables. Based on the business model, MobiThinking proposes division of the group into categories between Blind Networks and Premium Publisher Networks. One side, the blind network, works mostly on a CPC basis, while the other side focus on premium publishers, working mainly on a CPM basis. Between these two extremes, there are also categories worth mentioning and classifying in the following pages.

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<sup>151</sup> BI Intelligence: "The Mobile Advertising Ecosystem Explained", Report 2013

### 3.9.1 Blind networks

“Blind networks” is an expression that describes a group of mobile ad networks with which advertisers are placing their ads, without knowing the exact places where the campaigns will be run and to which audience (m.sites or mobile applications) the ads will be displayed.<sup>152</sup>

Companies that are falling under the category “blind mobile ad network” are companies that have access to the largest number of publishers and advertisers. These companies have collaboration with the wide portfolio of small publishers and have access to a high volumes of inventory that remained unsold. Very often, companies that are considered members of “blind networks” are buying also from premium publishers and other mobile ad networks.

While offering high volumes and large inventory to its clients, these companies do not disclose the exact sources of traffic or any other insight about the publishers with which they are working with. Nevertheless, advertiser can request targeting by specific variables (country, mobile operator, device) and content (news, sports, etc.) but without knowing the exact source of network’s traffic. While the level of quality of the new user is questionable and is proven in time, the “blind networks” are usually an excellent source for getting high volumes and instant increase of the clicks/visits.

“Blind Mobile Ad Networks” are selling mainly on a CPC basis, enabling advertisers to pay for the performance that, in this case, is measured by the number of clicks that end-users made. At the same time, “blind network” offers possibility of running campaigns with the aim of increasing the brand awareness, by charging on a CPM basis. Very rarely, blind networks can offer to its clients running advertising campaigns on a CPA (cost per action), when advertiser indicates which type of the action it requires (registration, subscription, purchase, etc.). The most convenient advertising, in terms of cost, is run of network (RON) advertising that does not include any targeting possibilities and in some countries it may start at \$0.01 CPC. The average CPC campaigns range between \$0.1 - \$0.3.

In most of the cases, advertisers are given an access to a panel, with many self-service tools, through which they can track and optimize their campaigns in real time, mainly on a price basis (by monitoring the eCPC/eCPM values).

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<sup>152</sup> MobiThinking.com



### 3.9.2 Premium Blind networks

Premium blind networks usually avoid small scale publishers and their focus is on medium-sized level publishers. They promise usage of premium m.sites and mobile applications but still, like in the case of blind networks, they do not disclose the exact source of traffic used for running the advertisement.

Companies operating in this sector offer to its clients CPC, CPI and CPM campaigns, promising good performance as they are using their exclusive relationships with the premium publishers (m.sites of well-known brands, broadcast companies, etc.). Clients can count on a better performance, than the one in the case of blind networks, when it comes to driving downloads of its application or obtaining high CTR (click through rate).

While still not disclosing fully the sources of traffic, advertisers have an opportunity to select a group of m.sites or applications that target particular demographic. This semi-blind type of advertising approach gives certain security to the advertiser and it is considered a viable option if there is a particular audience to target.<sup>153</sup>

Some of the companies belonging to this segment are: Jumtap, DMG, Hung Mobile Ads, Greystrip, Madhouse, Airpush.

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<sup>153</sup> Saatchimobile; Charlotte Howel, Media Account Manager at M&C Saatchi Mobile

### 3.9.3 Affiliate networks

Affiliate or the cost-per-action (most common: acquisition) mobile ad networks are rare as the majority of networks offer CPC and CPM advertising models. Nevertheless, even though the risk of running campaigns with the CPA goals is high, there are companies in the mobile world trying to position themselves as the leading affiliate mobile ad networks, specialized for the acquisition.

With the affiliate mobile ad networks, advertisers clearly define their objectives and the type of action they tend to achieve through their campaigns. Furthermore, the exact price of the fulfilled action by the end user is determined and advertisers pay only in the case of unique action, when conversion is achieved. Usual actions are:

- Subscription/registration
- Signs-up
- Purchase of a product
- Purchase/download/install of a mobile application
- Usage of coupon / sales leads
- Clicks to call

Like in the case of blind networks, advertisers can select specific types of m.sites or applications where the campaign will be run (or limit certain categories) but may not choose the particular publisher. Furthermore, advertiser can request targeting by geography, operator, device, type of connection (wi-fi / gprs) and/or demographic.

In order to achieve the goal of the advertiser's campaign, Affiliate/CPA networks often make partnership with other mobile ad networks (usually blind ad networks) with the aim of extending their reach and decreasing the risk of being ROI negative. The reason for this is that, in most of the cases, Affiliate/CPA networks buy inventory on a low CPC/CPM basis while charging on a CPA basis.

### 3.9.4 Premium networks

Companies operating in the segment of “premium mobile ad networks” tend to build an exclusive relationship with a small and limited number of highly selected and prestigious publishers. These publishers are leading mobile operators, m.sites with the big traffic, broadcast companies and the most popular mobile applications (coming from the gaming, music and entertainment sector).

Having exclusive relationships with the biggest publishers and most popular mobile applications, companies belonging to the premium mobile ad networks work mainly on a CPM basis. This is the leading pricing model in this segment as the price of mentioned exclusive relationship very high. Network’s clients are usually advertisers and marketers who want big and quality exposure, with the main objective of building brand awareness and presenting new product/service. Furthermore, premium networks offer wide range of targeting options, as well as superior customer support.<sup>154</sup> The range of CPM on premium networks is between \$5 - \$75.

Premium networks rarely work on a performance basis but when they do, the CPC range is considerably higher than the one of the blind networks, ranging from \$0.10 - \$0.50. The reason for this is the quality and the higher lifetime value of the consumer base of used premium inventory.

With the higher prices, for both CPC and CPM campaigns, premium networks attract top-tier advertisers willing to pay premium prices for securing the exclusive sources of traffic for its campaigns. Premium networks work with a minimum monthly advertiser’s budgets of \$10.000 which allows acquiring satisfying volumes of traffic at premium inventory.<sup>155</sup>

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<sup>154</sup> Saatchimobile.com

<sup>155</sup> Mobithinking.com

### 3.9.5 Location networks

Location mobile ad networks are putting efforts at targeting the right audience, at right moment, at the right place. Local mobile advertising can reach desired audience at the place they live, work and play, and some of the most popular campaigns objectives of advertisers, according to Millenial Media, are:

1. Increasing the foot traffic
2. Building the brand awareness
3. Increasing site/m.site traffic

In order to increase the foot traffic, advertisers are, together with the ad networks, adding an exclusive offer to the displayed banner that can be activated only inside of the store. The Location mobile ad networks are using their capabilities to deliver the campaign to the users that are within certain radius (50-200m) of the advertise's store. When it comes to the increasing consumers' awareness about the product or certain service in the desired area, advertisers are using location-aware ad units. The success of this kind of location-based campaigns is evident as some 40% of CPG/FMCG advertisers are using this type of targeting.<sup>156</sup>

According to the JiWire, 75% of mobile consumers made an action after seeing a location-specific advertisement on the display of their mobile devices. Furthermore, 38% of people that were looking for local content made an actual purchase after the search.<sup>157</sup> These data alone go in favor of the statement that the local mobile advertising is one of the most effective marketing investments for growing business and for introducing local offers, both products and services.

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<sup>156</sup> Adam Chandler, VP at Millenial Media

<sup>157</sup> Google : Understanding the mobile consumer, May 2013

The increasing importance of location-based marketing is backed additionally by the IAB (*Interactive Advertising Bureau*) in its report:<sup>158</sup>

- 44% of advertisers consider location-based mobile advertising as one of the most important benefits of mobile advertising
- 86% of marketers stated that the broad and precise location and navigation capabilities in smartphones and tablets have high importance for the successful advertising

While the advertisement could be delivered through a banner with the indications how to reach the advertiser’s store, recently there has been a new trend in running location-based mobile campaigns. The development of mobile devices also led to the development and evolution of mobile coupons which are currently the most used option for driving in-store traffic into food places and retail outlets<sup>159</sup>. Consumers receive mobile coupons via banners or MMS/in-application, or an SMS Code, in order to redeem them in-store. Some of the companies supporting mobile couponing are: Groupon, Foursquare and LivingSocial.

Taking into consideration that the advertising on a local level allows a more specific segmentation and targeting, the performance of this type of mobile campaigns is above market’s average and the ROI is usually very high. At the same time, the inventorBoth CPC and CPM pricing models have been used for a geo-location and location based advertising. In the US, depending on the proximity of the targeted area in respect to the advertiser’s store, teh CPM ranges from \$3-5, while the CPC has a market average of \$0.3.<sup>160</sup>

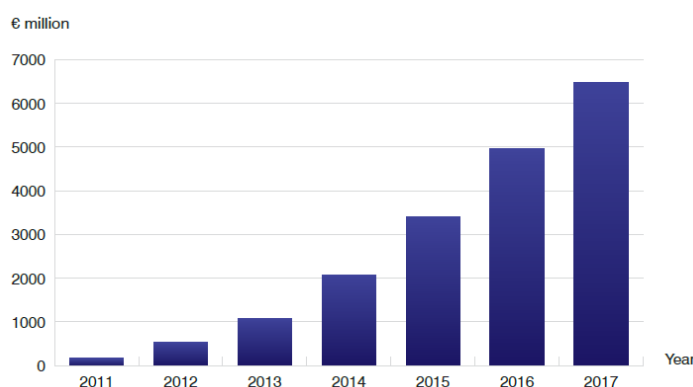


Figure 140 - LBA Revenue Forecast Worldwide

The growing importance of location based mobile marketing is backed also by the recent study by Berg Insight, which state that the location-enabled ad spend reached about 8% of total mobile ad spend for 2012 and it is expected to increase up to 33% by 2017.<sup>161</sup> For

<sup>158</sup> IAB Survey : Marketers Perceptions of Mobile Advertising 2013

<sup>159</sup> AdFonic : Geolocation white paper

<sup>160</sup> MobileSQUARED Survey 2013

<sup>161</sup> Berg Insight : Location Based Advertising and Marketing

this reason, competition in this particular segment of Mobile Ad Networks is higher than in any other.

The most common searched information are about the restaurants, weather, events, clothing, stores, etc. Location mobile ad networks offer both search and display advertising.

Nevertheless, with all its positive results, being in its early stage of development, mobile geolocation advertising is facing certain problems such as lack of widespread adoption by the advertisers and the accuracy and the relevancy of targeting. Some of the companies that are developing unique technologies and providing specific solutions for the advertisers are: Adfonic, Admob/Google, InMobi, JumpTap, Verve and Madvertise. To the big extent, Location Ad Networks cooperate with the technology providers that are supporting their efforts in passing the advertiser's message by optimizing technology for "geo-aware", "geo-fanced" campaigns, as well as algorithmic location-based targeting and targeting the users by the wi-fi hotspots. The ultimate goal of the market is to improve the GPS, Cell-ID and Wi-Fi positioning of mobile users, in order to operate more effectively with the real-time information and data.

### 3.9.6 Incentivizes networks

Companies operating in the incentivized mobile ad networks segment offer users to install a mobile application or to complete a certain action in exchange for some benefit. Usual rewards for conducting an action are in-app items/money or some sort of a virtual currency (such as token) while the actions may range from watching a video, installing mobile applications, subscribing to the services or making an online purchase.

Incentivized Ad Networks have integration with the publisher through which they are offering benefits for the app user or m.site visitor. There is an offer-wall through which users are encouraged to take and complete certain actions. At the same time, it is clearly communicated to the users which benefit they will receive for which action.

For publishers, it is a win-win opportunity through which they monetize their users and reward them for a chosen action. Furthermore, the positive thing is that the user chooses with which ad it wants to be engaged with.

Advertisers are deciding for this type of ad networks in case when they need an instant increase of downloads of its mobile application, in order to position themselves higher at the ranking lists of mobile app stores and continue generating organic<sup>162</sup> downloads later on. When it comes to the actions other than install, it is an effort of advertiser to increase its online sale, number of subscribers and/or base of its users.

Price model used in advertising with Incentivized Ad Networks is usually cost per action (CPA) or cost per install (CPI). When it comes to the CPI ranges, they are usually less than in the case of non-incentivized campaigns since it is considered that the quality of users is lower than due to the fact that desire to download the mobile application did not come from them but it was incentivized by third parties.

Some of the companies worth mentioning in the sphere of Incentivized Ad Networks are: TapJoy, SponsorPay, OfferMobi, SuperSonicAds, TokenAds, Trialpay, Play Heaven, Mob Partner, NativeX.

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<sup>162</sup> Organic download: Download of mobile application that came from the visitor of the mobile application store, a user that has not been exposed to the paid advertisement, or influenced on other way by the advertiser's actions. This downloads are generally recorded only by the ones that were done directly at the mobile app store.

### 3.10 Technology providers

When talking about the segment “Technology Providers”, we think about all those companies providing technology solutions to the advertisers for improving the performance of their mobile advertising campaigns.

The AdServers as technology providers are considered to be at the very heart of the ecosystem.<sup>163</sup> Simple example supporting the statement is the acquisition of big Microsoft’s AdServer company “Atlas” by Facebook in Q1 2013, all in order to support its growing ad business. Reason for such an importance of AdServers is in the fact that it enables its clients to respond to various needs, out of which the most important is real time advertising.

In today’s dynamic and progressive environment of mobile advertising, multichannel tracking solutions are the ones that marketers needs the most in order to monitor and analyze the campaign’s performance accross different channels. Both advertisers, their media agencies, as well as other players that are providing traffic understand that the optimization of the campaigns, analysis and good reporting tools represent a big step forward that will enable the mobile adverting industry to take even bigger share in the advertising market, as whole.

When it comes to the tracking of the consumers, and their behavior, the mobile channel faces certain limitations, in particular, the mobile cookie. Oposite of online advertising, mobile cookie has been limited by the device manufacturers and the operative system platforms, in order to provide certain level of privacy and security.

While being very reliable for tracking post-click engagement of the user and especially conversion (click to download), mobile cookie has limited options when it comes to the access to the apps-to-apps and mobileweb-to-mobileweb files and data (limited sharing with the other applications). Furthermore, Apple does not allow tracking of its users based on a third-party cookies.

Nevertheless, there are alternative ways of tracking mobile consumers by the technologies provided by the AdServers and players that are developing know-how in this particular field.<sup>164</sup> Some of those are tracking based on the ID of the mobile subscriber (IMSI,

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<sup>163</sup> Cyrille Geffray, Smart AdServer’s MD -

<sup>164</sup> IAB Mobile Center of Excellence: „Cookies on Mobile 101“



MSISDN). All the allowed processes are pre-defined by the regulations and legislations adopted by the IAB, GSMA and MMA Organizations.

Aside of tracking, technology providers can assist to the other players of the value chain by providing technology for optimization of the displayed banners at the chosen advertisement space. On one side, advertisers are mainly interested in running those types of banners and creatives that consumers are most likely to click on and make an action. At the same time, AdNetworks have a need of identifying which inventories are the best for specific actions and how they can match the campaign's objective with the source of traffic.

Some of the most spread solutions that these players offer are the monitoring and reporting tools that enable advertisers, agencies and/or AdNetworks to be updated constantly about the performance of the active campaigns. With the support of technology providers, players of the value chain can have access to powerful tool for monitoring and reporting, and integrate it to their own platforms. These integrations are done through the API (Application Programming Interface) codes and the most common used protocol is HTTP.

In some cases, big AdNetworks possess the knowledge and technology that technology provider players offer. In most of the cases – agencies and medium size AdNetworks outsource these services and integrate innovative solutions into their offers. Nevertheless, with the fuzzy boundaries between the players of the mobile advertising ecosystem, technology providers have a possibility of expanding their core business and offer mediation between different AdNetworks, or even Advertisers and Publishers.

## CHAPTER 4: MOBILE REAL-TIME BIDDING

### 4.1 Marketing technology landscape

The level and number of technological advancements has been growing with a tremendous pace throughout the last couple of years. According to research carried out by the Chiefmartec<sup>165</sup> in January 2014 there are not less than 947 companies offering their service to the marketers, which underlines the extent to which the technology has embraced the marketing industry.



Figure 141. Marketing technology landscape evolution

Looking back to 2011 there were just some 100 companies operating in the field, while a year after, in 2012, the number skyrocketed to some 350 companies<sup>166</sup>, representing a tremendous three-digit growth. However, as we see from the figures above, the number of the entities involved in the marketing technology was growing in 2013 as well, almost tripling again and reaching an impressive number 947 companies.

It is to be noted, that even such a detailed representation of the market does not reflect the whole market and there are many small and medium size companies that did not happen to be in this specific landscape, that has 6 classes:

- **Internet** services such as Facebook, Google, and Twitter that underlie today's marketing environment.
- **Infrastructure** such as databases, big data management, cloud computing, and software development tools.
- **Marketing Backbone Platforms** such as CRM, marketing automation, WCM, and e-commerce engines.

<sup>165</sup> <http://chiefmartec.com/2014/01/marketing-technology-landscape-supergraphic-2014/>

<sup>166</sup> <http://venturebeat.com/2014/01/07/947-companies-in-43-categories-the-increasingly-crowded-marketing-technology-landscape/#!>

- **Marketing Middleware** such as DMPs, CDPs, tag management, cloud connectors, user management, and API services.
- **Marketing Experiences** — more specialized technologies that directly affect prospects and customers across their lifecycle, such as advertising, email, social media, SEO, content marketing, A/B testing, marketing apps — the “front-office” of modern marketing.
- **Marketing Operations** — the tools and data for managing the “back-office” of marketing, such as analytics, MRM, DAM, and agile marketing management.

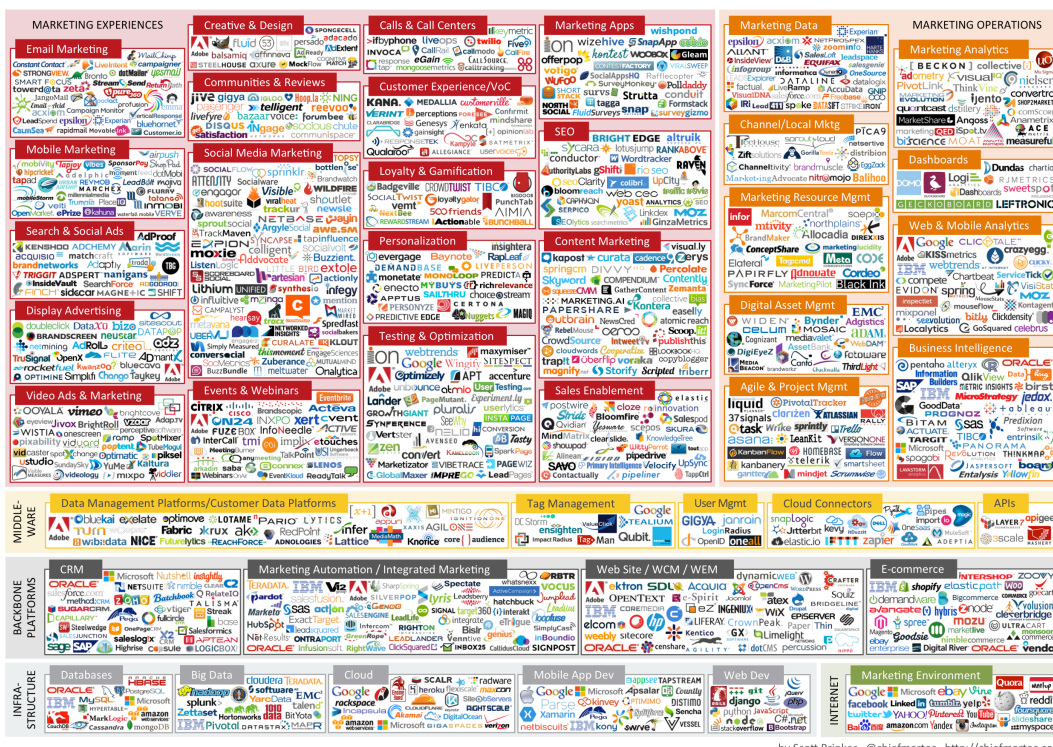


Figure 142. Marketing technology landscape

Looking at breathtaking market dynamics it seems that number of firms involved in the business will keep on growing and the figures will keep changing due to new launches, re-launches, expansions, exits and mergers.

## 4.2 Historical background of RTB

Going back to the history of creation of RTB technology, it is necessary to track down the development of the display advertising and the conditions that made possible the existence of RTB as a disruptive approach to advertising possible. As many other technologies the

mobile RTB was copied from its online counterpart as it has proven its ability to satisfy the needs of both demand and supply sides in an efficient and effective way, that is depicted below.

As a matter of fact, online display advertising arose as the major online marketing vehicle during the dot-com bubble of the late 90s. For many years, the way it was shaped, priced and sold remained unchanged. In 1998, goto.com started to offer text-based ads that had keywords as a target and the pricing was based on a CPC (cost per click) basis. It was an inception of the search marketing, which gave to the marketers an innovative way to connect with the customers. Google's arrival into the space underlined that search was a serious competitor for online marketing budgets, challenging the leadership of the display advertising.

The efficiency, control and measurability of the ROI provided by search marketing stressed the boundaries of display as at this time display did not offer clear and simple ways to directly access inventory, offering limited control over inventory and costs, being accompanied by relatively low performance.

By 2006, display marketing was no longer enjoying the leadership as budgets continued to move from display towards search advertising. This significant shift can be credited to one thing – control over ad placements and costs associated to it.

As a result, display needed to advance in order to compete in a new world governed by search. Through innovations and acquisitions by big players like Yahoo!, Google and to some degree Microsoft, display advertising industry started to evolve providing better access to inventory, more efficiency and control, and consequently improved performance. Deals like acquisition of RightMedia by Yahoo! and the launch of Google Doubleclick Ad exchange helped skyrocket the importance of the new ways of acquiring media, furthermore in 2007 Demand side platforms (DSPs) started to emerge as well with companies like MediaMath and InviteMedia who facilitated the media buying.

DSP was the platform that aggregated media buying in one place, quite interestingly some Ad networks, example being Turn, began to convert into DSPs to take advantage of this market shift. Few years after, Google acquired AdMeld an advertising optimization platform for publishers or how it will be called in the current paper –SSP that stands for Supply Side Platform.

### 4.3 Introduction to RTB

Taking a look at how the conventional business relationship between publishers and advertisers was evolving we see the following pattern as an initial one: publisher makes direct deals with agencies, while agencies connect with multiple publishers as a single one is never enough. As a result there are a lot of publisher to get in touch with in order to strike a deal for each of the advertising campaigns, through endless price requests, negotiations, confirmations of volumes, insertion orders and invoices. Apart from it for each of the campaigns for a separate publisher there will be a need of sending the creative files and tracking links that would make possible the campaign's delivery.

All the time and effort put into the above-depicted process is in some cases nothing more than irrational use of time as not all the requests and negotiations end up with delivered campaigns. Furthermore, publishers manage to sell just a part of their inventory directly to advertisers of agencies, with the remaining inventory generally being sold via Ad networks, that is, apparently, less profitable for publishers. The direct sales could potentially bring higher revenues, however, as already mentioned above, publishers rarely manage to sell all the available inventory using direct channels and as an other drawback-the endless flow of documents and campaign assets, that complicate the process for both the parties involved.

As a result of it, to get the best out of the remnant inventory publishers start to experiment with different Ad networks, plugging in one or another, trying to understand which one can perform better. These experiments resulted in the so called Chaining, where the publisher's ad server primarily calls a code of one specific network, giving it more traffic, if that network does not have a suitable ad, it sends request to the second one and so on. At the end of the month the performance of all the tested networks is evaluated and the preferences for the chaining are being reviewed, however it does not necessarily result in the incremental growth of the revenues, as it is not exactly easy to tell which of the networks will bring more revenues in the next period of time.

All the imperfections of the existing conventional approach to media trading, along with the development of behavioral targeting systems and application of Big Data, strengthened by the example of the online counterpart and desire of advertisers to value the media according to the traffic quality led to the development of the mobile real-time bidding ecosystem.

So, what is the Real-time bidding?

To put it simple, RTB represents stock exchange on which there are three parties: the advertiser who decides how much he is willing to pay for display his ad to a particular user , publishers , who sell their inventory in real-time , and the user - or rather his anonymous data – right to display advertising to which is the subject of the auction. Trading on this exchange takes place in real time: the whole process from the ad request sent by the user’s device till the ad is retrieved from the ad server and shown to the user, takes one tenth of a second, while the content requested by the user is loaded. During this time, data about the user - the publisher’s property he entered , the information that is known about him by the property or maybe - additional information from the data providers is put on the auction and is sold to the advertiser who has identified them as relevant and offered the highest price.

RTB allows the ecosystem members to trade display advertising inventory on an impression - by - impression basis as each impression is offered by a publisher's property website or app in real time. Furthermore, RTB provides both demand and supply side with a possibility to dynamically modify their bids, as well as allow to get the real-time feedback on the performance of an ad campaign with the given bid and set of targeting parameters.

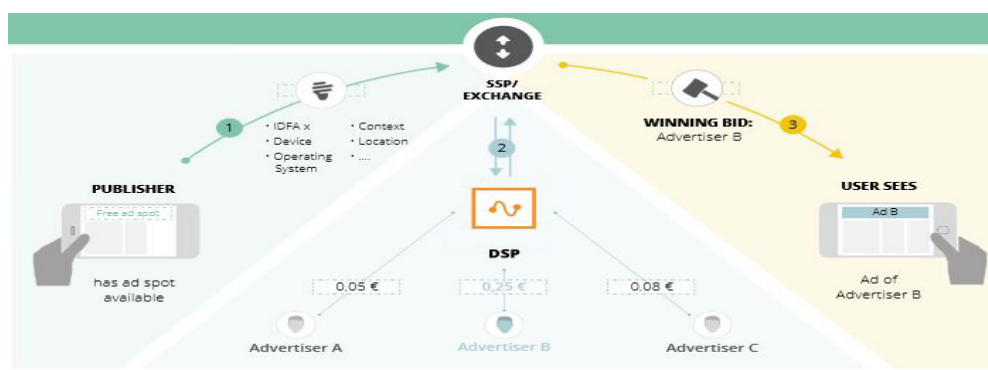


Figure 143. Real-time bidding process

With the RTB advertisers can decide to buy ad inventory based on a detailed audience targeting, and bid on available impressions when their targeting criteria match the impression on auction. The possibility to offer a bid for inventory just when the right audience is accessible means advertisers can be much more accurate in their targeting and effective in exploiting their advertising budgets. The quickness and precision of this real-time bidding model means a great prospect to advertisers who were struggling to spend their budget in an efficient way utilizing traditional display buying.

Nowadays, RTB ecosystem is primarily used to trade unsold display advertising inventory, remaining after the in-house sales team of publisher has sold a share of inventory directly to

client or an agency representing client's interests. Remaining inventory (often referred to as remnant) is sold via intermediaries and initially it majorly flew through ad networks and then ad exchanges, which help automate the process. Currently, with RTB, the trading workflow and the value chain are being optimized and automated even more. Why is RTB starting to threaten the traditional ways of doing business in display advertising? The answer is quite simple and it is money. Both media agencies and publishers have comprehended that RTB offers better ROI than other forms of ad inventory trading. By now, agencies and advertisers have understood that while eCPM rates may be superior for RTB -inventory, the improvement in ad effectiveness is justifying all the expenses. They discovered that RTB - campaigns deliver well for direct response performance campaigns, and they are starting to realize that RTB can also perform well with branding campaigns, even when using non - premium inventory. Practice shows that agencies desire accountability and performance in terms of return on their advertising spend. RTB satisfies both the need, while older methods do not. All major agency corporations nowadays have proprietary trading desks allowing them to plug into the RTB market and enjoy its benefits. Google and Facebook, who have embraced RTB, have taken advantage from this change in client demand, being number 1 and 2 in the display segment, which for many years had been controlled by Yahoo!

**Net US Digital Ad Revenue Share, by Company, 2012-2015**  
 % of total digital ad revenues

	2012	2013	2014	2015
Google	40.9%	39.9%	40.8%	42.3%
Facebook	5.9%	7.4%	8.2%	9.0%
Microsoft	6.2%	5.9%	5.7%	5.4%
Yahoo!	6.8%	5.8%	5.4%	5.0%
IAC	2.5%	2.5%	2.3%	2.2%
ADL	2.5%	2.3%	2.1%	2.0%
Amazon	1.2%	1.4%	1.8%	2.0%
Twitter	0.6%	1.0%	1.6%	2.2%
LinkedIn	0.4%	0.5%	0.7%	0.8%
<b>Total digital* (billions)</b>	<b>\$36.80</b>	<b>\$42.58</b>	<b>\$48.09</b>	<b>\$53.36</b>

Note: includes advertising that appears on desktop and laptop computers as well as mobile phones and tablets, and includes all the various formats of advertising on those platforms; net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; \*data through 2012 is derived from IAB/PwC data  
 Source: company reports, 2012 & 2013; eMarketer, Dec 2013

166311 www.eMarketer.com

Figure 144. Net US Digital ad revenue by company<sup>167</sup>

Publishers from their side are also contributing to this development, even if sometimes it may be rather market enforcement than a pure will. Lately, many publishers were cautious

<sup>167</sup> <http://adage.com/article/digital/emarketer-facebook-microsoft-pass-yahoo-s-u-s-ad-share/245761/>

about offering even the remnant inventory to RTB platforms; being afraid of the possibility that their unsold, cheaper inventory would contend with their own luxurious premium inventory that is sold directly, damaging their business. Today, more and more publishers start trading their unsold inventory via RTB, while some of them have already started offering the premium inventory to the market, taking advantage of so called “Private Marketplaces” that will be discussed later in the chapter. One of the main reasons of the publishers’ mind change is the growing demand from the “Buy” part of the ecosystem that can be hardly ignored by the “sell” side. However there is also a financial aspect to it, as eCPM rates are often higher with RTB than in old-fashioned indirect sales, additionally RTB is habitually less expensive to operate and higher revenue at lower costs equals better Return on Investment.

According to eMarketer<sup>168</sup> majorities of US marketing executives are already using a wide variety of programmatic approaches to their jobs, according to research from the Winterberry Group and the Interactive Advertising Bureau (IAB). A September 2013 survey found strong majorities using audience segmentation, auction-based media buying, insight development, and automation of back-end and premium digital media buying processes.

But the programmatic’s reach will get even farther. While 79% of respondents currently use segmentation, more than nine in 10 plan to do so in the next two years. And similar percentages plan to use real-time bidding or other auction-based media buying. Content optimization techniques are also expected to reach more than two-thirds of marketers in the next two years.

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<sup>168</sup> <http://www.emarketer.com/Article/Usage-Widening-Programmatic-Techniques/1010385>



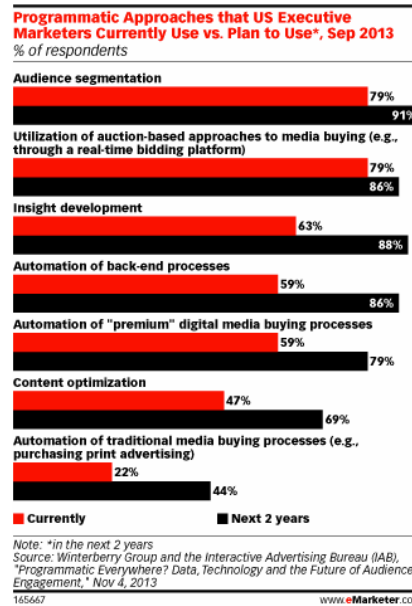


Figure 145. Programmatic approaches used by US marketers

As seen in Mediapost<sup>169</sup> the multi-year “year of mobile” has spilled into 2014, and marketers are once again expected to ramp up mobile ad spend. Agency trading desks anticipate that mobile will account for 16% of their digital ad budgets in 2014, up from 7% in 2013. Not only are marketers expected to more than double the amount of money they spend in mobile, but the ways in which the mobile ads are bought are expected to change, too. One year ago, 49% of trading desks were buying mobile inventory via automation (through demand-side platforms, or DSPs). In 2014, 90% of trading desks are buying mobile inventory this way. However, despite the adoption of automation, trading desks are still using direct buying methods more in 2014 than they did in 2013. In 2013, 22% of trading desks bought mobile inventory with publishers directly, and 30% did so through ad networks. In 2014, those figures have risen to 36% and 38%, respectively. The fact that all three buying methods - DSPs, ad networks, and direct with publishers -- are all being used more this year than last speaks to the growth that mobile advertising as a whole is seeing. As Adform RTB trend report published in December 2013 reveals<sup>170</sup>, the growth rate of mobile RTB impressions increased respectably during the third quarter in Europe in 2013. Mobile RTB impressions

<sup>169</sup> <http://www.mediapost.com/publications/article/220353/90-of-trading-desks-buy-mobile-inventory-via-auto.html?edition=70351>

<sup>170</sup> <http://blog.adform.com/real-time-bidding/rtb-research-mobile-advertising-increases-by-102/>

grew by 43%, and tablet impressions by an astonishing 102%.

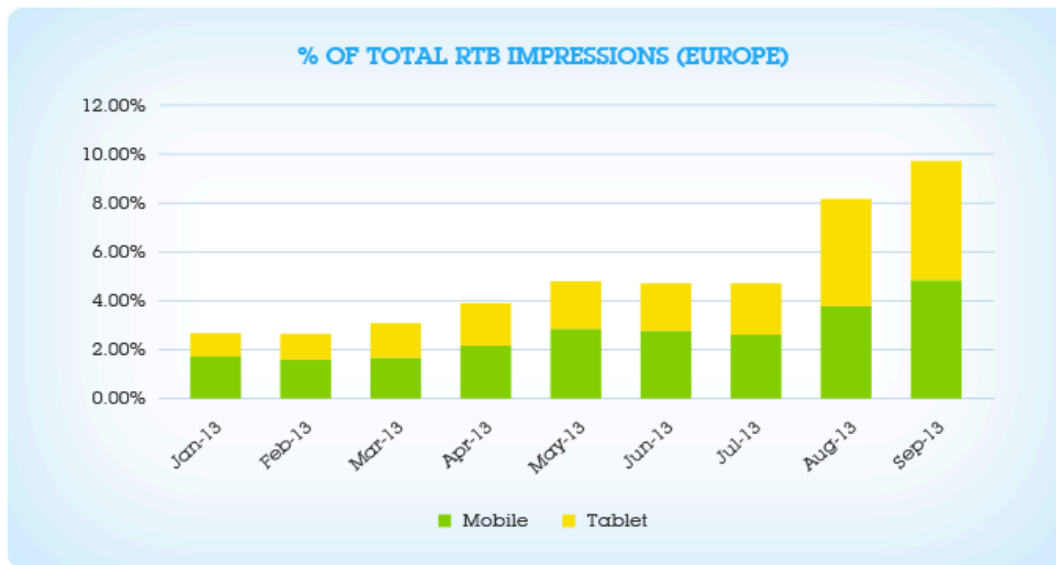


Figure 146. Total RTB impressions Europe

Mobile and tablet inventory now account for 8% of all RTB impressions sold, which has doubled compared to Q2. While this growth rate is impressive, it is still far below actual mobile usage, which in some regions within Europe represents 50% of all traffic. The report also reveals that the European programmatic market continues to show signs of growth, health and market stabilisation. RTB ad spend increased 31%, and CPMs saw a modest 3% growth. While third quarter growth was less dramatic than the first half of 2013, by September 2013 programmatic buying saw accelerated growth in spending.

#### 4.4 Mobile RTB ecosystem

The ecosystem of the Real-time bidding in mobile advertising is rather complex and is subjected to constant evolvement of the roles companies take and the ways they collaborate with other parties of the RTB landscape are still undergoing changes. For the case of simplicity it is suggested to take the classic representation of the system, where the Advertisers and Publishers are connected via Trading desks (TD), Demand-side platforms(DSP), Ad exchanges, Ad networks and Supply-side platforms(SSP), which in their turn utilize some other players in order to effectively connect demand with supply, mainly Data management platforms(DMP) and to some extent Dynamic creative optimization and Ad verification platforms.

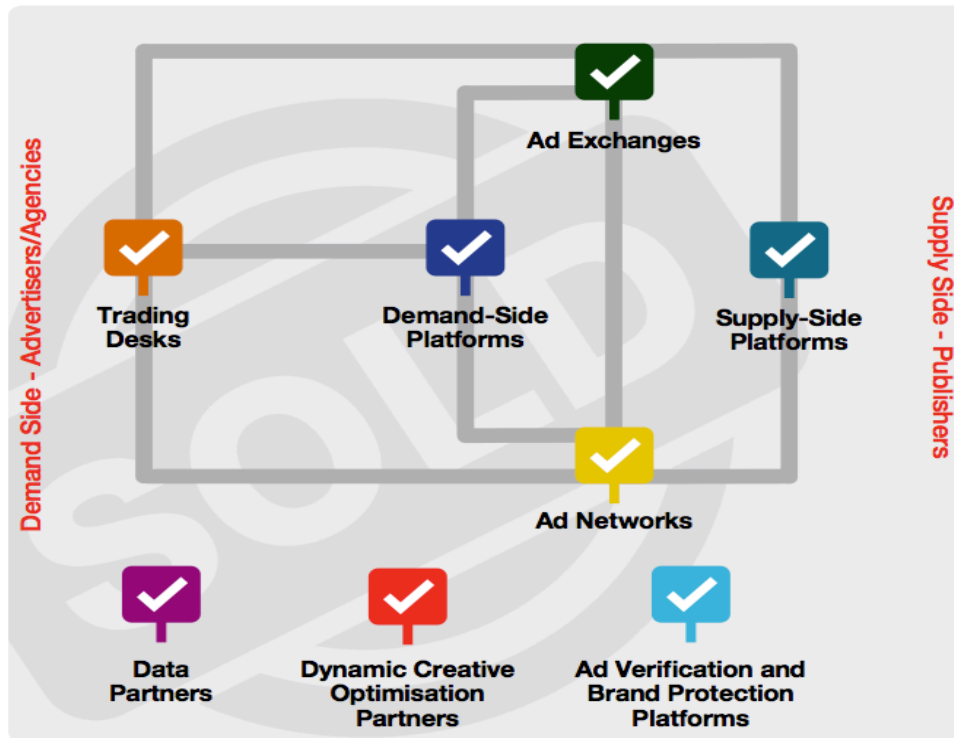


Figure 147. Mobile RTB ecosystem<sup>171</sup>

The emphasis will be put on the main ecosystem enablers and data platforms, as these are the actors that represent the backbone of the RTB ecosystem and contribute to a notable extent to the existence of the real-time programmatic buying. As already stated previously, nowadays the differences between actors involved in the auction based programmatic buying are blurring, as many of the actors are active in different roles simultaneously, example being DSPs calling themselves DMPs and DMPs adding DSP functionality, additionally there are Trading desks s trying to build their own technology making them a type of a DSPs. Other example could be given by the SSPs that sometimes offer direct sales of inventory to the demand side, essentially becoming ad networks. Ad networks, in their turn began offering API access to their inventory, with some of them operating almost as DSPs or Trading desks. Some of the SSPs then began offering buying tools, becoming sort of like DSPs. And the exchanges began offering everything to everyone<sup>172</sup>. To give the better graphic representation of the nature of relationship between different players across the mobile advertising the reader might want to take a look at an image below, that summarizes the majority of the possible flows.

<sup>171</sup> <https://econsultancy.com/reports/rtb-buyers-guide>

<sup>172</sup> <http://www.adexchanger.com/data-driven-thinking/the-new-digital-ad-ecosystem/>

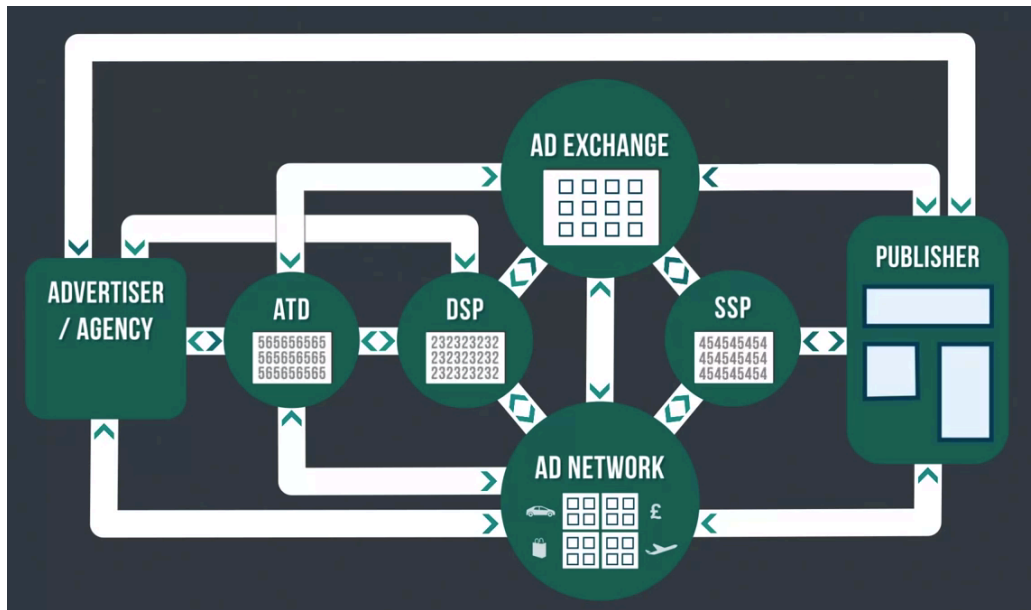


Figure 148. Display advertising ecosystem

As for the ecosystem represented with real world companies, some of which will be mentioned in the chapter, the most comprehensive picture of the market is offered by the Business insider<sup>173</sup>. As we can see the number of companies involved in the business is apparently less than the one of the overall marketing technology landscape, however still is quite high and ever growing.



Figure 149. Mobile RTB ecosystem. Real world case

173 <http://www.businessinsider.com/mobile-real-time-bidding-ad-ecosystem-2013-5>

Briefly, discussing the ecosystem, we can say that on the demand side, advertiser may use Trading desk, in case of agencies they typically use their own Agency trading desks, examples being Xaxis of WPP, Adnetik of Havas or Demand - side platforms, for instance Adform or Dataxu.

While for the supply side, publishers usually can offer their inventory through their own platforms, examples being Facebook and Google or through supply - side platforms which aggregate inventory, for instance Pubmatic or Mopub.

The trade is typically carried out via ad exchanges, like Google's DoubleClick or OpenX, which help connect demand and supply side of the market.

Data vendors such as Blukai or Acxiom offer third party data to make targeting more precise. To understand better all the complexity of the ecosystem and the relations within it, in this subchapter we will take a close look at the major actors and the role they play, discussing market trends, as well as main limitations and ways to overcome them.

#### **4.4.1 Trading desks**

Trading desk could be defined as a centralized platform classically on top of a licensed Demand-side platform (DSP) that uses data and technology to manage programmatic buying in RTB environment and effectively purchase audiences at scale across various digital media.

Activity of Trading desks is not limited by display, nowadays via Trading desks advertisers can purchase also video, social media, and search advertising.

Generally speaking there are two types of Trading desks: Agency trading desks and Independent trading desks.

**Agency Trading Desk** — in-house trading desks of advertising agencies, that are created to better satisfy the needs of the agency's clients and are not available to the third party advertisers/agencies.

As for the real world examples the list of the Trading desks with the respective Media agencies:

- Adnetik(Digilant) - Havas
- Mediabrands Audience Platform (Cadreon included) - IPG
- Varick Media Management -MDC
- Accuen - Omnicom

- Audience on Demand - Publicis
- Xaxis - WPP
- VMX - ViVaKi

In September some of the Chief Executives of the top media agencies gathered to discuss their business, below are opinions or industry leaders about the current percentage of programmatic buying and the to-be state projected to 2015<sup>174</sup>:

- IPG's VP Programmatic: Today it's five cents on the dollar; in 2015 it'll be 50%.
- WPP's VP Global development: Today it's less than five cents on the dollar; in 2015 it'll be seven-to-ten cents of every dollar
- Omnicom's President of Accuen: About 15% today and in two years *digital* spending will be more than 50%.
- Havas' Chief Media Officer: About 4% to 5% of total spending today; in two years that will look more like 15%.
- Publicis' President of Product and Solutions: On average 20% today; in two years more like 40% to 50%.

According to the figures of key industry people's expectations the future of automated buying is more than bright and the market is awaiting a big shift towards programmatic buying of media, big part of which would be represented by the Real-time bidding.

Quite interestingly the programmatic buying embraces not only the display part of the advertising, for instance Xaxis. the world's largest audience buying company, has recently announced the launch of Xaxis Radio<sup>175</sup>, the first programmatic buying product for targeting global audiences in the digital radio market. Fully integrated into the Xaxis Data Management Platform (DMP), Xaxis Radio enables advertisers to incorporate online and mobile radio buys within their overall digital media campaigns. Xaxis Radio is also the first solution to allow advertisers to precisely measure attribution for their radio ads, meaning marketers can identify which ads and which audiences deliver the best performance.

To develop Xaxis Radio, the company partnered with Triton Digital, the leading digital services provider to traditional and online radio, and the creator of a2x, the industry's first

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<sup>174</sup> <http://adage.com/article/special-report-advertising-week-2013/media-agency-execs-explore-implications-trading-desks/244419/>

<sup>175</sup> <http://www.xaxis.com/uk/news/view/xaxis-introduces-xaxis-radio>

programmatic buying technology for online audio inventory. Triton's technology will power the offering and provide Xaxis clients with access to Triton's global inventory of over two billion online and mobile audio impressions each month. Because Xaxis Radio runs through the Xaxis DMP, advertisers will be able to utilize multiple third party and proprietary data resources to reach the most relevant digital radio audiences. In addition to that, Xaxis has presented Xaxis Places<sup>176</sup>, a new programmatic platform that allows advertisers to buy digital-out-of-home (DOOH) ad inventory across more than 100,000 screens via real-time-bidding. Integrated within the Xaxis Data Management Platform (DMP), Xaxis Places is the first programmatic product to allow brands to buy DOOH inventory in full coordination with their overall digital media programs.

Xaxis Places provides brands with the entirely new ability to link the messaging that consumers experience on their computers, smartphones and tablets with the messaging these same consumers see when they are on the go – via DOOH screens in locations such as taxis, hotels and malls. To do this, Xaxis partnered with WPP's Spafax Networks who created a proprietary, extensible database of audience segments indexed to specific geolocations and connected it to the Xaxis audiences a brand is reaching via its display, online video, social and mobile campaigns. Through Xaxis Places, advertisers can plan, execute and measure their DOOH campaigns, at scale, with more precision than previously possible.

“Xaxis Places is the first solution to pair the flexibility and segmentation of programmatic audience buying with the high visibility and real world reach of digital-out-of-home,” said Xaxis chief operating officer, Mark Grether. “Xaxis Places allows brands to greatly refine who they're actually reaching with their digital-out-of-home buys, minimizing waste and improving overall campaign impact.”

More than 1.4 billion monthly, digital-out-of-home impressions will be addressable through Xaxis Places at launch via screens in various locations including taxis, shopping malls, doctor's offices, stadiums, gas stations, office buildings and hotels among others. Xaxis Places is fully trackable via advertisers' third party ad servers and all screens are Nielsen/Arbitron measured.

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<sup>176</sup> <http://www.xaxis.com/uk/news/view/xaxis-brings-programmatic-buying-to-digital-out-of-home-with-debut-of-xaxis>

Xaxis Places represents the latest media channel to be incorporated into the Xaxis DMP and follows the recent introduction of Xaxis Radio, the first programmatic buying product for the digital radio market. Both additions augment the company's mission of leveraging data and technology to help brands reach audiences wherever they happen to be and through all phases of the marketing cycle – from direct response to brand building, awareness campaigns.

**Independent Trading desks** – the media buying platforms available to all the advertisers/agencies, the main difference while compared to the ATD is the flexibility and universality that makes their usage possible to external agencies and direct advertisers.

Here are some of the independent market players:

- Sitedscout
- The trade desk
- Revenue cloud
- Sociomantic

Utilization of Trading desks allows advertisers to better target the audiences, as the targeted audiences is chosen according to a specific list of predefined attributes, which are used by the DSPs algorithms to match the right inventory and optimize the campaign performance in real-time. This significantly reduces the probability to acquire irrelevant impressions and audiences. Another important aspect is the data analysis that is provided by the Trading desks, thanks to which advertisers can gather intelligence insights about the efficiency and effectiveness of their campaign on both superficial and granular levels. In case of a ATD it is to be noted, that media agency would typically have more visibility over the budget placed via a trading desk and can provide more feedback and input to improve the process. As a result of an interaction with a Trading desk, as a rule of thumb, advertisers improve performance of their ad campaigns and consequently get more value from the display advertising, bringing much of the service in-house rather than outsourcing it to third parties.

From the advertiser's perspective Trading desk serves as an entrance point to the RTB ecosystem, greatly differing from the DSPs, which are mostly technological platforms for the real-time bidding, that are not working directly with advertisers directly and being a sort of a wholesale provider for the upstream parties. Advertisers can buy inventory directly from Ad network for example, however in this case the inventory would be quite limited in



comparison with the Trading desk, as the latter provides access to the inventory of all the Ad networks, Ad exchanges and SSPs, that are plugged in.

Trading desks, are usually, represented by a self-service platforms, where agencies and advertiser manage the campaigns by themselves and are typically charged for the use of the platform (Software as a service model), paying for a fixed fee for the usage of the platform, another model could be represented by a case where the advertiser is facing a commission that is added to the price of the inventory bought via the Trading desk.

Trading desk can offer a lot of benefits to savvy digital marketers, however before starting the collaboration with them advertisers should understand better how the collaboration would work, more specifically what is the business model and what the advertiser is charged for, additionally it is important to understand what kind of media is purchased via the given Trading desk and define the metrics, upon which the campaign performance would be measured. In any case it is always advised to run a small test before investing a big chunk of the advertising budget in one or another Trading desk.

#### 4.4.2 Demand-side platforms

Historically, advertisers were splitting their media budgets between media buying agencies, Ad networks and direct publishers. This was required as advertisers needed to reach a broad audience that is fragmented across large number of publisher properties:

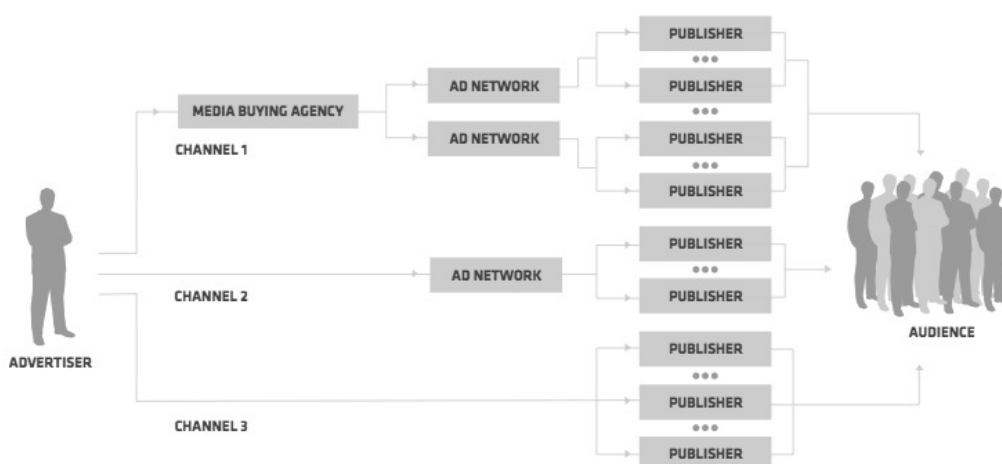


Figure 150. PreDSP market situation

The above-represented model has got some significant drawbacks, first of which is the inefficiency of the buying process, as advertisers buy across numerous channels, time and

resources are to be spent to handle multiple relationships, setting up campaigns and keeping an eye on the results with various partners. Additionally, advertisers do not have a complete view of their spending across channels, which inventory they have purchased and what are the results of the media buying. Obviously, it is possible to combine all the data to help creating an overall view on the digital marketing activities, however it is constrained by the amount of effort and time required to put the pieces together. Another issue arises when it comes to the frequency cap and reach management as it is quite a challenge for advertisers to implement global frequency caps, consequently a part of impressions bought across the range of channels could be visualized by identical group of visitors. Advertisers know what is the reach of each channel, but they cannot measure the total reach, as it is hard to compute the overlap between different media channels involved in the campaign delivery.

Demand-side platforms (DSPs) have appeared on the marketing landscape to help advertisers face the challenges coming from the imperfection of the above-described flow. Demand-side platform, in simple terms, is a piece of software that is used by advertisers and agencies to buy advertising in an automated way. A DSP provides advertisers with a possibility to buy advertising inventory (advertising spots, where their ads are shown) through a single buying point across a broad pool of publishers via exchanges, nowadays offering access to almost unlimited numbers of ad impressions, through the utilization of proprietary algorithms, that make use of the contextual data from the publishers, data from advertisers and Data partners to evaluate which impressions are worth bidding for, making media buying more efficient. Typically, a mobile DSP gathers data from advertisers, publishers, advertising technology companies and third parties, to offer ad buyers an option of buying the right inventory, at the right time, at an affordable price. Instead of buying blocks of inventory, the DSP evaluates each impression, as the mobile user is loading a page on a mobile site or app, and, in case the given impression opportunity is appropriate for a client's campaign, it is acquired, so the ad is shown as the page displays on the mobile device. Utilizing DSP, advertisers have control over the price they pay for each and every ad impression and based on it, can make their decisions about ads that have the broadest reach, best performance or engagement.

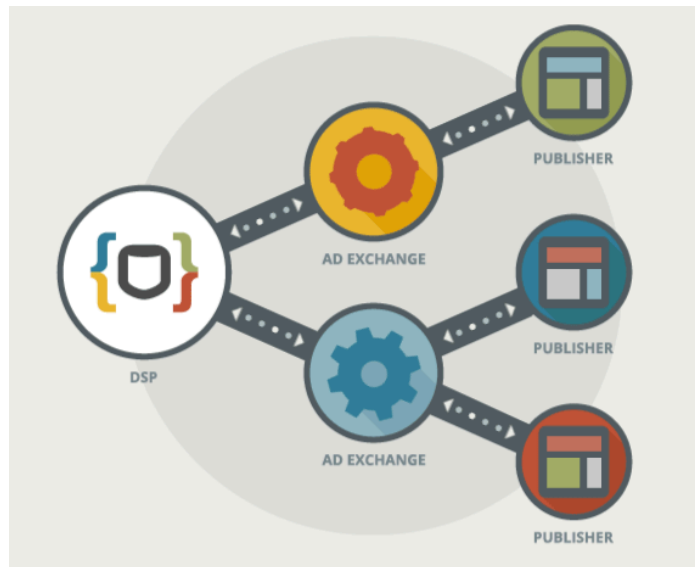


Figure 151. DSP's role in the RTB ecosystem<sup>177</sup>

In comparison with Ad networks DSPs appear to be a much better tool, as quite frequently advertisers may not know where the ads are served and what is the real value of the inventory they are buying, since usually, except for the premium or semi-premium, Ad networks act as 'black box', buying the inventory at the lowest rate and selling it to advertisers at the highest rate. However it is to be noted, that with the evolvement of the RTB ecosystem, some Ad networks have reconsidered their business models, with some of them moving more towards the advertiser transforming to DSPs, like Adfonic, and some others moving to the publisher side by becoming an SSP, while some of the conventional Ad networks decided to offer their inventory to the Ad exchanges, making their inventory reachable from DSPs

Thanks to the centralization of buying at a single point, DSPs allow advertisers to exercise a higher level of control over the whole process of media buying, for instance, offering a possibility to set frequency cap across multiple ad exchanges - guaranteeing that individual users are not over-exposed to ads which are distributed through various ad exchanges. DSPs add a lot of value providing advertisers with a tool to bid more wisely for impressions in real-time conditions, as the bid could be adjusted dynamically and return on ad investment based on actual campaign performance along with the value of each impression could be calculated and the campaign could be modified accordingly.

There are two major problems on the way of development of the DSPs. The first one is the inventory availability. A good portion of inventory is already traded via DSPs and ad

<sup>177</sup> <http://www.pocketmath.com/>

exchanges, however there are still huge amounts of valuable inventory that marketers currently cannot access in real time. It is to be noted that the trend of the real-time trading adoption is very positive, so the problem should be removed from the agenda in the medium-long term perspective. The second hurdle is essentially the reason and consequence of the first one and it the shortage of knowledge and expertise to grasp the upsides of buying inventory in real-time, advertisers need to learn how to dynamically set the right bid prices.

As for the benefits of the existence of DSP for publishers, higher proportion of captured ad spend one could be highlighted on the first place since there are fewer mediators between advertisers and publishers taking a share of advertising budgets. Additionally, smaller publishers are granted with a chance to compete with large ones, as thanks to DSPs it is no longer a complicated task for advertisers to acquire their audience across numerous niche properties, rather than a handful of bigger properties.

Fundamentally, there are two types of DSP solutions. The first one is sometimes referred to as a “Black box” DSP, as they that are completely managed and coordinated by the solution provider, meaning that an advertiser will work with the DSP to define budget and campaign objectives along with other necessary information. After the negotiation stage is passed, DSP take the full control over the campaign delivery. The second category of DSP is a self - serve platform, where the advertiser has entire control over the media buying process.

While the term “Black Box” can sound slightly suspicious there are no strings attached. It is just the fact that many marketers basically don’t have the time or expertise to manage the media buying, so rains handover turns out to be a meaningful decision. As a drawback this type of DSPs will charge more than self-serve counterparts and may not be suitable for smaller advertisers.

As already mentioned in the beginning of the chapter definitions in the mobile advertising ecosystem are quite blurry, as, for instance, in case of DSPs– some agencies and trading desks that buy large amounts of mobile advertising could effectively be labeled DSPs. On other side of the ecosystem, ad networks and ad servers are also integrating upstream and becoming buying points. This shift has sense as currently the buy side is the key gateway to the market. For example the mobile SSP and Ad exchange Smaato has a side company

Adsmobi<sup>178</sup>, that is operating as a DSP, another example could be a well-known Ad network Adfonic that has migrated from the sell to buy side, becoming Demand Side Platform<sup>179</sup>.

The targeting offered by DSPs can include up to 30 different parameters, but in the majority of cases advertisers can use the following ones:

- Location
- Device (iPhone 4S, Sony Xperia Z1)
- Operating system (Android, iOS, etc.)
- Carrier (Wind, Vodafone, etc)
- Previous sites visited and apps used
- App categories
- The day and the time of day

Generally are three parameters describing a good DSP platform:

- Algorithms used: the algorithms used by a mobile DSP to put together all the data, analyze each impression, choose whether to bid for the given impression and then evaluate how much to bid, is usually the foremost type of competitive advantage of a mobile DSP's effectiveness. Normally, a mobile DSPs with the most high-level algorithms, will win the most bids at the most competitive prices and bring an elevated Click-through and Conversion rates, as well as monetary efficiency.
- Level of integration: the bigger the number or integrated ad exchanges the better, as it will provide the advertiser with an access to a wider inventory. Another aspect of integration is availability of different advertising formats, as nowadays marketers are giving more preference to rich media and video solutions rather than traditional banners, therefore it is quite important for a DSP to be able to offer a broader list of possible ad formats.
- Access to data: the whole system is data-dependent, as a result the more first-party data a DSP can get from the advertiser, combined with third-party data the better it is.

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<sup>178</sup> <http://www.smaato.com/smaato-is-integrating-mobile-demand-platform-adsmobi-to-drive-global-mobile-real-time-bidding-revenue/>

<sup>179</sup> <http://www.adexchanger.com/mobile/adfonic-founders-discuss-shift-from-mobile-ad-net-to-dsp/>

The cost of mobile DSP services differs between actors and license agreements. They are commonly charged on a cost-plus model, meaning that the advertiser pays a defined CPM for ad placement and the DSP's fee is a commission on that CPM.

Taken together Real-time Ad exchanges and DSPs allow advertisers to buy digital media in a more efficient and transparent fashion, resulting in money savings. DSPs empower advertisers with a strong tool to harness the opportunities provided by the Real-time bidding environment and Ad exchanges, simplifying the media buying across multiple ad exchanges and offering an option to optimize the performance on a granular level on each single exchange as well as on the general level between exchanges. By encouraging advertisers to get more involved in the real-time media buying, and making it easier for small-size publishers to compete with their bigger counterparts, DSPs also offer publishers an opportunities to grow their ad revenue. To make use of these opportunities, publishers should start exposing their inventory to Ad exchanges, closing the circle, that would offer benefits to all the participating market players

#### **4.4.3 Data platforms**

Generally, data is referred to as facts and statistics collected together for reference or analysis. Another definition states that data is factual information, organized for analysis or used to reason or make decisions. Both the definitions are correct and in the RTB environment data means the data about users and represents the key feature and the main value for both demand and supply sides of the ecosystem, as SSPs can buy data to increase the price of their inventory, while DSP could look to buy data to have a possibility to buy the impression in the most efficient way. Data has become a fundamental element in a marketer's toolbox, leveraging data helps marketers find and target the right audience with the most appropriate ad, which leads to higher performance

Firstly, the reader might be interested to have a look at the types of data that are available

- **First-party data:** Proprietary data of the marketer, for example, browsing history of users, search queries or CRM data. It usually comes from marketer's website and analytics, CRM database or any other source of proprietary customer data and is mainly being used for Marketer data can be used to improve a wide variety of marketing tactics. For display advertising, it is most often used for remarketing.

- Third-party data: External data, that is not a property of the marketer, as a rule of thumb this type of data is purchased from Data management platforms (DMP) and Data exchanges or other third party platforms, examples being payment services or email marketers. 3rd party data is used to compile audience databases.

Currently there is also a so called second-party data notion, which is basically first-party data that marketers are getting directly from the source and it is not in the free access on the third-party data market. Data comes from many sources and every organization is faced with turning its data into both revenue and insights that lead to success. Separate systems being used by separate teams increases the amount of time and resources needed to make that data useful. A DMP can be a “unifier” of data across departments, helping not only operations and IT teams, but marketing and editorial as well. DMPs usually collect the data, normalize it, mix various types of data aiming at creation of various audience segments and is mainly used by advertising side of the ecosystem to enhance their capabilities on the RTB marketplace. While DMPs are about segments, Data exchanges are rather about raw user profiles in big volumes and typically used by the DSPs and SSPs to improve the quality of the segmentation and targeting. In their turn Data platforms are getting the information from the first parties(advertisers/agencies) as well as from various sources as website, internet providers, network operator, payment solution providers and other third parties that collect in one or other way data about their users.

The above-discussed platforms have emerged just in the recent past as an ad hoc reaction to a base-level need: Publishers and marketers were collecting more data, from more sources, than ever before. And to realize the full potential of that information, they necessitated a technology-driven solution—a centralized platform—to flawlessly and quickly gather, incorporate, manage and activate those large volumes of data. DMPs and Data exchanges are an integral element of the current RTB ecosystem, as they allow the marketers to segment their audience and study it at the granular level, enabling the delivery of highly targeted campaigns, with involvement of third party data as an addition to the proprietary one in case it is needed. From the other hands Data platforms offer data providers the monetization of their data in an effective and competitively priced way.

Control over data, safety and simplicity are one of the most important features that make the use of the DMP beneficial to the market players, as it provides the full visibility and control

over the proprietary data and allows its elaboration and further use for a wide range of possible marketing actions, at the same time being fully protected from both legal and technical standpoints. Additionally, DMP offer an opportunity to collect all the relevant information in one place, bringing new insights and deepening understanding of the audience through the utilization of first and third party data.

DMPs are serving different objectives and provide the parties of the mobile ecosystem to choose the capability that suits better their current needs. For example marketers interested to reengage the users who have shown interests to their products or services can use the DMPs for retargeting purposes, inviting the user to complete the action that he has initiated while visiting property of the marketer. Another key feature is a possibility to show an ad that is highly relevant to the user in the exact moment of time, for instance one can show car ads to the users visiting a property dedicated to automotive theme, however if it is known that the user has just checked the car insurance for the next year, it would be more relevant to offer an ad about the possible insurance. Historically, just the search engines had this advantage of knowing what the users are interested in in the very moment of search, however nowadays with the ability to use third-party data, marketers get this chance as well, allowing them to analyze the behavior of the users and understand their needs. Apparently, use of data in the right ways allows savvy marketers to target just the right audience, with the segments being predefined or created in an ad hoc fashion to satisfy specific targeting needs of the marketer, allowing a look-alike targeting as well(targeting of users, that are similar in their behavior to the ones who have shown interest to the advertisers' products/services in the past).

As for the monetization of the data, principally there are two ways for the data holders: first of them is a commission on the CPM charged to the advertiser, while the second one is data selling with a CPM price known in advance. In both the cases DMPs and Data are adding their commission to benefit on the transaction happening between data providers and data consumers. This represents a very interesting opportunity for the players that have an adequate audience with a relevant amount of data about it, as it allows a passive monetization not of the audience but rather of the knowledge about the audience.

DMPs allow to respect the privacy and safety of the data, as it is in the core of the terms of its usage and provide the DMPs as independent market players to pass the data to DSP or SSP in a confidential way, not disclosing the source of information and at the same time replying



efficiently to the request. This way DMP secure the safety of the data, avoiding a possibility to identify a given audience as an audience of a Publisher X and potentially still this valuable knowledge. From the other hand, advertisers and publishers can change DSPs and SSPs according to their needs, not putting their data in risk, as the third independent player stores it. As for the privacy of the users, it is respected as well, as the profiles are stored in an way that does not allow an identification of the person at the level of a name, email of any other sensitive type of data, as the information is tied to id with a code given by the DMP and the data about actual person is either not stored at all or stored in cyphered encrypted way.

As already mentioned in Chapter n.2 in the mobile ecosystem tracking is rather complicated, as there are no cookies in their classic definition, however thanks to the technological advancements of the recent past Data management platforms for mobile are being established by all the major market players, as an example one could use the Lotame<sup>180</sup>, that has rolled out it's mobile DMP suite in January 2014 to help businesses collect and manage audience data from mobile devices. According to Vice-president the not allowance of third-party cookies in mobile can be tackled via usage of Behavioral Collection Pixel (BCP), that is essentially a technology that lets the platform collect the first-party data automatically using the client's own cookie [through Apple's IDFA or the Android Advertising ID], at the same time it does not gather personally identifiable information, but as users move through a site, a platform can collect their comments, clicks, postings and other activities.<sup>181</sup>

Furthermore, nowadays mobile DMPs can get access behavioral and demographic audience data from mobile sources through with mobile third-party data providers, the real world case would be represented by the Admobius<sup>182</sup>, that combines data from publishers, from Ad networks, other aggregators and third-party data sellers, creating audience segments, which networks, publishers, and DSPs can use to target their advertising campaigns with a higher precision, additional providing with a possibility to create custom segments based on the clients data.

Speaking about collaboration between DMPs and industry giants that want to make use of the DMPs capabilities, one of the most prominent partnerships could be the one between Twitter

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<sup>180</sup> <http://lotame.com/>

<sup>181</sup> <http://www.adexchanger.com/data-exchanges/lotame-launches-new-mobile-dmp-suite/>

<sup>182</sup> <http://www.admobius.com/>

and Lotame that was announced in December of 2013<sup>183</sup>. Thanks to the partnership Lotame can help advertisers define the audience segments they wish to target using first and third-party data within the Lotame audience building tools and utilize anonymous cookie IDs in each audience segment before transferring the data to Twitter that in its turn matches on the data, to learn which Twitter users belong to each audience segment. Those segments are loaded into Twitter Ads, enabling advertiser to select them at campaign set up, allowing to reach each segment with Promoted Tweets and Promoted Accounts, tools that are discussed on a more detailed level in Chapter 2.

The arrival of Data has changed the whole paradigm of the advertising, as now audience and the message to be conveyed are the real cornerstones of the marketing efforts, as opposed a property being site or an app where the audience could be reached. Thanks to the Data and RTB capabilities marketers create various segments and only then create messages for those clustered audiences to reach the most efficient performance. This approach is significantly differently from the traditional advertising approach, where creative come first and suitable placements are found afterwards, giving advertisers an opportunity to save their advertising budget hitting just the precisely targeted groups of users. Furthermore, it could be stated that Data is introducing some game-changing mechanics, as the attitude of users toward the banners and other advertising medias is shifting to a perception of media messages as useful pieces of advice rather than useless intrusive communications.

Nowadays there is an incredible level of attention to the notion the Big data, that has always been around, but just now advertising market starts to enjoy the benefits brought by immense amount of gathered data and to a notable extent it is being done via the DMPs that effectively manage these data. Currently existing Data solutions are getting more and more functional features and are trying new methods to find their own way to deal with the big data. As data becomes currency in display advertising, publishers will have to decide to what extent they will invest in solutions to help them collect, understand and monetize the data they have at their disposal. A DMP will not make sense for all publishers, but may prove a boon to those looking to improve inventory monetization, add new revenue sources, implement or expand audience extension efforts, or simply better understand their audiences—as well as their value. Usage of DMP already is and will continue to be one of the key tools for the savvy marketers to deal with their proprietary and third party information in order to effectively and

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<sup>183</sup> <http://lotame.com/lotame-partners-twitter-new-tailored-audiences>

efficiently reach their marketing objectives.

#### **4.4.4 Ad exchanges**

As already discussed before the traditional value chain of display advertising is not the most efficient solution as there are numerous mediators (arbitrators) in the chain that connects publishers and advertisers, and each of them takes his percentage of the initial price. Typical example, still quite spread on the market would be an ad network that has difficulties selling a particular part of inventory and offers it to another ad network at a discounted rate, while the second ad network may in turn trade it to a third ad network. Furthermore, in a conventional model advertisers have no other choice but to invest time and human resources understanding where to buy ad inventory, testing various advertising channels and then comparing data from several sources to evaluate results. Publishers also have significant hurdles on the way to profitability, as to boost revenue streams, they also need to spend time, involving resources to decide how to split inventory between various ad networks.

Generally, there are five categories of ad selling available to publishers, primarily premium ones. Four out of five methods are programmatic and many publishers use some combination of these methods, if not all five:<sup>184</sup>

- **Manual Direct Sales**

We're all familiar with this method of ad sales. Your sales team responds to RFPs, sends out IOs and your ad ops team manually traffics a deal once it's agreed upon. This method has a high overhead cost, but is still where the majority of spending lives. Why is manual direct employed so frequently? It allows you to create unique packages for different partners, while giving you guarantees and predictability for revenue.

- **Automated Fixed Price, Reserved**

This method of sales has the most in common with manual direct. Sales are executed directly between a single buyer and seller, inventory is well defined and guaranteed and prices are fixed. The difference is in the execution. While an automated reserved buy deal might still be negotiated over the phone between a publisher's sales rep and a media buyer, the actual ad serving is executed programmatically once the digital proposal is executed into a digital

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<sup>184</sup> [www.adexchanger.com/the-sell-side/demystifying-programmatic-a-guide-for-premium-publishers/#more-89113](http://www.adexchanger.com/the-sell-side/demystifying-programmatic-a-guide-for-premium-publishers/#more-89113)

insertion order. This category is often referred to as programmatic direct, or programmatic reserved, but the basic premise is the same, whatever you call it: an automated way to sell reserved inventory directly to a buyer. The key difference between this and other programmatic sales method is that the tech stack here includes a direct integration into your ad server. This means that no pre-allocation inventory is necessary, unlike private and public marketplaces. You always have full control over who buys and at what price, and once a buy is made, the inventory is reserved just as it would be with any direct sale. With that control, there is no risk of channel conflict and, increasingly, technology is actually being purpose-built to help sales and ad operations people automate their workflows. Why automated reserved? It preserves benefits of direct buying, while lowering overhead costs.

- **Fixed Price, Unreserved Via Deal ID**

Deal ID is another programmatic mechanism that lets you programmatically execute fixed-price deals with a given buyer, on a nonguaranteed basis. What does that mean? Deal ID buys are still technically auctions, but you can encode specific buyer information into the exchange, which lets you set specific pricing and inventory access for every one of your buyers. Unlike automated reserved, there's no guarantee with deal IDs — you commit to a price, and provide access to inventory, but there's no mechanism for securing an upfront commitment from a buyer before a deal is executed. Why deal ID? With buyers clamoring for programmatic access, many publishers have had to get creative with ways to provide access, without eroding control over who can buy which inventory at which price. Deal IDs are one way to let buyers access inventory programmatically, while preserving price and inventory controls. Campaigns still need to be manually added into the ad server, unlike automated reserved, which is directly integrated.

- **Private Exchanges**

Private exchanges, like Deal ID, rely on a bid protocol and limited participation, but unlike Deal ID, prices are variable and unfixed. A typical private exchange involves one publisher, but can be a group of publishers, with restrictions on buyer access and price floors. Once invited to the exchange, buyers still enter an auction, with the highest bid winning, provided the bids are above a floor. For many publishers, private exchanges are a useful layer between directly sold inventory and inventory that's sold on the open exchange, without limitations. And with that, we reach our final method.

- **Open Exchanges**

Open exchanges are what we typically think of when talking about RTB — nonfixed, unreserved biddable inventory, without price floors or limits on buyer access. This method of sales is what you’re probably using your SSP for, and in general, this is the easiest way to monetize whatever inventory isn’t sold directly or via a deal ID. Adoption of programmatic strategies has thus far been led by the buy side, with many publishers hesitant to start selling programmatically. But there are dramatic efficiency gains to be made on the sell side as well, and programmatic doesn’t have to be a four-letter word if you have the right strategies in place.

Speaking about RTB environment we would focus on the Open and Private exchanges starting from the Open moving on to the Private ones. Coming back to the problems experienced by advertisers and publishers described before, the market seems to have found a solution represented by the above-mentioned types of Ad exchanges as they tackle the problems head on, eradicating complexity and wastefulness from the value chain of mobile advertising, by auctioning each single impression in “real-time” amid multiple advertisers, and eventually offering it to the highest paying advertiser. It helps streamline the value chain by as it is offering a single point of connection for publishers and ad buying side, so both advertisers and publishers can significantly decrease the number of places where they trade the inventory.

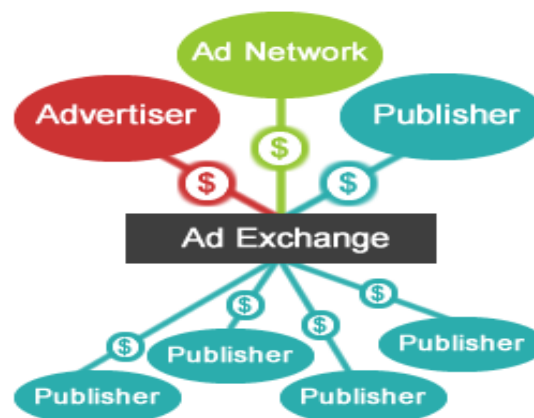


Figure 152. Ad exchange as single point of connection

Furthermore, thanks to the RTB logic with the use of Ad exchanges advertisers can choose which inventory to buy, as the impression level data is available and can adjust their buying tactics based on real-time feedback from the market. As for the publishers, Ad exchanges bring them an opportunity to better monetize their inventory, especially in a case of non

premium property (the premium ones are discussed further in the text) as publishers are paid the highest market value of each given impression at each given moment of time, thanks to the fact that advertisers are competing for every single impression, increasing the price of ad space. This concept is much different when speaking about the Ad networks where the impressions are bought in large volumes, with low level of possible adjustments done in real-time. Additionally advertisers normally have visibility over property offering an ad space, visitor and ad unit which they are bidding on, giving a chance to appropriately measure value of the impression and pay a respective value for it. While publishers get more detailed information about advertisers who buy their inventory. This offers visibility over the drivers of eCPM on their publishers' property and different level of control over advertisers and creative units they want to accept for their ad inventory. This is notably different from Ad networks where publishers frequently have partial visibility and can just black-list certain categories of advertisers

Thanks to the RTB logic ads are sold in real-time and therefore less operational activities are needed to estimate inventory and manage over-and under-delivery, consequently decreasing friction and overhead costs, offering publishers a higher proportion of every advertising dollar invested by the "buy" side of the ecosystem. Furthermore, Ad exchanges typically allow publishers to set a "floor price:" meaning a minimum price at which an impression could be sold to the advertisers, therefore the net effect on publisher profits can only be positive.

However, there could be a different take on the situation, here is what CEO of Matomy, one of the notable digital performance oriented companies, that has partnered with Appnexus to strengthen the offering, says about survival of publisher networks<sup>185</sup>:

"Programmatic buying is great, but when you have your own media, your own network, it creates an advantage in the form of data perspective, and an ability to know the market and predict success. When you are buying inventory [programmatically] in liquid fashion, you are not able to repeat the location you bought yesterday because someone may outbid you tomorrow. Two years ago, people said the ad network model would die, and the advantage of working with the network will not exist. You'll be able to buy the traffic anywhere you want, and you won't have to manage the publisher relationship. As an ad network, when you have a

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<sup>185</sup> <http://www.adexchanger.com/ad-networks/the-next-ad-tech-ipo-questions-for-matomy-ceo-of-fer-druker/>

relationship with the site, you can do better things. And when you are managing a network, you can export the supply you don't need to exchanges, and you can bring supply in from outside.”

The existence of Ad exchanges does not imply that Ad networks should vanish from the advertising landscape, as they remain in the intermediary role for buyers. In fact, huge volumes of inventory of Ad networks are coming from Ad exchanges. It means that when publishers prefer an Ad exchange over an Ad networks(s), they connect with many more Ad networks in one single point, approach would be hardly possible with a direct relationship strategy.

There are still publishers that are not willing to trade their remnant inventory through RTB ecosystem, and when it comes to the trading of their directly sold inventory they show an absolute hesitance, as they are quite concerned about the price they would get for their premium inventory and about the lack of control over the process of sales. There concerns have a rationale behind, as their inventory might face a competitive pressure from a numerous providers of cheap and effective remnant inventory. Still, in majority of cases, advertisers and publishers realize that RTB – delivered campaigns with targeting data embedded into the trading lot, perform better than traditional campaigns, which permits publishers to request higher rates, and which advertisers in their turn are ready to as their Return on investment is higher<sup>186</sup>. However, in each single case it is better to try the RTB environment and see what it can bring to a single publisher. To do so, not risking too much RTB platforms, as already stated before, allow publishers to set a minimum price at which their inventory could be purchased.

Speaking about Ad exchanges in Mobile it is hard not to mention Facebook that has made a big push to enhance its advertising opportunities by rolling out both mobile ads and the Facebook Exchange (FBX) ad-buying platform—two of the social giant’s most high-profile efforts to increase ad revenue. Now that both mobile ads and Facebook Exchange (FBX) have been around for a little while, marketers are beginning to assess their efficacy<sup>187</sup>. Retargeting company Adroll partnered with FBX early on and has since brought over 700 advertisers worldwide onto the platform. At the end of 2012, the firm examined the

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<sup>186</sup> <http://www.emarketer.com/Article/RTB-Ad-Spend-Continues-Robust-Growth/1009783>

<sup>187</sup> <http://www.emarketer.com/Article/Mobile-Facebook-Ads-Facebook-Exchange-Delivering-Better-ROI/1010252>

performance of its advertisers running both online display and FBX retargeting campaigns and the results are quite impressive. Even back in December 2012 Facebook accounted for 63% of retargeted impressions.

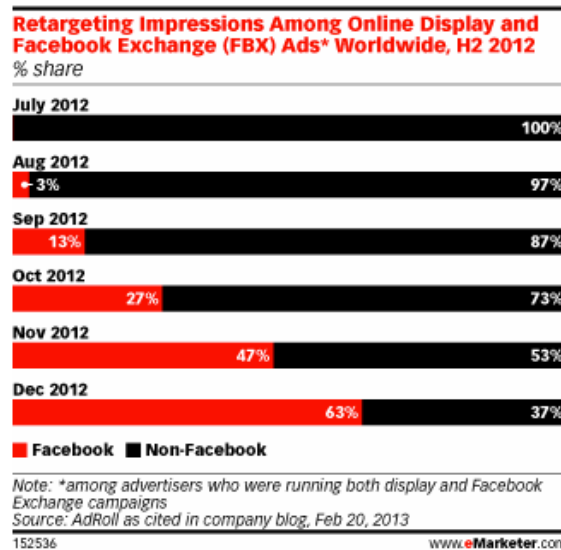


Figure 153. Facebook retargeting impressions

Speaking about Adroll, it is interesting to note that in February 2014 AdRoll announced a private beta launch<sup>188</sup> of a new mobile retargeting offering that enables marketers to retarget users across devices.

The mobile retargeting solution allows marketers to identify high-intent desktop users and target them across mobile devices to promote app installs and conversions on mobile optimized sites. AdRoll, currently the only ad tech that integrates with both Facebook and Twitter, enables advertisers to retarget desktop site visitors as they visit Facebook and Twitter on their smartphones and tablets. Marketers can also retarget mobile web visitors when they browse other mobile sites, leading them back to mobile optimized landing pages.<sup>189</sup> Adroll is not the only notable player to partner with Facebook, Google has also announced<sup>190</sup> in October 2013 that it would help their clients succeed by working with Facebook to participate in FBX real-time bidding exchange.

Cost per impression (CPM) and cost per click (CPC) were both significantly lower on Facebook, proving that the social site does offer some substantial monetary benefits, along

<sup>188</sup> <http://www.adroll.com/retargeting/mobile>

<sup>189</sup> <http://marketingland.com/adroll-launches-mobile-retargeting-solution-cross-device-campaigns-74691>

<sup>190</sup> <http://doubleclickadvertisers.blogspot.it/2013/10/doubleclick-bid-manager-joins-fbx.html>



with wide reach.

According to Triggitt results brought by FBX campaigns perform a way better than traditional campaigns with the following figures<sup>191</sup>:

- 4x higher Click-through ROAS compared to retargeting on the traditional ad exchanges
- 2.2x higher post-click conversion rate
- 6.5x less Cost per click-through order (CPA)
- 18% – 30% lift in FBX conversions when comparing against control test of users

Going back to the challenges of the Ad exchanges, we might mention SSPs, that to lessen worries of the publishers, have begun to provide them with “private” marketplaces- RTB trading systems, which usually offer more control to the players. The main feature is the reduced number of selected advertisers and publishers making part of these marketplaces. Private marketplaces exist to address publishers' two main fears: protection of their present price points and guaranteeing that no inappropriate ads run on their ad properties. However, the number of impressions traded via Private marketplaces is not very high, one of the reasons could be the fact of artificial limitation of a number of bidders and the number of impressions available to bid on, thus reducing competition and the profits which RTB may offer. To give real-world confirmation, reader might take a look at a research of Admeta that has found<sup>192</sup> that the number of advertisers allowed to bid on the exchange is in direct correlation with eCPM rates, with an increased number of bidders, significantly improving the ePCMs.

The market analysts expect the RTB market to grow significantly over the course of the following years and industry is indeed confirming the trend with a series of acquisitions, starting with Twitter that in September 2013 bought the world's largest mobile Ad exchange MoPub<sup>193</sup>, allowing to fundamentally change how mobile ads are purchased and places them at the forefront of how mobile, Web, and social ads interact<sup>194</sup>. As Nexage's CEO says about the Mopub being acquired by Twitter: “There are a couple things Twitter has that fit an ad exchange. One is a significant proprietary data set that can be used for data mining, including audience building and segmentation, or even inference-based demographics. Twitter also has the ability to link online users across devices through its login and apply that knowledge

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<sup>191</sup> <http://blog.triggitt.com/facebook-exchange/>

<sup>192</sup> <http://www.admeta.com/upload/Admeta%20-%20Advertisers%20vs%20eCPM.pdf>

<sup>193</sup> <https://blog.twitter.com/2013/driving-mobile-advertising-forward-welcoming-mopub-to-the-flock>

<sup>194</sup> <https://medium.com/on-startups/e3ffbf8f3cd8>

across screens for addressable advertising. As long as you have a way to link those data points to incoming ad requests, you've got an asset that you can monetize really well. And the fact that Twitter recognized the value of a mobile exchange by buying MoPub has catalyzed the industry.<sup>195</sup> Twitter could potentially rise to be a major competitor of Google and Facebook, even if its offer is still in its early days

Another example could be a partnership<sup>196</sup> between Millennial Media a public company that helps advertising buyers with inventory and data for mobile devices, and AppNexus, an ad tech platform that's been moving into the mobile space. Each company is counting on their combined new offering, the Millennial Media Exchange, that after its launch in September 2013 and initial success in the United States and parts of EMEA, Latin America and Asia, have enabled Millennial Media to expand its offering in global hubs -- including India, the Russian Federation, Saudi Arabia, Israel, Switzerland, the United Arab Emirates, and Austria.<sup>197</sup> Additionally, Amobee, one of the notable players on the market, defining digital advertising and offering comprehensive, end-to-end mobile marketing solutions and services for advertisers, publishers and operators worldwide has purchased a mobile DSP called Gradient X<sup>198</sup>. Nowadays, Ad exchanges represent backbone of the RTB ecosystem and play a vital role, that allows advertisers spend their ad budgets more efficiently, while allowing publishers to maximize their ad revenues, thanks to the set of solutions provided by the RTB environment.

#### **4.4.5 Supply side platforms**

Advertisers are progressively using DSPs and Ad exchanges to purchase digital advertising and Supply-side platforms are there to serve them, helping connect publishers with the “buy” side of ecosystem, being a gateway for them. In simple terms, supply-side platform is a part of software used to sell ad inventory in an automatic fashion and is basically the publisher counterpart of a DSP. While DSPs are used by advertisers to purchase ad impressions from

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<sup>195</sup> <http://www.adexchanger.com/mobile/nexage-ceo-discusses-twitters-mopub-acquisition-mobile-rtb-outlook/>

<sup>196</sup> <http://www.forbes.com/sites/alexkonrad/2013/09/18/millennial-media-appnexus-ceos-explain-new-partnership/>

<sup>197</sup> <http://online.wsj.com/article/PR-CO-20140225-907926.html>

<sup>198</sup> <http://gradientx.com/amobee-acquires-gradient-x>

Ad exchanges as efficiently as possible, SSPs are there to do the opposite: to maximize the revenues of the publishers, bringing system to the balance. SSPs offer publishers with an option to expose their inventory to multiple Ad exchanges, DSPs, and networks, using just one solution. Thanks to this fact, it allows publishers to offer inventory to numerous potential buyers and get the highest rates provided by market for the inventory of a given publisher. That is why SSPs are sometimes called yield-optimization platforms. As already discussed in the chapter the problem for publishers, is the risk of reduction of the inventory's value. SSP exist right to tackle this issue and also to allow publishers to better aggregate and manage the numerous relationships with different ad buyers. Another risk-hedging tactic, already covered above is a price floor, allowing publishers to lower the level of risk.

Capabilities of sell-side platforms (SSPs) are a great tool for publishers as with the use of SSP they avoid management of multiple indirect channels of ad selling that requires a significant amount of time and resources to be invested. It rarely happens that in-house sales team manage to get to 100% fill rate of the publishers' property, so almost always there will be remnant inventory to be offered to other ad buyers, so SSPs help avoid the headache caused by a need to manage numerous partners, providing with a possibility to plug-in to one gateway that would fill their inventory in a most revenue driving fashion. Conventional approaches don't provide publishers with comprehensive method to sell, view, manage, and optimize their advertising revenue. Majority of publishers use discrete systems for each ad buying channel, and inventory is generally sold through quiet inefficient bulky chains that restrain a real competition and complicate reporting. To make key decisions, Advertising operations teams of publisher typically would export data from various sources into spreadsheets – and it is, apparently, not the the best way to evaluate demand and decide which demand source performs better than other for the company. Usage of Chaining or put in other words sequential selling negatively affects the competition as the ad impressions are offered to the first buyer in the chain, while there could be an ad buying partner that is willing to pay a much higher price for a given inventory. All this summed up makes it impossible for publishers to understand the true market value of their inventory, bringing potential ad revenue loses.

Speaking about industry players, first to come to mind are established desktop exchange players like the Rubicon Project and PubMatic, which have expansive networks on the sell side and have struggled to retrofit their existing platforms to meet the needs of mobile media.

Meanwhile pure-plays like Nexage, Mobclix, Smaato, Inneractive and MoPub have lacked truly significant scale to open up larger amounts of inventory despite rapid traffic growth.

The RTB trend is supported by the Latin American companies as well. Recently Huntmads, leading independent mobile advertising company targeted to Spanish and Portuguese speaking market, has announced the launch of the first mobile RTB platform available in Latin America<sup>199</sup>. Furthermore, Latin American ad network StartMeApp has launched its mobile RTB exchange, enabling advertisers, agencies and DSPs to buy and sell inventory in real-time auctions<sup>200</sup>. As far as Latin American market is mentioned it is interesting to note Spending on real-time-bidder digital display ads will reach \$9.5 million this year in Brazil, an increase of nearly 150% over last year's spending levels. Meanwhile, spending in the rest of Latin America will more than triple to \$2.6 million.

By 2017, spending in Brazil and the rest of the continent will be comparable, at well over \$60 million that year—meaning the rest of Latin America has a lot of catching up to do. IDC predicts dramatic growth rates throughout the region for the rest of its forecast period<sup>201</sup>.

Here's a rundown of the strengths and weaknesses of each of the main mobile ad exchanges pinpointed by the principal analyst of Forrester<sup>202</sup>:

**Rubicon:** As the company has shifted from a "yield optimizer" and a supply-side platform (though executives deny ever positioning itself that way), managing publishers' display impressions has been at the core. For the past year, the company has quietly pursued the IPO path – or, perhaps, set itself up for a major acquisition by Facebook or Yahoo – and it has worked to expand its mobile services. Still, the mobile focus here is about closing the loop for its publisher clients and the marketers who are starting to demand more mobile access to inventory as well.

As such, Rubicon's approach to mobile is essentially about extending its display impressions to covering mobile, as opposed to building a distinctly mobile business. In the spring of 2012, Rubicon bought mobile ad platform Mobsmith for an estimated \$10 million. The company

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<sup>199</sup> <http://www.huntmads.com/hunt-mobile-ads-launches-its-mobile-rtb-platform.html>

<sup>200</sup> <http://mobilemarketingmagazine.com/startmeapp-launches-mobile-rtb-ad-exchange/>

<sup>201</sup> <http://www.emarketer.com/Article/Latin-America-Nearly-Triple-RTB-Spend-This-Year/1010349#rWU2TpiQ425hhwUa.99>

<sup>202</sup> <http://www.adexchanger.com/mobile/after-twitter-mopub-the-mobile-ssp-landscape-shifts/>

has been fairly quiet about the integration, though it has started to push on mobile direct order automation via its Connect product for its "comScore 500 inventory."

According to Rubicon, over 200 of those top 500 publishers have used its mobile seller solution. Additionally, the company says that its mobile solution is performing so well, it is averaging a more than 2X increase in CPMs and is expected to surpass that figure by the close of 2013.

**PubMatic:** Along with Rubicon, PubMatic is considered the other big player in the SSP space, along with Google's AdMeld. Its focus is naturally similar: close the loop on display. Its mobile services connect with inventory from 30 ad networks in what it bills as a cross-platform play.

Nevertheless, PubMatic has emphasized its mobile growth with some impressive percentages, though they mostly show the company just getting started. In April, PubMatic upgraded its platform to identify devices, which entailed combining first-party, geo-targeting, carrier and device data. It also expanded its partnership with JumpTap, before that company was acquired by mobile ad network Millennial Media last month<sup>203</sup>. It's not clear how that partnership has evolved since the spring, but PubMatic did tout that Jumptap saw an average increase of 504% in paid impressions month-over-month in April.

**Nexage:** The mobile SSP is considered one of the leading independents in the space, now that MoPub has been snapped up. The company has sought to solidify relationships with publishers – it claims to work with more than 300 publishers and 200 "demand sources" – by promising greater brand safety and transparency, both of which are items of concern across digital advertising, but are a bit more acute on mobile because of the different reporting and tracking standards (or lack thereof).

The company recently introduced new tools that attempt to get to the heart of the weak standards in mobile. Among the new products are aggregate reporting, which lets publishers track the performance of each site, and advertiser-level reporting that allows publishers to see which advertisers are buying their impressions.

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<sup>203</sup> <http://www.millennialmedia.com/pressroom/press-releases/millennial-media-completes-acquisition-of-jumptap/>

**Mobclix:** After struggles between it and parent Velti, which bought Mobclix in 2010, the mobile ad exchange has been up for sale for about a month. As a sign of the difficulties, Velti reported a 47% decrease in revenue since last year. Considering the rapid growth of mobile, that does sound like a particularly bad sign, though it's hard to say how much was Mobclix's fault. Either way, the company hasn't helped Velti. It'll be interesting to see what a different buyer might do with it. Still, the company was once able to give mobile ad networks like AdMob, which was acquired by Google, a run for their money and it is still considered a pioneer in mobile RTB. But history only goes so far.

**Smaato:** On the plus side, when India's mobile ad market takes off, Smaato will be ready. In many ways it is. The company has noted the depth of its presence in India and the value of it by announcing it reached a run rate of \$100 million in annual revenue. As for India itself, Smaato added that India is "the largest RTB revenue generator behind the US with the entire Asia-Pacific region increasing their real-time auctions by more than 50 percent within one single month." While it also has offices in Germany, which serves as its gateway to the European market, and an office in San Francisco, Smaato is likely to see its exposure increase as it settles into western markets.

**Inneractive:** The 6-year-old Israeli mobile SSP has been zeroing in on the in-app market. Inneractive also heavily interested in building up its mobile video capabilities, as brand campaigns increasingly look for ways to be cross-screen. The company claims to have ongoing deals with 120 advertising distributors from over 200 countries, all the while promising the simplicity of connecting buyers, sellers and developers via a one-line SDK. It's also signed up with all the major ad networks, so its reach is as extensive as anyone's. But it's still hard to vouch for the quality of the inventory. But that's more of an industry issue than one that's particularly affecting Inneractive.

#### 4.4.5 Final considerations

Looking at the market trends it becomes clear that more and more media buyers are using programmatic exchanges and quite interestingly some of them are also considering moving to programmatic trading to replace their direct relationships with publishers. As seen in eMarketer<sup>204</sup> more than one-third of US media buyers said they were in favor of this move, even in 2013. And another one-third seemed willing to entertain replacing their direct relationship with publishers with programmatic buying, but they wanted to see the success of the method first. Only three out of 10 media buyers seemed certain they would not move entirely to programmatic buying. For publishers, the concern around programmatic buying is a matter of protecting their pricing and brand image. Three-quarters of publishers surveyed said that their biggest issue with programmatic trading was controlling cost per thousand impressions (CPM) and pricing. Additionally, publishers want to protect their relationships with media buyers; maintaining a direct relationship with buyers was a concern for over two-thirds of publishers. Maintaining control over ad quality, and by extension, protecting the publisher brand itself, also ranked as a leading concern. When asked what part of the ad-sales process could be automated, publishers ranked reviewing an ad's quality last. Only one-quarter thought this aspect of ad sales could be automated, reiterating the importance publishers place on being able to review what goes alongside their content. While the cheaper pricing and better targeting upside of programmatic buying may be obvious for media buyers, they too have concerns about migrating onto programmatic platforms. The greatest percentage (68%) wanted more data to inform bids. There was also significant interest in exposure to additional inventory.

Speaking from a numerical perspective, current figures and the predictions for future seem to be quite positive. The study, conducted by research firm IDC and commissioned by PubMatic, describes how RTB spend will continue its rapid growth as a percentage of digital advertising spending, rising from a respectable 14% in 2013 to a massive 41% over the next four years in the United States, and from 8% to 28% worldwide. While the United States will remain the most mature and advanced market for programmatic spending, growing at an anticipated average rate of 48% a year from \$2 billion in 2012 to a predicted \$14.4 billion in 2017, other markets are poised for rapid growth as well.

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<sup>204</sup> <http://www.emarketer.com/Article/Despite-Reservations-Programmatic-Buying-Gains-Steam/1009833>

IDC's research predicts that the Western European market will grow from \$381 million in 2012, to \$3.3 billion in 2017, with RTB's display advertising spend share rising from 5% to 23%, while Japan's programmatic spending will grow from \$218 million to \$1.1 billion with advertising spend share rising from 5% to 28%<sup>205</sup>. In fact RTB is one of the fastest growing parts of digital marketing, and it holds significant promise to increase marketer's ROI. RTB Digital Display ad spend will grow from a \$1.9B market in the US in 2012, to a \$8.5B market by 2017, a growth rate of 35% CAGR. As a percentage of total digital display ad spending, eMarketer predicts RTB will grow to 29% by 2017<sup>206</sup>.

The adoption of the RTB tools is one of key drivers of the future development and success of connection of demand and supply sides of the digital advertising ecosystem. However, without a sufficient amount of ad inventory being available on the marketplace the growth of the RTB could stagnate. In order to overcome the possible problems publishers need to get a proof of the fact that the amount of revenues coming from RTB channel is actually higher than the one they would get from the conventional channels, however with a lot of positive feedback from industry it does not seem to be a huge hurdle. Another concern may arise from a brand safety standpoint, as both publishers and advertisers want to have a visibility over placement of ads. In case of publishers, they naturally prefer to know which advertisers and ad units are being promoted on their inventory, not to damage their brand image with low-quality of unfitting advertising units. To avoid this problem there are options of black-listing or participating in private marketplaces, where by definition the brand name would not be stained, however it does not apply to all the publishers, being more likely an option to premium ones. Another factor that still holds back the development of the RTB market on the mobile platform is the difficulty of targeting, coming from impossibility of cookie placement in mobile browser and the fact that mobile apps are sandboxed, meaning that they cannot exchange information with targeting platforms in an easy way. Nevertheless, the market represented by players like Adtruth, that allows premium advertisers and publishers to maintain user anonymity while collecting the intelligence they need to drive performance and reach their target users<sup>207</sup>, essentially letting exchanges and other ad-tech players identify users across platforms and devices by connecting those devices to a user ID. Their customers include OpenX, PubMatic and AdForm. The company also has been fairly aggressive on the

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<sup>205</sup> <http://www.pubmatic.com/press/2013/new-idc-study-shows-real-time-bidding-rtb-display-ad-spend-to-grow-worldwide-to-208-billion-by-2017.php>

<sup>206</sup> <http://www.emarketer.com/Article/RTB-Ad-Spend-Continues-Robust-Growth/1009783>

<sup>207</sup> <http://www.adtruth.com/what-we-do/what-is-adtruth>



privacy issue, engaging with the Federal Trade Commission, TRUSTe and the Digital Advertising Alliance<sup>208</sup>. Another example could be a Tapad - leader in cross-device content delivery, with groundbreaking, proprietary technology that assimilates billions of data points to find the human relationship between smartphones, desktops, laptops, tablets, connected TVs and game consoles. The result: an unprecedented understanding of consumer behavior across related screens and the ability to reach the right people on the right device at the right time<sup>209</sup>.

There are a lot of interesting trends on the mobile RTB landscape, as the marketers and market itself are becoming more savvy and intelligent, trying to make the best use of all the technologies available on the market. One of the examples could be an evolving trend or trading or Rich media ads on the RTB environment. Rich media ads, particularly mobile-native rich media ads, enhance the price of publisher inventory (about 8x market average)<sup>210</sup> while improving the level of consumer engagement. These ads fit within more visually appealing mobile websites, applications and games to enhance both customer experience and ad relevance. Free products like Google Web Designer, which offers free creation of Rich Media ad units is helping advertisers create these ads quickly and efficiently. Another interesting trend is development of the programmatic buying of mobile video inventory, although the solution was introduced by Brightroll in September 2012<sup>211</sup> it is still evolving and number of video exchanges keeps growing, offering advertisers more and more inventory to bid on. Advertisers, in their turn, are becoming more familiar with the optimization opportunities within real-time ad buying and are understanding how direct conversions can be achieved through greatly targeted and purposefully run RTB campaigns. DSPs are already striving to provide innovative metrics to prove the value not only of direct response campaign, but also the effect of impressions bought on the RTB market on brand awareness.

RTB has been growing and becoming more of a “must” for the innovative display campaigns. During 2013, mobile RTB market crossed the threshold in terms of volumes in terms of both impressions and advertising dollars and it is now quite determinedly established. The ecosystem of advertisers, publishers, tech and service companies who have decide to take

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<sup>208</sup> <http://www.adexchanger.com/data-exchanges/experian-buys-device-id-firm-41st-parameter-for-324m-gets-adtruth-in-the-bargain/>

<sup>209</sup> <http://www.tapad.com/about-us/who-we-are/>

<sup>210</sup> <http://www.nexage.com/nexage-exchange/rich-media-video>

<sup>211</sup> <http://www.brightroll.com/press-release/brightroll-exchange-brx-introduces-the-first-mobile-video-real-time-bidding-solution/>

advantage of the RTB market, and the billions currently flowing through it, underline that the critical mass has evolved would keep on growing. All the factors say that in the upcoming years RTB will continue unstoppable march to ultimately becoming the standard for all media buying across all platforms. Apparently, it is still a long way to total ubiquity, but 2014 seems to be a year when market would rather discuss how the world with dominance of RTB looks like, instead of talking about if it is bad or good phenomenon.

## **CHAPTER 5: RESEARCH METHODOLOGY**

### **5.1 Objectives of the empirical analysis**

In the precedent chapters through the analysis of the various existing sources of information the current state of the mobile advertising was described. The emphasis was put on the importance of mobile as a means of media, different formats of mobile advertising and value chain of the mobile advertising with all the conventional and new players populating the ecosystem.

The present empirical analysis aims at achieving a more detailed picture of the market and its dynamics through the research and interviews of key mobile advertising space players. Eventually the analysis will help understand:

- The current state of art in the mobile advertising environment
- The nature of relationship between different actors along the value chain
- The scenarios of future development of the mobile advertising market

### **5.2 Tools of the analysis**

The choice of the industry players to be included in the research process was based on cover the most important categories of the market on both demand and supply side, aiming at creation of a comprehensive picture of the market and the ties between actors within it. Various ways were utilized to understand which industry players are to be included in the research:

- Industry reports published by research bodies and industry players
- Academical reports

- Whitepapers published by industry players
- Web-portals dedicated to the digital and mobile advertising
- International newspapers

Apart from the sources stated above a lot of insights about the industry and its key players were gathered through a personal participation in two events:

- IAB Forum, held in Milan in December 2013
- Mobile World Congress, held in Barcelona in February 2014

### 5.3 Sample of the analysis

The sample for the direct case studies was chosen according to the objectives of the present work and was mainly focused on the players of the traditional mobile advertising value chain being represented by the ad networks and the new players of the nascent mobile RTB market

Company	Role	Country	Position	Person
<b>TubeMogul</b>	DSP	US	Director or Mobile	Antoine Barbier
<b>StrikeAd</b>	DSP	UK	Vice president Sales EMEA	Andrew Morsy
<b>DataXu</b>	DSP	Italy	Country manager	Pierpaolo De Vita
<b>Rockefuel</b>	TD	Italy	Country Manager	Enrico Quaroni
<b>VivaKi</b>	ATD	Italy	Digital director	Sara Buluggiu
<b>SponsorPay</b>	SSP	Germany	Head of App distribution EMEA	Benno Hamman
<b>Airpush</b>	Ad Exchange	UK	Sales Director EU	Luca Livesi
<b>Flurry</b>	Ad Exchange	US	Account specialist	Christian Poppelreiter
<b>Vdopia</b>	Ad network	Germany	Sales Director Germany and CE	Oemer Oezvar
<b>Matomy</b>	Ad network	Israel	Team leader Mobile	Gal Beck
<b>NativeX</b>	Ad network	US	Account development manager	Allison Boerum

While for the indirect case studies subchapter the following companies were taken into consideration to get deeper insights into the real world industry players and their activities:

- InMobi
- Mojiva
- Revmob

- AppFlood
- Madvertise
- DMG
- Millennial media
- Appia
- Mopub
- Sponsormob
- Admob
- Chartboost
- Tapjoy
- King
- Pandora
- Supercell
- HalfBrick studies

#### **5.4 Case study structure**

To take the full advantage of the possibility to talk to the key industry players the phone calls were chosen as a preferred means of communication, as they allow the interview to be dynamic as opposed to the static email questionnaires. Therefore 75% of interviews were carried out by phone and then transcribed into the text, to give the reader a chance to understand better the market dynamics.

The questions in the interviews were adjusted to the nature of the players, however the skeleton of the discussion remained the same, as the questionnaires were prepared in a way that they could generally fit the wider audience of the sample.

The following topics were touched during the interviews:

- Mobile advertising trends
- Leading mobile advertising formats
- Leading categories of advertisers investing in mobile
- Role of data
- Role of Mobile operators
- Native advertising
- Location-based advertising
- Cross-device targeting

- Scenarios of future development for specific categories of player and mobile advertising market as a whole

The direct case study subchapter is divided by the actor and will include a brief description of the actor that will be followed by the interview itself. As for the questions they all are of qualitative nature, as it provides with the maximum information and allows the interviewer to better tailor the following questions and dive deeper in the topics that are more relevant to the objectives of the present paper. While in the indirect case studies subchapter the purpose is to give a reader insights and real examples of the actors, their spheres of interest, point of views on current trends of the industry and value chain, as well as to acquire more information based on which the future trends could be anticipated. Section with the presentation of actors of the value chain is further valuable as it allows us to understand more clearly differences between various segments of the value chain, their advantages and unique strength and weakness

## **CHAPTER 6: CASE STUDIES**

### **6.1 Direct**

#### **6.1.1 TubeMogul**

**Company profile:** Demand-side platform for video advertising completely focused on brands and their media agencies. By using a single, integrated solution, TubeMogul's clients gain control over their video spend, simplify their workflow and verify the success of their campaigns TubeMogul has offices in New York, London, Tokyo, Singapore, Sydney, Toronto, Chicago, Detroit, Austin and Los Angeles

#### **Relevant facts:**

- Total spend on TubeMogul for 2013 was \$111.9 million, which was up from \$53.4 million the year before. And 2013 revenue was \$57.2 million, up 67 per cent from \$34.2 million in the prior year.
- In March 2014 TubeMogul has declared its plans to go public with an offering of up to \$75 million.
- In 2013, TubeMogul ranked #239 on the Inc. 5000 list of fastest-growing companies in the U.S.



**What are some of the changes that you observed in 2013 in comparison with 2012?**

The main difference, I think is in having more and more premium publishers, that understand they could benefit from putting their inventory on open exchanges or private exchanges if they want to be on a safe side, having a chance to select the media buyers they want to work with.

Two-three years ago when you approached a publisher, it was very different, as publishers were more counting on their in-house sales team, pushing it to sell more inventory directly, while working with one exclusive partner to monetize the remnant inventory. And back then only few of them were considering moving part of their inventory to the programmatic environment. The shift has started in US and then was followed by other markets where the publishers start understanding the benefits of programmatic.

**What are the most active categories of clients in terms of spend on programmatic mobile video buying?**

Typically, what you see in mobile is what you tend to see in digital in general. I would say the biggest investors are from automotive, FCMG and entertainment industries.

**In terms of formats, what is the most preferred one?**

Here you should look at the supply side, as it is the supply side to dictate in some fashion the format that advertisers may use. For in-screen mobile video advertising most of the inventory we are seeing is standard mobile pre-roll videos with one-tap interaction, meaning that upon click user would be typically redirected to mobile-optimized landing page.

**What in your opinion would be a catalyst for advertisers and agencies in countries that are less developed in terms of digital advertising to put more focus on mobile? What would help shift the spend towards programmatic buying in countries like Italy, Germany and France?**

Mainly it is the supply and I think the supply side is going more and more toward programmatic. Apparently, getting to programmatic should make sense to publishers, meaning that they need to see the benefits of it, to see ROI, otherwise the shift will not be likely to happen.

**What you think are the main reasons to publisher to be still reluctant to the change?**

**They do not want to put programmatic in competition with their direct sales or they are afraid to see the revenues going down?**

It seems that the main reason why the move does not happen is the fact of giving an advantage to the internal sales team. However, now publishers, especially in US start to realize that there are two types of sales, with a brand-selling inventory to another brand being the first and programmatic bringing other advantages as a complementary part to the internal sales team being the second.

**Speaking about programmatic it is hard not to mention the Data. What in your opinion is the role of Data in today's market and how does TubeMogul take advantage of it?**

Data is very important. To my mind after the publishers availability discussed before, Data is going to be the second catalyst to see the real budgets shifting to mobile. If I am an advertiser and I look at what I can achieve in terms of targeting on desktop and then I look at what I can achieve on mobile, I see a big difference. Today I think the data market on mobile it is really nascent and not available at scale, mobile audience data is quite rare, but things are changing quickly. One our side we are trying these early data providers, the companies that have made the right move and have the right data that could be associated with the right device identifiers.

**What do you think about the user ID and the cross-device targeting and the companies like Drawbrigde?**

Cross-device targeting is one of the big buzzwords of today, however it still seems to be at early stage and the current solutions to tie different devices to a single individual do not seem to be convincing. It is challenging for several reasons, mainly the technological ones, however there is a lot of companies trying to solve this problem. Our positioning is to be open to ecosystem and to be able to work with pretty much everyone and we are obviously trying to figure out how these companies are addressing the problem, hoping that one day we can start collaborating with them.

**Speaking about data, we know that the Telecom operators have got a lot of meaningful data, but it seems that they are not taking the advantage of it. Do you think TELCOs are still relevant from a mobile advertising's perspective? Is there something they can do to increase their importance on the market?**

You are right; the first-party data they possess is golden. There is definitely some packaging work that needs to be done on the Mobile operators side, meaning building the offering, including the data on which they are sitting. They need to find ways to leverage the data that is now not being fully used for the advertising purposes.

### **Would not it raise the privacy concerns?**

Privacy should be respected in any case, so the use of data should not violate the terms of the agreement with a user.

### **Speaking about the role of DSPs, how do you think it is going to evolve in the future?**

On this market everything can happen. But I think in the future there will be a clearer distinction between demand and supply sides, because the lack of it can be a reason for internal conflicts for companies that are trying to assume many roles at the same time, stretching the offering from demand to supply side.

## **6.1.2 StrikeAd**

**Company profile:** Mobile advertising specialist StrikeAd has created the first dedicated mobile advertising Demand Side Platform (DSP) which allows advertisers, agencies and brands to quickly and transparently plan, optimize and deliver effective global mobile advertising campaigns. StrikeAd's platform allows media buyers and planners to create dynamic campaigns across multiple Supply Side Platforms and territories, reducing time, cost and complexity while offering greater control, better data and improved ROI. This allows them to deliver and monitor the effectiveness of any number of mobile campaigns globally and in real-time. StrikeAd Fusion includes sophisticated automated optimization, tracking and analytics to give its clients unparalleled insight and control over their mobile advertising campaigns. StrikeAd was founded in 2010 by digital and mobile advertising entrepreneur Alex Rahaman. Today, the company has 70 members on staff in New York, Los Angeles, London, Singapore and Kiev

### **Relevant facts:**

- **StrikeAd Fusion** is the #1 mobile DSP in Europe



**What are the overall trends that you are observing on the market? It seems that more advertisers are coming into the programmatic world as well as more publishers are exposing their inventory to the demand side of the ecosystem, moreover new formats appear to take a part of the mobile spend.**



All these point are relevant. What we see is a shift from the Ad network model, which has been a dominant one for quite some time in terms of they way the inventory is sold by publishers and the way it is bought by the media buyers. And the shift is towards exchange buying. As it brings higher yield, because the can place multiple demand sources in competition for a single impression, they can also potentially increase the monetization, attaching the data to their inventory, making it something that “buy” side can benefit from. As for the advertisers, ultimately what they are getting is better performance and greater transparency into the whole process. An increasing number of clients and agencies are shifting their business models away from buying through a network to managing their own trading.

Another interesting thing is happening around the definition of what the premium publisher. If you take the desktop world the premium inventory is associated with effectively with the publishers that are known and recognized, the publishers that have built brand equity. With mobile on the other hand, what you find is that the enormous amount of the inventory is inside applications and a lot of these applications are not necessarily designed for distributing high level content, as they are primarily designed to entertain. These applications occupy an enormous amount of real estate for mobile. Clients coming to mobile advertising seem to automatically sync up with what they know on desktop, so they look for a premium publishers from desktop on mobile and what we see that a lot of the supply does not give you the same value proposition as some of these new premium publishers in mobile. If you are an app and you have a 30 billion impressions a month because everybody plays your game, then there is an enormous audience there and if you can additionally offer the demand side the ability to geotarget the creative, the ability to run Rich media, the ability to identify device through a unique identifier then these three things along with the transparency, meaning sharing of the app name, give an enormous premium to the “buy” side and ultimately creates something that has a mobile specific premium value. A lot of our clients are still getting acquainted with this concept, as the users that you find on premium desktop publishers as high-level editorials, for example, are actually doing something very different when they are using their smartphones and tablets.

**What are the main categories of clients investing in mobile advertising the most?**

The bulk of our revenues would come from Automotive, TELCO then mobile content and mobile games. Furthermore FMCG has a lot of mobile activities, especially when it comes to Rich media advertising. As for the ones having the hardest time adapting to mobile I would name the financial sector.

**As we know there is a huge gap between the time spent on mobile and actual advertising spend on mobile.**

It does not come as a surprise, as the same thing happened to the online advertising. All we are seeing is a predictable delay between consumer eyeballs and advertising dollars. The reality is that consumer has moved, so time spend on app in US in January exceeded desktop, so people are actually using their phones more than their desktop computers. This has been a very aggressive trend and we see it accelerating, as the amount of smartphones being sold is outnumbering the one of the desktops. It will be just a matter of time for the ad spend to equalize the time spent on mobile, it mainly is associated with the knowledge spreading, how quickly everyone can educate himself on it, how quickly the technology can service the requirements. People are coming to mobile expecting to see the same things the saw on desktop, they want to suppliers, buying mechanisms and the inventory to be the same, but the reality is that mobile is a quite different beast, as the device is different and it is handled differently by the consumer.

**What holds direct advertisers and media agencies back from putting more focus on mobile?**

The desire to work effectively across mobile devices is significant amongst every single person I meet. What holds them back is that they can't just extend what they are doing on desktop to this new device and that frustrates them. They would want to tick a box in a dashboard that allows their ads to roll across other devices and they want to see the same results from mobile as they see from desktop. But when it comes to the challenges of mobile as tracking users across app and browsers or building an audience without cookies, you start to face the resistance.

**What is your perspective on the cross-device targeting and activities of the companies like Drawbridge? Do you think it has got a future?**

Yes, it does. When it comes to cross-device targeting, you have to keep in mind that there are two tiers of the companies on the market. Tier 1 companies are represented by massive business like Facebook, Twitter and Google and have millions and millions of consumers logging in from desktop, mobile and tablet. These companies have a competitive advantage as they know with absolute certainty and accuracy who the user is, this is the reason why these companies are the dominant money makers. Tier 2 companies cannot ultimately match this competitive advantage, so the companies like the one you mentioned are trying to solve the problem for everybody else on the market.

**Speaking about these industry giants do you think Twitter will be able to challenge the Facebook in a way with their new products like Tailored audiences and not yet officially announced app download products?**

If you look at Facebook, one thing that is off the scale is the fact that it is a DMP basically, that the consumers have populated with their own data at a massive scale and high levels of granularity. I am not sure Twitter has that level of data. They have is very interesting and they can potentially do things that are clever and new and not even conceived yet for advertising purposes, but I do not think they possess a phenomenal amount of information about people that Facebook has.

**Why do you think publishers are still reluctant to move part of the inventory to the programmatic side? Some people say it is due to lower eCPMs publishers get, other say it has to do with the internal issue between direct sales and programmatic one. What is your view?**

I think publishers care about money, so when they put their inventory to an exchange, setting a floor price gives them some degree of confidence. But they need to ask themselves a question: is that floor price a fair value, given the data that I am passing back to the demand side. I would also say to the publishers that want a better monetization to deal with less people, but potentially offer a higher level of engagement. Now when you look at how redundant the ad network model is, I think the question about the programmatic buying is no longer “if” it is rather “when”. As for the competition between individual sales team and the exchange ones, it is just the matter of the management, as you need to make sure that one team is selling one value proposition and the other is selling something else.

### **Is it about premium inventory vs. remnant or more about placement?**

I would rather say placement. If you want to appear somewhere, to have a guaranteed position on an app or a msite, guaranteed audience at a guaranteed volumes you have to deal with one team, if you are a biddable platform and you want to see what you win you deal with another team.

### **Do you collaborate with the data providers while delivering campaigns?**

We work with all three data types, meaning first, second and third party data. It has as much value as the campaign you want to run, what can be next to useless to one campaign could be crucial to the other.

### **How you think the role of the DSPs will evolve and where you see the industry going?**

I would say in general what is going to happen is consolidation. I think at the moment there are a lot of players at every part of the market and probably it is not scalable and sustainable. We would ultimately expect that any DSP that is still trading independently in 2-3 years would reach a significant scale, provide clients with access to multiple devices, and give them flexibility to manage their own data.

## **6.1.3 DataXu**

**Company profile:** One of the largest independent DSPs, that introduced the first multi-channel Demand Side Platform to include display, mobile, video and Facebook Exchange

### **Relevant facts:**

- Ranked 1<sup>st</sup> US Fastest growing Marketing and Advertising company
- Ranked 5<sup>th</sup> US Growing company overall
- DataXu was founded by MIT aeronautics and astronautics scientists who wrote the combinatorial language that guided NASA's Mars mission plans.
- DataXu founded the OpenRTB consortium whose standard for programmatic media was adopted by the IAB and is in use in more than 80 companies
- Company plans to go public in 2014-2015

**What are some of the broad trends you're seeing in the programmatic space today?**

I would say that the most interesting trend is represented by shift from programmatic display to programmatic video

**Which categories of clients are spending most actively?**

Travel, Finance and FMCG.

**What in your opinion will be the catalysts for advertisers and media agencies to place more focus on mobile?**

The technology that nowadays dominates programmatic is based on cookies. Till the moment when there will be a new technology allowing the proper tracking and becoming a new standard mobile will remain less preferred by advertisers, as for performance campaigns it will be less interesting.

**Nowadays SMS and call revenue is declining, yet carriers sit on a treasure trove of data.**

**Are the big carriers still relevant in mobile in your perspective?**

Yes, they are. However, they are still not monetizing on it. Even if they decided to use this data, at least to target the normal mobile display campaigns it would be already a big step forward.

**With whom you think they could collaborate with DSPs or maybe with Data exchanges?**

I would say with both. But before they need to transform this data in way that would allow such collaboration.

**How does your company collaborate with Data exchanges and DMPs?**

We've got our own DMP and are integrated on server-to-server basis with the major providers of data, like Bluekai, Exelate, VisualDNA and others.

**Is data the key factor on today's market? Is Italy catching up in this terms?**

Yes, absolutely, the role of data is key. As for the Italy it still is some 1-2 years behind the advanced markets like US and UK. We have data in Italy, but the volumes are low and the matching rate is quite low. For example, you can buy 10 third-party data cookies, but will be able to match just 2-3 of them.

**How will industry facilitate user ID and cross device targeting?**

I think the things will change from the current fragmented state after one of the big players like Facebook or Microsoft will adopt a new technology, so others would follow.

**What, from your perspective are the main challenges of Location-based advertising today?**

When you have an app with an activated geo-targeting it is absolutely efficient. If you take a user that goes to a mall and uses an open hotspot, wi-fi targeting could work from a technological, however in Europe it is close to a borderline from a legal standpoint.

**Native advertising seems to be one of the most repeated words today. As I know you are working with Facebook exchange. Could you tell us more?**

Yes we are working with them. The native advertising via programmatic is still in early stage and starts to evolve just nowadays. It is quite complicated, as not only there is technology to be implemented, but also the content should be absolutely flexible to fit look, feel and layout of the page. In my opinion, it is still in the embryonic stage

**How do you think the role of DSPs will evolve? Would they start to merge with DMP, following you path?**

Certainly, DSPs as standalone players do not have a future. Companies like ours, or Turn, Mediamath and Google DBM have definitely brighter outlook. It is quite hard to foresee what is going to happen, as this market is very turbulent and maybe the next big thing would be one that we could not even think of.

**Would there be a shift towards programmatic in general and maybe private marketplaces in particular?**

Yes, private marketplace and particularly the video one seems to be of a big value, especially for the advertisers are not interested only in performance. There is a lot of discussion about it, however the level of investment is still quite low, mainly due to the publisher side.

#### **6.1.4 Rocketfuel**

**Company profile:** Rocket Fuel delivers a leading programmatic media-buying platform at Big Data scale that harnesses the power of artificial intelligence (AI) to improve marketing ROI in digital media across web, mobile, video, and social channels. Rocket Fuel powers digital advertising and marketing programs globally for customers in North America, Europe,

and Japan. Rocket Fuel currently operates in more than 20 offices worldwide and trades on the NASDAQ Global Select Market

**Relevant facts:**

- #1 on Deloitte Fast 500 for 2013
- #4 on Forbes 2013 Most Promising Companies in America
- Chief Executive Magazine Mid-Market Elite 100 for 2014
- AlwaysOn Global 250 for 2011, 2012, & 2013
- Silicon Valley Business Journal Fastest Growing Company for 2013



**What are the major changes you have observed in 2013 in comparison with the previous years?**

We are seeing a significant growth in terms of investments in programmatic buying. Clients nowadays are asking for the measurability of their marketing activities, focusing more on direct responds, performance campaigns. The same goes for the branding campaigns where the measurability could be optimized and improved using more scientific approaches.

**What are the main categories of clients investing in mobile advertising the most**

Finance, TELCO, Automotive and to lesser extent Retail and Fashion.

**And as for the formats, what are the ones used most nowadays?**

IAB standard formats, it is to be noted that we are using the formats that can be accepted by the Ad exchanges. Another thing to highlight is the video format, for example in Italy 20% of the overall digital spending is spent on the video(not only mobile).

**You are positioning yourself as a demand side player, not being involved in Ad exchange and SSP activities, correct?**

We have a particular positioning and see ourselves more as a trading desk.

**The question was raised, because there are companies nowadays there are companies for example Airpush and Smaato that are trying to cover the whole value chain of the RTB market. What is your perspective?**

To tell the truth, these are the Ad exchange platforms that allow you to buy inventory in real-time. Our big difference from the players of the market is the capability to use a unique algorithm of our artificial intelligence that allows you to use Big data in a very fast, efficient and effective way. In our warehouse we have 16 Petabytes of information. Nobody else on the market possesses our technologies.

**Does Rocketfuel work with Data partners, like DMPs and Data exchanges?**

We can work with Data partners as well and above all we are happy to work with DMPs.

**So with the guys, like Lotame, Exelate and Bluekai?**

Yes, absolutely.

**What in your opinion would be the catalyst for direct advertisers and media agencies to put more focus on mobile?**

Mobile is different from other channels. It is really hard to carry out marketing activities with display advertising on mobile. The fundamental problem is that the generation of a “mobile connection” with a user there is a set of initiatives to be carried out, for example an m-site optimization that would offer a seamless experience on the smartphone and the major part of the market is unfortunately still not ready to these changes.

**Some people are saying that it is rather cultural problem, as many companies nowadays do not even have a Head of Mobile or Head of Digital titles. Do you agree?**

Exactly, there is a whole way of evolution to be taken. It has been already taken in the US, but countries like Italy would require a bit more of a time to get there.

**What in your opinion are the main challenges of the Location-based advertising?**

I would say the capacity to take the optimal decisions in real-time.

**Why do you think publishers are still reluctant to move part of the inventory to the programmatic side?**

Because they are afraid to loose revenues, as giving the inventory away to programmatic, in their opinion, would bring less than the traditional selling and maybe they are right.



**How do you think the role of the Media buying platforms as well as the whole ecosystem will evolve over the course of the next years? Nowadays the marketplace seems to be overcrowded.**

I think there is going to be a natural selection, a consolidation of the market. The media buying would be more and more done via programmatic

### **6.1.5 VivaKi**

**Company profile:** VivaKi is part of Publicis Group, the world's third largest communications group, the world's second largest media counsel and buying group, and a global leader in digital and healthcare communications. The company offers media planning, media buying, and media counselling services through its agencies. Across the globe, VivaKi employs more than 400 engineers, technology experts, product designers, analysts and digital marketing professionals



**What are the broad trends that you are seeing in programmatic?**

The growth of private marketplaces, growth in mobile spend in general and the higher level of attention to the Rich media formats.

**And what about video?**

Video is already quite consolidated, so it will continue to grow with the growth rates it has been experiencing lately.

**What in your opinion would be a catalyst for advertisers and agencies in countries that are less developed in terms of digital advertising to put more focus on mobile?**

Actually, the mobile represents the natural evolution, as the media traffic is shifting there and as a result the spend on mobile will grow.

**Nowadays SMS and call revenue is declining, yet carriers sit on a treasure trove of data.**

**Are the big carriers still relevant in mobile in your perspective?**

Their problem is that they did not play this card well from the beginning, not asking a user's permission to use this data for advertising reasons. And now it is quite complicated to solve the issue. There are companies that are dealing just with data, they know how to collect

it, they know how to use it and they are doing a great job indeed, while the TELCOs seem to be an outlier in this field.

**Continuing the conversation about data. How does your company collaborate with Data exchanges and DMPs?**

We've have installed their panels on our platforms. The third-party data is important, however more and more clients are investing in RTB, working with their first-party data.

**The future of user ID and cross device targeting?**

As of today it is very complicated, as every device has its IP-address and it is quite a challenge to carry out the matching.

**And what about the companies like Drawbridge, that are trying to solve the problem?**

What they do is quite empirical I would say. I do not see it as a solid solution. There is a long way to go.

**What would you say about retargeting through actors like Facebook?**

Retargeting just on Facebook definitely has its value, but if you could manage to make a flawless retargeting on other media channels, including Facebook itself that would be really powerful.

**How do you think the role of ATDs will evolve?**

They will become a point of automatization for all the work that is now being done manually, so it will save a lot of time, bringing more efficiency to the process.

**Where do you see the industry going in the next few years?**

I think it will grow over the next years; otherwise there will be no market anymore. Another thing that hope to see is more analytics than commercial figures along with a shift towards adoption of new ways of media trading that bring benefits to everyone and efficiency and improvement of the daily processes for media agencies in particular as opposed to the personal interests that have quite often been the drivers of the market.

## 6.1.6 SponsorPay

**Company profile:** SponsorPay fuels the app economy by creating solutions for smarter ad monetization. Our comprehensive Ad Monetization Platform includes mediation, an ad marketplace and ad serving capabilities to empower app developers to integrate, manage and optimize all sources of ad revenues. SponsorPay is headquartered in Berlin with a U.S. hub in San Francisco and offices in New York, Los Angeles, London, Paris, Shanghai, Seoul and Tokyo

### **Relevant facts:**

- SponsorPay has been honored as one of the world's top mobile advertising companies by VentureBeat, and has received awards from OnMobile, OnMedia, Red Herring, White Bull and others



**Sponsorpay was born as a web-based ad network and now it seems it is more of a mobile SSP, could you tell more about this transition?**

We started on web with incentivized performance based offers. Most of them being direct response one, like surveys or lead generation and then after the mobile got stronger, we adopted the product to mobile and it grew so fast that within a few years it started to outperform the web business and we started to work more with the advertisers as an Ad network. We always had the policy to work just with direct publishers, so we integrate with games only directly which after some time resulted in a very good relationship with publishers and within the last 1.5 years we've been focusing more on our publisher relations, shifting from an Ad network to a Supply-side platform.

**I would imagine your publisher portfolio is constantly growing, could you tell more about your relationship with the inventory holders?**

Yes, we are constantly adding new players. In the beginning when we worked with publishers, it was mainly about freemium games. Now we realize that it gets more and more diverse in the mobile, of course there are still a lot of games out there, but there also new business models for monetization. While we were heading to the direction of a Mediation platform and SSP we also had to change the way we were seeing the ad market, so we needed

to start thinking about non incentivized advertising as well and the end we realized that more we are talking to the app developers more we are understanding there is a big problem for them when it comes to monetization as if they want to survive it seems that they need to integrate with a lot of demand partners to make sure they have 100% fill rate and earn enough money. So for the last 1-2 years we've been working on the product that allows publishers to plug-in with us and then be able to work with everyone else on the market, as this is the vision of the company. We are about to realize our Ad monetization platform for the publishers as a kick off for this vision, meaning that even in the first version a publisher would be able to work with other partners through us.

**Could you tell us more about the SponsorPay's marketplace?**

The idea is that we still have a very good relationship with advertisers and we are well connected on the market, so we not only want to give a publisher an option to work with other people, we also want to give them an option to keep working with us. Right now publisher has to integrate with each of the players, which is hard to maintain, hard to monitor and compare and this is the problem we are trying to address with our new platform.

**As long as you position yourself as a mobile SSP it would be interesting to hear your perspective about the current trends in the programmatic environment. What are the tendencies you can highlight?**

It depends on the players. Market in general is getting more and more sophisticated. In my opinion for example developers are getting more and more professional when it comes to monetization of their inventory. The developers are looking for new solutions to monetize their traffic.

**What in your opinion could be a catalyst for advertisers and media agencies to put more focus on mobile?**

I think it has to do with the traditional approach to media that many advertisers and agencies. There should be a mindset shift, to redirect the fortunes going to print of other conventional media to mobile and it will definitely happen over time. Another challenge is the targeting on mobile. Finding the right user at the right point of time in a not disturbing way is still quite complicated. As soon as this challenge is addressed it will be a common sense that it is worth more than any other advertising type.

**Do you deal with native advertising?**

Yes, we are offering our publishers to integrate our ads in a very customized way, however sometimes publisher do not do it to the extent they could do, as they go for the default settings which allow easier implementation. Nonetheless, there is a big potential and as more publishers are starting to think about the efficient ways to monetize their inventory more of them would go for native ads as well, optimizing the look and feel of the ad inventory.

**Does your partnership with various players allow you to collect relevant data?**

We are not the biggest company in the mobile world, however we already have tons of data, but we do not even know right now what are the ways we could use this data.

**So, you do not collaborate with DMP or Data exchanges?**

All I wanted to say is just because you have data does not mean you are able to use it in a way that would make say. If you want to work with other platforms you need to standardize your data, so that two platforms would be talking same language

**6.1.7 Airpush**

**Company profile:** Airpush is a private, bootstrapped mobile advertising platform. It is known as one of the world's largest mobile ad platforms, currently offering also DSP and Private Ad exchange solutions. Founded in 2010 by mobile advertising veterans, the company has approximately 230 employees and offices in Los Angeles, London and Bangalore.

**Relevant facts:**

- Ranked #2 in the 2014 Forbes list of "Most Promising Companies"
- Winner of the "Most Innovative" and "Fastest Growing" categories at the 2013 Best in Biz Awards
- More than 127,000 apps rely on Airpush



**Airpush’s offering stretches from demand side with AirDSP through AirX ad exchange to supply side with your ad network. Some people argue that this approach may lead to internal conflicts of interest within the company? What’s your perspective?**

You can call your business however you like, but the bottom-line is where you place yourself in the chain. I would not define competition as the one based on the “names” like DSP, SSP or Ad network, you have to go into details of each company to understand if they really compete, because you can actually be a competitor and supplier at the same time.

**Speaking about AirDSP categories of clients are spending most actively nowadays?**

I would say e-commerce.

**You provide a wide range of advertising formats, starting from the famous Push notifications ads and ending up with video and rich media. What are the formats that advertisers are interested most?**

A bit of everything, but mainly push notifications, interstitial and in-app banners.

**Can all the formats be delivered at scale or a lot of work needs to be done on the publisher side? As it seems that advertisers can easily get the in-app banners delivered at scale, however when it comes to the Rich Media and video the situation becomes a bit more complex.**

It really depends on what your company does, how it positions itself. The majority of our inventory is represented by in-app banners and push ads just because we are a performance network. If you speak with a video company like Vdopia or Brightroll, they do only video, as they have a massive scale on video. Potentially advertisers can find any kind of traffic. They just need to understand how and what exactly they want to do, so they could pick the right supplier up.

**What in your opinion will be the catalysts for advertisers and media agencies to place more focus on mobile in countries like Italy?**

Italian market is different from other markets; the competition is different. But overall, I would say it is a combination of two factors. Partially the situation is far from ideal due to the fact that

brands and media agencies want to work on a clear environment, meaning that they want to know where the ads run. Additionally the advertisers want scale, and sometimes it is difficult to scale up. Generally speaking mobile is still early stage. As the time goes by, we will see more and more campaigns run on mobile.

**You mean the advertisers are in early stage?**

I mean brands. Nowadays most of them do not even have a Head of Mobile. Because mobile is still really small compared to other media channels. It takes time for brands to understand how it works and how to monetize it.

**Does it also have to do with the fact that Data on mobile is still not available at scale? As in comparison with Desktop there are no cookies, so it is hard to actually understand who is who and target properly.**

Yes, true. But it is only true when you compare it to online. You can compare it to TV, radio or newspapers where you do not now that much about the audience, you just have a cluster and you just make assumptions about the actual audience. So we need to be careful with this comparisons, as we only compare mobile to online, it makes sense as it is where the mobile should go, but at the same time, we should not forget that the majority of the media does not have this targeting capabilities.

**What in your opinion is role of data in today's market? Apparently with your motto being "Data-driven advertising" you value it a lot.**

The data is probably the main ground of competition in the next years. The companies that will be able to have real data will be ahead in the race. The data is the reason why, for example, why Facebook is doing that well, being generally speaking the only company having the real data at scale. Data is definitely the key asset if you want to compete on mobile.

**And what do you think about Twitter that has recently acquired MoPub strengthening its position on mobile? They also seem to have a sufficient amount of data.**

I do not think at this stage they can compete with Facebook. They have data, but still I do not think they have the same power of Facebook. Twitter can be a big player, but for me it is still a big question mark. I am not sure they have found the business model yet.

**Do not they have some appealing products? For example “Tailored audiences” that would allow you to retarget your Desktop users on mobile seems to be a powerful tool.**

It is interesting, however for me success is measured in revenues. When many advertisers start using and when Twitter generates massive revenues it will be successful. But so far I do not see many advertisers using Twitter. It may become a key player of the industry but not necessarily in a short term.

**Going back to data, do you collaborate a lot with DMPs and Data exchanges or you do something in-house?**

We have our own data, because we integrate our SDK in the publishers’ apps, so we can collect the data from the users and use it. We are working on it and will probably have some results in a few months time.

**Will it be just for you clients or you want to put it on the market?**

No, our business is media is not data. Data is a way for us to sell media.

**Nowadays SMS and call revenue is declining, yet carriers sit on a treasure trove of data. Are the big carriers still relevant in mobile in your perspective?**

The TELCOs potentially have the massive data and they can potentially be key players, but they are too big. They are giants that are too slow to react to mobile. Vodafone, for instance, has been trying to build its own data platform for two years, but still they are far from any decent achievement. Thy dynamics in such companies are very slow the do not have the needed flexibility yet. On mobile market you have to be quick or you are out.

**Do not you think it also has to do with the privacy concerns?**

No, it is not that. It is just that the Operators are not structured to approach the market in the organic way.

**What do you think about cross-device targeting and the business that companies like Drawbridge are trying to do? Do you think that one day it will be there?**

Yes, for sure it will be there and Drawbridge is a very interesting player.



**What, from your perspective are the main challenges of Location-based advertising today?**

I think the technology is still not accurate enough to pinpoint the actual location of the end user. There is a massive potential as you can really serve the media in the right place at the right time, but we are far from there.

**Native advertising seems to be one of the most repeated words today. What is your experience and forecast?**

Native advertising can be interesting, but the bottom-line is that it has to perform.

**If you take Facebook, they seem to attract an impressive amount of ad dollars thanks to the Native ads and retargeting options, do not they?**

Yes, but they make money not because they do Native advertising. They make money because they have data and scale. The way you serve banners can be native, can be a pop-up or push. The bottom-line is that you choose the one that performs better.

**Earlier this year you have launched an AirX the private ad exchange born from your collaboration with OpenX? What has led to this step?**

A lot of companies are approaching RTB, but there is nobody going to RTB without having data. So speaking about us, we are preparing ourselves to get ready once we have data. RTB in a way is a technology that will allow you to get the most out of the data you have, this is why we and the other companies are going there. There is no RTB without data, you could have a structure, but it will have no value inside.

**Why in your opinion publishers are reluctant to move part of their inventory to the programmatic environment?**

I do not think they are reluctant as the end of the day what counts to the publisher is the monetization of inventory and RTB provides higher eCPM. I would rather say that sometimes they are not technically ready.

**How do you think the role of DSPs and Ad exchanges will evolve? Where do you see the industry going in the next few years?**

I think the market is going to consolidate and scale will be key. It is not matter of a definition of DSP or SSP, what counts is the content, what you can really offer to market, what is your plus

compared to competition. And for me these pluses are data and scale. I expect to see the consolidation, meaning less players doing more money.

Overall the mobile market is a great place to be, because it is clearly growing. At the same time it is tough, the fact that it is growing does not necessarily mean it is the right place to start a new business because the market is really competitive nowadays.

### **6.1.8 Flurry**

#### **Company profile:**

Flurry is the world's leading mobile app analytics and advertising platform, measuring more than one-third of the world's app sessions across more than 1.2 billion active connected devices per month. This unique visibility into the mobile app landscape is what powers Flurry Marketplace, where buyers and sellers have access to rich Flurry consumer data that is not available anywhere else. Flurry Marketplace is the only mobile app RTB solution supercharged by Flurry audience data – buyers and sellers harness this data to increase ROI, maximize yield, and reach target audiences at scale. Flurry has offices in San Francisco, New York, London, Chicago and Mumbai.

#### **Relevant facts:**

- Over 125,000 companies use Flurry services across more than 400,000 apps.
- Flurry has raised over \$50 million in venture funding



#### **What are some of the broad trends you're seeing in the programmatic space today?**

I can only speak to programmatic in mobile, where interest among advertisers and publishers is growing. The use of data to find the most relevant impressions is critical for making ad-supported apps more efficient as businesses. The trend shows few signs of slowing.

#### **What in your opinion will be the catalysts for advertisers and media agencies to place more focus on mobile?**

I think the advertising experience on mobile necessarily needs to improve. Mobile consumers have an expectation that they will not be interrupted during their use of an app, but they also have an expectation that free apps may have ads. So long as their experience isn't disrupted, there is an opportunity to place an ad in appropriate format like video in a moment during the app's usage that will provide the user with a good experience. Also, app publishers determine how to fill their own inventory, so particular apps have the option to sell their inventory direct to the most relevant advertisers who have premium video / graphics. As the market matures, so will opportunities to support apps with ads and the experience of viewing an ad on a mobile device will improve.

**Nowadays SMS and call revenue is declining, yet carriers sit on a treasure trove of data. Are the big carriers still relevant in mobile in your perspective?**

Yes, they have plenty of data and a direct relationship with the customer, but beyond their own first party apps which often come preloaded on devices and other data services like SMS, they're exerting very little control over the content and apps which people access. There is plenty of freedom for a mobile consumer to choose their experience.

**What in your opinion is role of data in today's market? How does your company collaborate with Data platforms?**

Data is critical for interpreting the interest of each mobile consumer. Flurry Analytics is our own proprietary data platform from which we source all of our data. There is some version of Flurry Analytics on around 90% of all smartphones and tablets in the world, and we're tracking data from over 4 billion sessions per day. The scale of our data collection is immense, and the analysis that takes place afterwards is what enables us to improve the performance of individual campaigns.

**What, from your perspective are the main challenges of Location-based advertising today?**

Most everyone wants to target by location, so the challenge is to authorize data collection among app publishers and consumers so that geo-targeting campaigns have inventory to fill. Also, publishers also have an obligation to disclose their collections of location-based data to their users.

**The future of user ID and cross device targeting. What do your advertisers use today for user targeting? How will industry facilitate user ID and cross device targeting?**

All users are incorporated into anonymized segments based on behavior or other attributes. Advertisers cannot target based on user ID and there is no way to identify a user across multiple devices in Flurry.

**Native advertising seems to be one of the most repeated words today. What is your experience and forecast?**

Native advertising and direct sold campaigns represent a great opportunity for publishers to determine the value of their own inventory. In many cases these prices could eclipse returns from campaigns running across networks or programmatic.

**What is your company's competitive edge?**

More data collected on mobile usage than any other company.

**How do you think the role of Ad exchanges will evolve?**

Being able to target using data becomes increasingly important as time goes on.

**Where do you see the industry going in the next few years?**

More advertisers looking at mobile seriously, more of the money brands and agencies spend on traditional mediums will transition to mobile and narrow the disparity between time spent on mobile and amount spent to reach a consumer.

### **6.1.9 Vdopia**

**Company profile:** Vdopia is the most scalable Mobile Video and Rich Media solution in the market with extensive reach across mobile web and apps. Vdopia Inc. is a privately held, venture-backed company headquartered in Silicon Valley and worldwide offices US, UK, India, Germany and Singapore.

**Relevant facts:**

- Vdopia has proprietary .VDO video format is not flash based, making it compatible with all smartphones and tablets across mobile web and apps. .VDO technology converts standard banner inventory into video inventory, giving us unprecedented reach and scale in mobile video advertising
- Vdopia delivers advanced targeting with our leading data partners: Blue Kai, TargusInfo, Comscore and other industry leading data providers.

**What are the industries spending more than others on video from your experience?**

Telecommunication, automotive, entertainment and game developers.

**What about some trends on the market? Have you noticed bid changes happening lately?**

Yes, I would say so. The advertisers and agencies are becoming more aware of the fact that classical ways to advertise, like TV, print or online are the only means of communication, so mobile has become a part of the mix. Nowadays if you do a media plan on different channels, then you need to consider mobile as fixed part of it. And the budgets are moving over as well. If for example 5 years ago 25% could be spent on print, reaching just 1% of the audience, while with 1% of the budget going to mobile you are hitting 10% of the audience.

**What do you think about the RTB?**

I believe RTB is the next big thing in mobile and nowadays a lot of players from online are stepping into this. We see a switch in the industry as more and more Ad networks and DSP are buying global mobile media through RTB.

**Are you also switching toward RTB in Vdopia?**

No, we do not.

**You position yourself as a premium mobile video Ad network. If we compare your company with mobile video DSPs like Tubemogul, why advertisers would chose you and not them?**

Because we are the global leader in mobile video and rich media advertising.

We deliver the best video ad experience for consumers across all smartphones and tablet devices; additionally we are the first company that offers .VDO video format technology.

This proprietary technology allows us to deliver video both in-app and in mobile web to more people than any other company in the advertising world.

**As I know you collaborate with companies like Bluekai. Could you tell more about your partnership?**

Bluekai is the third-party data provider, so having this data allows you to go deeper in the targeting. You can have the basic targeting that everybody else has, like demographic, contextual or category targeting, platform, device, GEO or carrier targeting, but then you can add an advanced targeting, like lat/long targeting or ethnic targeting, so that you can reach Hispanic audience in US and retarget them with special offer from advertisers.

**What is the split of your inventory between in-app and mobile web?**

Mobile web still is bigger in many countries. I can not give you the exact figures, but in-app is becoming more and more important. There is around 1 mln apps in the Android store and around 500-600 thousand apps in the iTunes store the market is exploding and the in-app video is becoming more and more relevant.

**As for the formats, you offer mini video, medium video, max video and pre-roll video.**

**Which format brings the best results in terms of CTR and overall engagement?**

It is for sure the max video, one of the main sizes we offer. It is similar to pre-roll from a size perspective. I would always suggest advertisers to use the mix of the formats in order to have a good CTR and overall results, including traditional display advertising and Rich media units.

**You are working with different advertisers. Could you tell more about the categories and objectives of each?**

With the advertisers, firstly you need to know who is the media buyer as it could direct advertiser, brand or mobile digital agency, app developer or other ad network as their

approach and objectives are different. For example for a performance based content providers are interested in buying bigger volumes of traffic at the best rate with a specific targeting and they would maybe prefer programmatic buying. On the other hand brands and agencies that are running branding campaigns are looking for high quality users for getting engagement on their social offerings, like Facebook, Twitter or Youtube brand channels. They are looking to reach the right audience as they want to spread awareness about their product and get social engagement and effectiveness. For this category of clients it is important to know where the ads will run, as they are looking for good quality, transparent, brand safe inventory and the price is of second importance to them.

### **Do you think mobile video Ad networks will be able to compete against giants of programmatic?**

It is a different business. In Vdopia we are looking more for the branding campaigns, approaching brands and agencies with our unique offering. We have direct relationships in the regions where we are located with the Tier 1 agencies as well as with the local agencies and brands and what we offer is end-to-end solution. Sometimes they are looking for somebody who can explain and show them how mobile market works, how they can get a higher level of engagement, brand awareness and social effectiveness.

### **6.1.10 Matomy**

**Company profile:** Matomy offers advertisers, agencies and networks, effective campaign management and optimization for performance across multiple media channels including affiliate marketing, display, mobile, email, virtual currency, search, social and video. Matomy Media Group serves 60 billion impressions per month for 500 of the world's leading advertisers across 7000 publishers in 85 countries, and enables optimizing campaigns across all digital media to ensure cost-effective, controlled and high quality results. Matomy has 7 branches worldwide: Israel, Spain, Germany, Mexico, San Francisco, Fort Lauderdale and New York City

## Relevant facts

- Matomy had revenue of \$193.5 million in 2013, up from \$120.1 million in 2012. Adjusted earnings before interest, tax, depreciation and amortisation (EBITDA) rose to \$13.1 million in 2013 from \$9.1 million in 2012.
- In March 2014 Matomy announced its plans for an initial public offering (IPO) on the main market of the London Stock Exchange with the aim of raising \$100 million.



### **Was 2013 different from 2012 in terms of advertisers' interest and revenue volumes? What are some of the broad trends you're seeing in the display advertising space today?**

2013 was much better revenue wise, we also saw a big decrease with the download vertical (web) due to Google regulation, in mobile – the difference is huge we started our mobile activity in the end of 2012 and now it's one of our strongest media channels. The trends that we saw in web is the switch to CPS since CPI is harder to convert to paying users. Mobile- the importance of quality users that will use the app\ service more than once.

### **Which categories of clients are spending most actively and which ad formats are mostly used nowadays?**

The categories that spend the most our mobile content advertisers (premium SMS) and games, ad formats are display- 320x480\ 728X90 interstitials and pop-up.

### **What in your opinion will be the catalysts for advertisers and media agencies to place more focus on mobile?**

DMP's, user retention, identify the big Whales, more engaged ad formats (HTML5)

### **Nowadays SMS and call revenue is declining, yet carriers sit on a treasure trove of data.**

#### **Are the big carriers still relevant in mobile in your perspective?**

Yes, more relevant then ever, we see a lot of regulation coming from the carriers themselves and the carrier could be the difference from a good campaign into bad one. The data that they have could be used in a lot of ways especially in countries in which credit card is not used very often, (MX for example) and most of the billing is through carrier billing.



**Native advertising seems to be one of the most repeated words today. What is your experience and forecast?**

As for my knowledge, it's could be extremely high converting ads (CTR) if the native is placing right (Facebook with its billions DAU is working well) but it have to not interfere with the user experience and the ad should be very attractive. I believe that it could be the best CTR ad format in the near future.

**What is your company's competitive edge?**

We have a lot of offers to our partners, a lot of experience in the online media world. For our advertisers we have one of the strongest internal media in the industry

**How do you think the role of Ad networks will evolve?**

I'm guessing that the Ad networks will be much bigger with unique ad formats lower CPM\CPC and exclusive publisher, also all of them will be much more transparent about their traffic

**Where do you see the industry going in the next few years?**

Mostly into LTV models (Life Time Value) which mean that the advertiser will pay only for active user of the app and not CPI. Additionally, we see a big interest in Mcommerce and Click to Call actions.

### **6.1.11 NativeX**

**Company profile:** NativeX, formerly W3i, is a leader in innovative monetization and user acquisition solutions for mobile and desktop apps. For publishers and developers who want to monetize with advertising that really works, NativeX is the marketing technology platform that is reinventing in-app advertising to create more effective and engaging ad experiences that enable developers to build successful businesses around their apps NativeX allows a developer to integrate an advertisement into the middle of a game. But the developer has more control over the ad than usual. About 65 per cent of the space for the ad is under the control of the developer while 35 per cent is dedicated to the advertiser. .The company's customers reach more than 105 million monthly active users across iOS and Android. And

NativeX's mobile business grew more than 350 per cent in the past year. The company has 165 employees and recently added a San Francisco office.



**Was 2013 different from 2012 in terms of advertisers' interest and volumes? What are some of the broad trends you're seeing in the display advertising space today?**

From 2012 to 2013 we saw a shift in the market from advertisers requesting primarily incent campaigns, to non-incent. In 2013 advertisers were looking to find the right users, not just a large number of users. In 2013 they started looking for users who are going to play the game enough to make an in-app purchase (IAP) and convert from a non-paying to a paying user. The change toward the end of 2013 is that advertisers now want both global scale, yet still retaining quality.

**Which categories of clients are spending most actively and which ad formats are mostly used nowadays?**

At NativeX, we are still seeing a large number of incented install campaigns, but now it is as common to see non-incent campaigns. We have seen an increase in the availability of video assets as well.

**What in your opinion will be the catalysts for advertisers and media agencies to place more focus on mobile?**

At NativeX, we focus primarily on the free to play games market. So from our perspective, the market has already shifted primarily to mobile. Most games are now mobile, and many web only games are now moving to "freemium" mobile versions.

**Nowadays SMS and call revenue is declining, yet carriers sit on a treasure trove of data. Are the big carriers still relevant in mobile in your perspective?**

I believe the carriers are still very relevant because they do control the data that people are using on their mobile devices. In order for people to be truly mobile and have their information and games accessible anywhere in the world, we will still be dependent on the big wireless carriers.

**What in your opinion is role of data in today's market? How does your company collaborate with Data exchanges and DMPs?**

I believe data is truly what makes my company successful. We have built an ad network from the ground up, and all of our success and what makes us different than our competitors is our ability to collect, analyze, and utilize data. We have created a predictive analytics engine that uses behavioral and emotional targeting to show the right ad to the right user at the right time. We have our own data centers and store all of the data that passes through our network.

**What, from your perspective are the main challenges of Location-based advertising today?**

The challenge of location-based advertising is the ability to collect information about someone from their device. We can target by country and even down to state in the United States. But our technology is getting smarter and later in the year we expect to be able to target all the way down to a specific postal code. This will allow local advertisers to get into the mobile game and show relevant local ads to users around the world.

**The future of user ID and cross device targeting. What do your advertisers use today for user targeting? How will industry facilitate user ID and cross device targeting?**

Advertisers today use a device ID as a user ID. The device ID is a unique identifier, but it does not tell advertisers anything about those they are targeting. In the future it will be interesting to see how industry increases the targeting abilities while still addressing privacy concerns of it's users.

**Native advertising seems to be one of the most repeated words today. What is your experience and forecast?**

We built our entire company foundation around native advertising. We coined the term "native advertising" and even named our company after it. Native advertising is certainly a buzz term in the industry right now. But what we are doing is creating a completely native experience for game users that seamlessly integrates advertising into a game. We utilize character images and animations to create a frame around the ad that increases user engagement, click through, and eventually conversion.

**What is your company's competitive edge?**

We are at least 6 months to 1 year ahead of our next competitor when it comes to native advertising. We have brought on some of the best data scientists in the United States who are building our predictive analytics engine. We use a combination of advanced design principles, along with our data science. As we put it, we blend together art and science to drive revenue for our publishers without disrupting the user experience. In addition to that, because we have built our network from scratch, we control all the ads and traffic that come into our network. We make sure ads we show are relevant to gamers and will produce quality results while preserving the integrity of our network.

**How do you think the role of Ad networks will evolve?**

The exciting thing about the mobile ad industry is that is constantly changing. I don't know if I can accurately predict how ad networks will evolve, but just like with traditional media, ad networks are going to have to become bigger, smarter, and more creative to keep people from developing "banner blindness" as we say in our company, which is immediately recognizing they are being shown an ad, and clicking the close button. They will have to become bigger in the sense that they will need to provide more and more scale to drive more installs for advertisers. They will need to have the ability to scale globally and drive installs in emerging geos as mobile technology becomes more available worldwide. All this, while still providing quality installs for advertisers. It will not be easy.

**Where do you see the industry going in the next few years?**

Similar to the previous question, the industry is going to continue expanding at an incredible rate. I feel we have only seen the tip of the iceberg when it comes to mobile advertising. Many game publishers are still using banner ads in their games as a way to drive revenue. That is simply not a feasible solution anymore. In the past, many small indie game developers created games for the love of gaming, and although that will still exist, now I see it moving more toward a business of making money off of games. Once someone figures out the formula for what creates a lucrative game (Candy Crush or Clash of Clans), others will model their games off of that success in an attempt to re-create it. I also see companies creating games and apps based off of their brands to build awareness and also make money. I see games being built more around showing ads, so they are set up for success from the start. At this point we have to retrofit ads into games that have already been created.

## 6.2 Indirect

### 6.2.1 InMobi

**Type of network:** Blind AdNetwork

**Established:** 2007

**Main offices:** Bangalore, Karnataka (HQ)

**Employees:** 900

**Major shareholders:**

**Web site:** [www.inmobi.com](http://www.inmobi.com)

**Annual revenues/turnover:** \$500M in 2013<sup>212</sup>



InMobi is a company backed by the SoftBank and Kleiner Perkins Caufield&Buyers (\$15M and \$200M respectively). It was founded in 2007 and today has offices around the World, and around 900 employees. InMobi claims to have reach to 759 millions end-users in 160+ countries, serving billions of ads on a daily basis. In its R&D work more than 350 people scientists and engineers, building a complex platform that runs hundreds of campaigns daily.<sup>213</sup>

InMobi's platform offers advertisers targeting audience by content and category, demographic, OS/device, telecom operator, geo-location, time period, etc. Furthermore, company offers protection to both publishers and advertisers in form of content filtering and spam filtering. Additionally, InMobi offers reliable and user-friendly analytics and tracking tools. Company claims to have more than 10,000 publishers in its network, running campaigns for clients such as: Zynga, eHow, ebuddy, photobucket, NFL, Opera Software, ROVIO, Unilever Plc., Samsung Electronics Co. Ltd., etc.

#### Case history

Gaia Interactive partnered with InMobi on the re-launching of its adventure game "Monster Galaxy", iOS application. The objective was to support the app on its way to the top of iTunes charts. InMobi used a "rank-push strategy" and have used a combination of daily spending caps in combination with the weekend burst that enabled Gaia's Monster Galaxy to reach the top 10 at the App Store.

### 6.2.2 Mojiva

**Type of network:** Blind AdNetwork

**Established:** 2008

**Main offices:** New York (HQ), L.A., San Francisco, London



<sup>212</sup> <http://www.livemint.com/Companies/1ICEcE9baZo74WHgiEEo8J/The-next-Infosys--Tapping-the-mobile-advertisement-spaceIn.html>

<sup>213</sup> <http://www2.technologyreview.com/tr50/2013/>

**Employees:** 105

**Major shareholders:** Bertelsmann, Pelion Venture Partners (VCs)

**Web site:** [www.mojiva.com](http://www.mojiva.com)

**Annual revenues/turnover:** n/a

Mojiva is a company established and led by the experienced professionals from advertising and media teams from Google, Yahoo, Nokia and AdMob. It offers a self-service advertisement platform that enables publishers to sell their inventory and advertisers to place their campaigns. The campaigns could be run across different platforms. Furthermore, Mojiva's solutions are scalable while offering good targeting options (channel, demographic, device, time, etc.) and it specializes in supporting rich media ad formats. Company claims that have more than 1.800 publishers and that it runs over 8.000 campaigns for clients such as EA, Microsoft, Ford, etc.<sup>214</sup>

### 6.2.3 Revmob



**Type of network:** Blind Network

**Established:** 2011

**Main offices:** Sao Paolo, Brazil

**Employees:** 11-50

**Major shareholders:** privately held

**Web site:** <https://www.revmobmobileadnetwork.com/>

**Annual revenues/turnover:** n/a

Blind network offering a worldwide reach, and easy setting up of the campaigns. The basic working model is CPC and the most used formats are interstitial banners that pop up when users open applications. Revmob offers limited tracking possibilities, among which one click-through-rate and conversion rate of the campaigns. Some of the customers of Revmob are Kabam, TinyCo, Zariba, Dena, and Nissan.

### 6.2.4 AppFlood



**Type of network:** Blind Network

**Established:** 2012

**Main offices:** Beijing (HQ)

**Employees:** 20+

**Major shareholders:** PapayaMobile

**Web site:** [www.appflood.com](http://www.appflood.com)

**Annual revenues/turnover:** n/a

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<sup>214</sup> <http://www.mobithinking.com/mobile-ad-network-guide/blind#mojiva>

AppFlood was founded in 2012 and it is a Beijing based company, with offices in San Francisco and London. It is a blind network that offers cross-promotion platform's features that gives opportunity for buying, selling and exchanging mobile inventory. Since its launch in July of 2012, AppFlood has attracted more than 4.500 developers, both iOS and Android orientated.<sup>215</sup> Company works entirely on a CPD/CPI basis and uses formats such as content lock, interstitial and offer-wall. It offers targeting by country, device and operating system while its platform is self managed and has self-service features.

### **Case history**

One of the biggest success, AppFlood had with the company "X6 Game" and its popular Android strategy game in China, "Dragon Kingdom". Company used an interstitial banner in order to promote other free apps and then began acquiring free users for its game "Dragon Kingdom".

The campaign was very successful and has generated more than 37.000 installs and has increased DAU by 385% in period of 12 weeks.<sup>216</sup>

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<sup>215</sup> Appflood

<sup>216</sup>[http://www.appflood.com/images/xpromt/cption/images/index\\_v2/AppFlood\\_Exchange\\_Success\\_Story\\_Dragon\\_Kingdom.pdf](http://www.appflood.com/images/xpromt/cption/images/index_v2/AppFlood_Exchange_Success_Story_Dragon_Kingdom.pdf)

## 6.2.5 Madvertise

**Established:** 2008

**Main offices:** Berlin, London, Madrid, Milan and Istanbul

**Employees:** 100+

**Major shareholders:** Sole Proprietorship

**Web site:** <http://madvertise.com/>

**Annual revenues/turnover:** not available



Madvertise was founded in 2008 and has been funded by the Earlybird, Team Europe, Blumber Capital, Felicis Ventures of Silicon Valley and Point Nine Capital of Berlin.<sup>217</sup> The portfolio of global clients include Ford, ING, BMW, Electronic Arts Games and Bacardi.

Madvertise offer solutions for efficient audience targeting, on the widest range of mobile websites and mobile applications in Europe. Company states that it can achieve the highest eCPM and eCPC for its clients and it offers exclusively banner ad formats.

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<sup>217</sup> Cruchbase



## 6.2.6 DMG

**Type of network:** Premium blind networks

**Established:** 2007

**Main offices:** Raanana, Israel (HQ).

**Employees:** 130+.

**Major shareholders:** DMG is wholly-owned subsidiary of DSNR Group

**Web site:** [dsnrmg.com/mobile](http://dsnrmg.com/mobile)

**Annual revenues/turnover:** \$20-50M<sup>218</sup>



This advertising network works with over 3.000 publishers from all over the World, that can be summarized and categorized into more than 37 different verticals (sports, entertainment, food, gaming, etc.). Operating in 200 countries with over 60 billion impressions monthly, “DMG” reaches over 300 million unique users and delivers hundreds of thousands of campaign conversions every month<sup>219</sup>.

When it comes to the Geographical coverage, company operates Worldwide, with the main focus on European Big 5 (Italy, France, UK, Germany, Spain), as well as the USA, Taiwan, Turkey, Argentina and Mexico.<sup>220</sup>

To its clients, it offers different targeting possibilities, such as: targeting by operating system, device manufacturer, publishers, carrier, geography, browser and connection type. As a tracking solution, it uses its own patent-pending technology “Traffiliate for Mobile” that provides clients analytics based on different mobile variables, all with the aim of finding the best match for its advertisers and providing good conversion rates.

DMG company shares the revenues 50-60% with its direct publishers and it works on a CPC and CPM basis. It provides an SDK for publishers, including support for rich media. Furthermore, DMG is a trustable partner, being a member of Mobile Marketing Association (MMA).

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<sup>218</sup> [Mobithinking.com](http://Mobithinking.com)

<sup>219</sup> [DSNR Media Group, LinkedIn](https://www.linkedin.com/company/dsnr-media-group/)

<sup>220</sup> [Dsnrmg.com](http://Dsnrmg.com)

The key differentiation point for DMG is the tracking solution and analytics tool, the “Traffiliate for Mobile”. As stated by DMG, it is a “unique technology which provides real time measurement, evaluation, and optimization of the entire mobile advertising value chain, enabling advertisers to focus on best-performing channels for maximum ROI.” DMG works directly with more than 200 advertisers and 40 media agencies. Some of the clients include: Gameloft, B!, (Buongiorno), Mobster, Ubisoft, eDreams. Branding campaigns from agencies clients include: Mazda, eBay, Kindle, Nike, Ferrari.

### Case history

DMG had a very successful cooperation with the Gameloft, video game company based in Paris, France. Client is a worldwide company that specialize in producing games both for mobile devices and home equipment. Some of its most famous and award winning games are “Rise of the Lost Empires”, “The Oregon Trail” and the “Assasins Creed”.

The cooperation was born out of interest of generating large volumes of downloads and acquisitions across different territories for its premium games “Asphalt” and “Assasins Creed”.



Figure 154 - Mobile Campaign for AC2

With the successful cooperation with DMG, and by utilizing the “Traffiliate for Mobile” technology, it was possible to collect various data from different platforms and traffic sources that assist in gaining better visibility into downloads rates accross markets, OS and devices. These data enabeled Gameloft to customize banner ads and act locally in order to efficiently reach the wide audience. It was especially successful in the South East Asia where banners were customized for feature phone users. Results: download rates increased by 600% and conversion rate by 30% (4 weeks)<sup>221</sup>

The DMG/Gameloft cooperation was best described by Rodrigo Mejia, Acquisition Manager at Gameloft: “We are happy to partner with DMG to pioneer new optimization techniques and strategies to help maximize acquisitions and provide optimal results.”

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<sup>221</sup> MMA Global

### 6.2.7 Millennial media



**Type of network:** Premium Blind

**Established:** 2006

**Main offices:** Baltimore, USA (HQ)

**Employees:** 600+

**Major shareholders:** Private

**Web site:** [www.millennialmedia.com](http://www.millennialmedia.com)

**Annual revenues/turnover:** \$50-100M<sup>222</sup> in 2012

Millennial Media stands for one of the biggest mobile ad networks currently operating around the globe, offering a wide range of ad solutions both to the advertisers and developers, while providing a self-service platform, the mMedia platform. It claims reach of approximately 200M users worldwide and an additional 100M in US alone. Another strong point of Millennial Media is the 2010's acquisition of TapMetrics, a company specialized for analytics. This acquisition enabled MM to offer to its clients a detailed analytics of application usage and consumer's behaviour, all in order to better manage the application sales&revenues. Furthermore, it offers audience & behavioural targeting, as well as carrier, demographic, OS, time and device targeting. The International HQ are in Baltimore while the international position is backed with the offices in Singapore, San Francisco, Paris and London.

With Millennial Media, publishers can use the mMedia Platform to run their own ads and allocate impressions to the third parties and other AdNetworks partners. It supports rich media and video advertisement solutions, together with the standardized banners.<sup>223</sup> The major part of its inventory comes from Nielsen's top 100 web sites and mobile applications (Accuweather, Time Warner, MTVN, Disney, ABC, etc.).<sup>224</sup> Some of its advertisers are Marriott, Mazda, Gucci, Coca-Cola and other big brands, while it works with every important movie studio in the US.

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<sup>222</sup> Mobithinking.com

<sup>223</sup> Mobyaffiliates.com

<sup>224</sup> Nielsen Group

## **Case history**

Microsoft collaborated with the Millennial Media on the promotion and launch of its WP Nokia Lumia 1020 in Germany. The objective was to present the powerful features of the phone's 41 megapixel camera, as well as other functionalities, through a specialized mobile campaign.

An interactive ad was created for the purpose of the campaign, that called consumers to action – to touch the screen. Once in the advertisement, a photo of the phone would be displayed on a promoted phone, which consumers would touch and zoom in order to experience its features and functionalities. The results Millennial Media achieved were impressive 3,23% engagement rate, 56% second engagement (zooming a second time) and 8,63% click-through-rate – a percentage of people who clicked and were redirected to the site of the product.

## 6.2.8 Appia

**Type of network:** Premium Blind Network

**Established:** 2008

**Main offices:** Durham, San Francisco

**Employees:** 50-200

**Major shareholders:** Venrock, Trident Capital, Eric Schmidt, Social Internet Fund

**Web site:** <http://www.appia.com>

**Annual revenues/turnover:** 30M+



Appia is a mobile AdNetwork that is focused on user acquisition, reaching 1 billion users around the Globe. It provides performance mobile solutions for all the actors of the value chain: from advertisers to the publishers and developers. Furthermore, with the “pay-for-performance” attitude, company claims to have an app install network that outperforms the competitions 10 times.<sup>225</sup>

Appia says that it is “the largest, non-incentivized app install network”, that offers its clients targeting by several parameters, charging exclusively on a CPI basis. Nevertheless, it is not so clear if it is possible to place Appia in “incentivized” AdNetworks or in Premium Blind AdNetworks, as, even though it states it is non-incentivized platform, some of the ad formats are in the form of offer wall. Nevertheless, the Chief Revenue Officer Ken Hayes stated:<sup>226</sup>

“Appia has created a mobile user acquisition network that focuses on solving the app discovery challenge while providing higher lifetime value users. Appia spans the entire mobile advertising ecosystem – from data partners to mobile exchanges; and our performance-focused, predictable mobile advertising solution covers advertisers, publishers and developers”.

Company has HQ in Durham and San Francisco and it cooperate with the companies such as Fiksu, Cupid and AppBrain, while on publisher and advertiser’s side it has Travelocity, DeNa, King.com, etc. Premium visibility on a no risk Cost-Per-Install (CPI) model.

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<sup>225</sup> Appia.com

<sup>226</sup> Techcrunch: Appia's position on existing Mobile Advertising Ecosystem

## 6.2.9 Mopub



**Type of network:** Premium Blind Networks

**Established:** 2010

**Main offices:** San Francisco (HQ), New York

**Employees:** 50-200

**Major shareholders:** Twitter

**Web site:** [www.mopub.com](http://www.mopub.com)

**Annual revenues/turnover:** \$100M<sup>227</sup>

MoPub was initially financed by the Accel Partners, Jafco Ventures and Harrison Metal Capital, with \$18.5M in total<sup>228</sup>. They all backed the former Google and AdMob engineers that created company in 2010. In 2013, Twitter has acquired MoPub for \$350M<sup>229</sup> with the aim of entering advertising business, on mobile platforms, in a more efficient way.

MoPub is a company that provides an ad-serving platform through which developers can manage easily their ad inventory both on iOS and Android. It allows publishers to optimize different sources of advertising on one place: direct ads, ad networks, house ads and RTB through “MoPub Marketplace”.<sup>230</sup> Since 2013, it has been invested heavily in expanding its offer and providing solutions and services such as the ones of RTB and SSP, in addition to the AdNetwork’s ones. As discussed previously nowadays Mopub is a part of Twitter.

MoPub claims that in 2013 it reached 550M unique devices and was conducting 2 billion ad auctions each day, with the clients such as : OpenTable, Flixster, Ngmoco and WordPress.

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<sup>227</sup> Techcrunch, MoPub’s revenues review

<sup>228</sup> MoPub, LinkedIn

<sup>229</sup> Crunch base

<sup>230</sup> MoPub.com

## 6.2.10 Sponsormob

**Type of network:** Mobile CPA Network

**Established:** 2006

**Main offices:** Berlin (HQ), San Francisco, Austin

**Employees:** 25

**Major shareholders:** Privately Held

**Web site:** [www.sponsormob.com](http://www.sponsormob.com)

**Annual revenues/turnover:** US \$5-10M<sup>231</sup>



Sponsormob was founded in 2006 as one of the first CPA AdNetworks for the Mobile web and mobile applications. As a CPA Network, company charges only for the confirmed leads or sales activities. Publishers belonging to the network of Sponsormob are give possibility to choose the campaign that they would run on their app but they are paid when customers make action, such as register, install app, make in-app purchase, make a acquisition, etc.

Sponsormob claims to have more than 8000 publishers in its networks, running campaigns for more than 350 advertisers, while serving 30M ads per month.

The CPA AdNetwork model, in combination with the RTB, DSP and Re-Targeting possibilities influence significantly on the traditional paid-for display advertising on Mobile.<sup>232</sup>

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<sup>231</sup> Mobithinking.com

<sup>232</sup> Sponsormob

### 6.2.11 Admob

**Type of network:** Premium - Global Mobile Ad Networks

**Established:** 2006.

**Main offices:** San Mateo, California, USA

**Employees:** 50-200<sup>233</sup>

**Major shareholders:** Subsidiary of Google

**Web site:** [www.google.com/ads/admob/](http://www.google.com/ads/admob/)

**Annual revenues/turnover:** n/a



AdMob company was founded in 2006 in Mateo, California. After only 3 years of independent work, it was acquired by Google for \$750 million. Before mentioned acquisition, AdMob bought company AdWhirl that specialized for iPhone applications advertisement. The reason for fast and big acquisition of AdMob by Google is in the fact that AdMob offers highly competitive and innovative advertising solutions for various mobile platforms (iOS, Andorid, Flash Lite, WP, etc.), including all standard mobile web browsers. This is possible by a in-house developed Software Development Kit (SDK) that assist publishers to connect their applications across different platforms.

With the Google's support, AdMob is one of the biggest advertising platforms in the World that claims to serve more than 40 billion mobile banners and text ads per month. It offers ads across different mobile channels, including contextual search, entertainment, downloads and portals, sports, news and information.<sup>234</sup> Since the acquisition by Google, AdMob is entirely focused on the application developers while it has decreased almost entirely its activities when it comes to the mobile web advertising and web publishers.<sup>235</sup>

#### Case history

A small Finnish company "Fingersoft" has addressed AdMob for the support in spread of its applications across iOS and Android OS applications. Fingersoft's apps such as "Hill Climb Racing", "Night Vision Camera" and "Cartoon Camera" are being monetized exclusively through AdMob. "Hill climb" has accumulated 70M of Android downloads and about 21M iOS downloads. Thanks to the good AdMob's platform, the fill rate was constantly high, and has increased by almost 500% in the 6 months period.<sup>236</sup>

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<sup>233</sup> <http://www.google.com.my/ads/admob>

<sup>234</sup> AdMob, LinkedIn

<sup>235</sup> Mobyaffiliates.com, mobile AdNetworks

<sup>236</sup> <http://www.google.com.my/ads/admob/success.html>



## 6.2.12 Chartboost

**Type of network:** Premium AdNetwork - App Promotion

**Established:** 2011

**Main offices:** San Francisco, Amsterdam

**Employees:** 100

**Major shareholders:** Sequoia

**Web site:** <http://www.chartboost.com>

**Annual revenues/turnover:** n/a



Chartboost is considered as one of the leading platforms for powering the business of mobile games. It is specialized in supporting application developers in finding new players, driving the user's acquisition and assisting them in monetization efforts. It has a 100% transparent ad-network, which makes it a premium AdNetwork as the clients have opportunity to choose the inventory at which they will be running campaigns. Through its platform, it encourages developers to sell and buy advertising space one from each other and to cooperate.

Chartboost claims to power more than 60.000 games, while having big names in its network such as: Image, King, Nimblebit, Pik Pok, Supercell, Wooga and others. Furthermore, some of the publishers that are integrated with the Chartboost are: Gree, Kabam, Killoo, Booyah, Disney Mobile, Pocket Gems, Gameloft, TinyCo, etc. The company has a reach to more than 300M unique users per months in over 150 countries and can generate more than 12 billion game sessions per month.<sup>237</sup> Company has offices in San Francisco and Amsterdam and has raised \$21M from Sequoia Capital, Tran slink Capital, SK Telecom Ventures, and XG Ventures.

### Case history:

Application Developer company, "Focused Apps", famous by its "Hit Tennis" mobile game, was looking for a way to drive more installs and monetize its chart-stars hit games in 2013, after a thrilling tennis season.

After installing Chartboost technology, Focused Apps measured an impressive increase of publishing impressions of 213%, with the 246% growth in money earned, all-in-all givin a 116% eCPM boost.<sup>238</sup>

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<sup>237</sup> Mobyaffiliates.com

<sup>238</sup> Chartboost

### 6.2.13 Tapjoy



**Type of network:** Incentivized AdNetwork

**Established:** 2007

**Main offices:** San Francisco (HQ), NY, LA, Paris, London, Beijing

**Employees:** 220

**Major shareholders:** J.P. Morgan Asset Management, Rho Ventures, etc.

**Web site:** www.tapjoy.com

**Annual revenues/turnover:** \$100M+

Tapjoy is considered as one of the most innovative companies in Silicon Valley nowadays. Its platform offers a new way for users to engage in mobile advertising. Instead of simple banners, with a click driving KPIs, Tapjoy offers consumers virtual currencies of their favorite apps for watching a video, downloading an app, subscribing to service or other actions that advertisers are paying for. Upon the action, users are rewarded with the virtual currency that can be used within the app.

What is the key for Tapjoy's success is the way how it monetizes the users that do not wish to make a purchase within the app, as these kind of users represent a majority.<sup>239</sup>

In December 2013, Tapjoy published that it reaches more than 450M mobile users monthly through their "Mobile Value Exchange" model. Company claims that it has more than 8M DAU, running campaigns for Amazon, EA, Victoria's Secret, etc.<sup>240</sup>

#### Case history

A company "Concrete Software" cooperated with Tapjoy since it wanted to generate more revenues and to increase user's engagement in its PBA Bowling Challenge game. The solution was Tapjoy's nGEN™ platform that delivered targeted, relevant ad engaging users when they are most likely to respond. As a result, users were thrilled with the timing and relevancy of the offers, boosting the app revenues by 130%.<sup>241</sup>

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<sup>239</sup> <http://www.mobyaffiliates.com/mobile-advertising-networks/tapjoy/>

<sup>240</sup> <http://www.fastcompany.com/3017408/most-innovative-companies-2012/27tapjoy>

<sup>241</sup> <http://developers.tapjoy.com/case-study/pba-bowling/#objective>

### 6.2.14 King

King.com Ltd, a company that was founded in 2002 in Stockholm, Sweden, is currently one of the biggest mobile application development companies and a largest application developer at Facebook. It has more than 180 titles available in 14 languages with more than 324 million unique monthly active users (MAU). What contributes greatly to the company's success is availability of its products across all the devices and platforms: from web and social platforms to mobile and tablet devices. The synchronization of its games allows players to switch very easily between the devices and platforms and play them anywhere, any time.

Some of the biggest and the most popular games of King are: Candy Crush Saga, Bubble Witch Saga, Diamond Digger Saga, Papa Pear Saga, Pet Rescue Saga, Farm Heroes Saga, etc. King's most popular game is, without any doubt, Candy Crush Saga which was presented for the first time in April 2012. In January 2013, this game became a number 1 game on Facebook with over 45 MAU<sup>242</sup>. The previously mentioned applications are currently active and most popular games. With the spent of \$110.5 Million on research and development,<sup>243</sup> company can afford launch of, on average, 2 new games on a monthly basis.

In February 2014, King Digital Entertainment PLC has announced that it will offer its shares in its initial public offering (IPO). Expected price per share will be around \$22.5 which will value a whole company at \$7.6 Billion. Company plans to become public and offer at the first transaction 22.2 million shares (\$533 Million worth). The big success company owes on first place to its "Candy Crush" puzzle game that makes around 78% of cash spent by user at King, contributing to the generation of \$567.6 Million of profit in 2013, advancing fast from only \$7.8 Million a year earlier. Even though it is hard to estimate the exact percentage of advertisement in the overall revenues of the company, there are certain estimations that it makes around 10%, generating it from many of its 180 games.

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<sup>242</sup> AppData.com

<sup>243</sup> BusinessWeek.com: King's IPO Filing

### 6.2.15 Pandora

Pandora Radio, also known simply as Pandora, is a biggest music streaming provider in the U.S.A. It plays music selected based on the user's taste and aspirations and user has an option of rating the given playlist which is very valuable information for future songs. Based on the user's behavior, Pandora can generate a lot of information (over 400 different music attributes and variables, combined in different tags and segments) and offer its consumer the most preferred songs and playlists. At the moment, Pandora is available only in the United States, New Zealand and Australia.

In July 2008, Pandora launched mobile application for iOS platform based devices. Later on, it made it available for Android, Windows and BlackBerry phones. Mobile application has two business model: a free download or a fee-based one (premium subscription). The most users decide to use a free subscription that does not offer any premium features and this version is entirely supported with the funds gained through mobile advertisement. With more than 150 Million registered users and 75.3 Million active listeners at the end of February 2014, Pandora managed to occupy total share of 8.91% of all U.S. radio listening service providers.<sup>244</sup>

With the big user base, big volumes and big dependence of its revenues from mobile advertisement, Pandora made decision in March 2012 to disclose on a monthly bases all the information regarding its user's behaviour and its volumes, in order to assist the advertisers and other players of the mobile advertising, when making their traffic buying decisions. When talking about the revenues, it is worth mentioning that Pandora generated \$427.1 million out of which \$375.2 million was from advertising, which represent an increase of 56% in comparison with 2012.

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<sup>244</sup> Pandora: February 2014 Audience Metrics

### 6.2.16 Supercell

Another example of Application Developer is Helsinki based company, Supercell. It was founded in June 2010 in Finland and today has more than 90 employees.

First game it was released by SuperCell was “Gunshine” that was running only in a browser, without a need to instal any plugin. The biggest success company made after release in summer 2012 of an iOS based games: Clash of Clans, Boom Beach and Hay Day. In only few months, games Cash of Clans and Hay Day reached top 5 positions and held it longer than any other game in 2012.<sup>245</sup> These games, together with the Boom Beach, have a free-to-play model, the so called “freemium” model (games which users do not pay to download but rather pay for getting premium content and features of the game).

According to the Supercell’s statement from February 2014, company has increased its revenues 9 times in comparison with 2012 and has reached \$892 million. The EBT has reached \$464 million, which represents an incredible jump from just \$51 million previous year.<sup>246</sup> These revenues have been generated by the big user base and 8.5 million daily active users. Data that is, at this moment, unbeatable by other players in this segment, is incredible revenue of \$2.4 million every day.<sup>247</sup> At the same time, recently there has been a breach into secured network of the company and data extracted from the backend shows that 3 games combined had 29.4M active users that generated \$5.15M on 7th of February.<sup>248</sup>

In 2011, Accel Partners placed \$12 million investment in Sueprcell while in October 2013, a Japanese company SoftBank, together with GungHo Online Entertainment, had invested \$1.5 billion for acquiring 51% of the company.<sup>249</sup>

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<sup>245</sup> <http://www.forbes.com/sites/karstenstrauss/2013/04/17/is-this-the-fastest-growing-game-company-ever/>

<sup>246</sup> <http://bits.blogs.nytimes.com/2014/02/12/supercell-revenue-and-profit-soars/>

<sup>247</sup> <http://www.forbes.com/sites/karstenstrauss/2013/04/18/the-2-4-million-per-day-company-supercell/>

<sup>248</sup> Re/Code

<sup>249</sup> <http://www.theguardian.com/technology/2013/oct/15/supercell-funding-softbank-gungho-clash-of-clans>

### 6.2.17 HalfBrick studios

Another successful company in game developer's segment is HalfBrick Studios, company founded in 2001 taht is coming from Brisbane, Australia. At the beginning, company was developing games for PSP and Xbox while recently, it is focused entirely on mobile gaming industry. Some of its games are: "Bear vs Art", "Band Stars", "Jetpack Joyride", "Monster dash" and others.

One of the most widely spread and the most popular mobile game of HalfBrick Studios, is "Fruit Ninja". It is a video game that was published in April 2010 for iOS platform primarily and later on, in September, it was published for Android OS devices. There are several versions of Fruti Ninja game such as "Fruit Ninja Kinect" (Xbox), Fruit Ninja HD (iPAd), Furit Ninja THD (Tegra 2) and an arace based version "Fruit Ninja FX". Today, game has recorded more than 700 milion downloads worldwide. Fruit Ninja generates for the company around \$1M per month, out of which \$500.000<sup>250</sup> from the advertising. The game's inventory is entirely managed by the Mobclix company that handles all the advertising campaigns and initiatives. It allows other AdNetworks to participate in a bid in order to secure their advertisement on the mobile application.

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<sup>250</sup> Phil Larsen, CMO HalfBrick Studios

## **CHAPTER 7: Conclusions and future scenarios**

In the previous chapters the reader was presented with the insights about various mobile advertising formats and the value chain players who make the delivery of the advertising message possible. The snapshot of an existing value chain was broke down to a level of a single player to give the widest overview possible over the mobile advertising state of art. Conventional players like Ad networks were examined from both theoretical and empirical perspective along with the new players of the market as DSP and Ad exchanges that bring groundbreaking technologies to the ecosystem, changing it to a data-driven marketplace. In the theoretical part the authors tried to be as close to the reality as possible, because of the natural intentions of a curios researcher, however it is to be noted, that in the ever evolving industry as Mobile advertising almost all the information the researcher comes across is connected to reality, as this information is in a major part coming from first-party data sources, like companies' whitepapers or interviews with the companies' management. Another valuable pieces of information are coming from the research and regulatory bodies like IAB, MMA, Nielsen, Juniper and others. Additionally online resources like e-Marketer provide with extremely helpful information about the market and its dynamics. All the cited sources have a hands-on experience on the market and offer an opportunity to grasp the whole picture of the complex world of the mobile advertising.

The big focus of the present paper was put on the new technology, the "Real Time Bidding", whose success in the world of online advertising at international level has led to the emergence of new realities even in mobile ecosystem. Speaking about RTB market it is needless to say that data is it's main fuel, therefore a high level of attention was given to this phenomenon while using both theoretical and empirical approaches to the world of mobile advertising. In the present chapter we will reflect on the current situation in the ecosystem as well as try to make predictions of the shapes that the industry may take in the short and medium term future.

## 7.1 Mobile market and traditional players

With the \$13.1 billion spent on mobile advertisement in 2013, \$18 billion predicted for 2014 and the forecasted \$42 billion by 2017<sup>251</sup>, it is not anymore a surprise that the World is going mobile. While it is expected that the smartphones will overtake the total number of PCs around the World in the first half of 2014, the overall advertising industry understands that it needs to take the new course in order to respond in an adequate way to the new major medium.

In order to increase the overall spend on mobile advertising, all the value-chain's players will need first to face the most important task. The challenge number one in the following years is introducing of mobile channel as a standard medium for transmitting the message to the audience. Mobile Advertisement Agencies have a crucial role in incorporating the mobile into their client's programs and pushing out attitude about mobile as a "one-off" trial and opportunity. It is important for the brands to learn how to spread their message using the mobile applications and social Medias in the most effective possible way. The mobile, in 2014, is expected to become fully integrated into 360 degrees advertising campaigns, increasing the share of the overall marketing spend of the companies.

The main focus of the mobile advertising value chain's actors, in the upcoming years, will also be on the product and technology expansion and upgrades. All the actors of the ecosystem will continue investing significant resources in enhancing the reach, capability and the effectiveness of current technology platforms they are operating on. The key is in the breadth of the offerings and the reach and scalability. This, together with the post-click mobile advertising activities and tracking of mobile-user lifecycle management is the key differentiation everyone will be striving to.

"In the upcoming years, the growth will be fueled by improved market conditions, such as provider consolidation, measurement standardization and new targeting technologies, along with a sustained interest in the mobile medium from advertisers. ", Stephanie Baghdassarian, research director at Gartner.

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<sup>251</sup> Gartner



It is not everything anymore only about communicating the brand's message. It is also about the engagement, measurement of that engagement and promoting desired message in such a way that it will create a viral reach that has the most powerful effect. For that reason, mobile channel and the quality of used inventory, as well as innovative and engaging advertisement formats, are out of crucial importance.

Based on several researches, the customer engagement and customer satisfactions are two the most important aspects when it comes to the shape of the campaigns and its implementation. While feeling comfortable with the relevant advertising, consumer wants to receive the best experience that is simple to use, it is easy to understand and intuitive in the sense to direct the consumer straight where they want to be.

If we analyze the mobile advertising performance, it could be noticed that the standard display ads - banners, once they entered the scene, were recording an amazing click through rates of up to 40%, while nowadays (2014) the average is hardly higher than 1%. The big drop in the CTR is due to the fact that the audience became "banner blind" and do not respond anymore to the classic and standardized banners.

With the previously mentioned in mind, it is important to state that the creative part of mobile advertising will gain on its importance in the upcoming period. Advertisers, agencies and Ad Networks will have to invest more in its creative solutions that will be optimized for different smartphones and tablet devices, all in order to support their efforts in accepting the mobile advertising as a leading channel in industry. The percentage of rich media and video advertisement formats is already increasing rapidly, while in 2015, there will be more these formats than standard mobile ad banners in the premium and premium blind segment.

"Physical proximity of something is going to dictate the experiences", Mr. Israel (Sapient Nitro).

Speaking about publishers it is important to notice that in 2014 the majority of the traditional web publishers are expected to become mobile-first, with the biggest part of the traffic coming from mobile devices. This trend was partly dominating the marketplace in 2013, with companies like Youtube and LinkedIn getting 40% of their traffic from mobile devices and it is expected to extend to other industry whales as well. As a natural consequence of this shift the rise of the responsive mobile websites is expected to take the central stage when it comes to the user experience. Consumer attention is still quite on the app side, but advertisers should keep an eye on their mobile web strategy as well. In 2014, brands will need to pay higher attention to how their sites render on all mobile devices and optimize them accordingly to

maximize consumer engagement. Another interesting trend predicted for the 2014 would be the focus of the developers on the lifetime value of the users, as it is a core measure of the healthy business and it is increasingly used to analyze the monetization possibilities. The focus on the LTV will result in modified advertising strategies that may result in a higher attention to the brand safety and quality notions.

Mobile devices have a key advantage over other connected devices; they are able to give quite precise location-specific data, meaning that ads can be delivered to customers in a much more targeted fashion, such as in a particular location where a store may be holding a sale, or to show a trailer near a cinema. The ability to target by location offers massive possibilities for advertisers, particularly retailers. According to Gartner, the biggest increase in mobile advertising in the following years will be introducing better features and technologies when it comes to the geo-location targeting and advertising. It implies that this segment of the ecosystem will be growing rapidly as the momentum and the location are becoming the most important factors in mobile advertising – reaching consumer at the right moment, at the right place. With all the possibilities that smartphones offer, with its sensors, GPS technology and accelerometers, advertising has limitless opportunities. However, speaking about the location-based advertising one should not forget about all the challenges described previously in the paper and ranging from privacy concerns to technological feasibility and accuracy. As to the combination of location-based advertising and real-time bidding logics, it offers a new unprecedented level of granularity when it comes to the targeting, however it is to be noted that currently the volume of the local inventory is relatively small, but it seems that industry is going to utilize its best resources to solve the issue in the foreseeable future, as it would provide marketers with breathtaking capabilities.

Another important trend when it comes to the Ad Networks, and all the industry in general, is programmatic buying, as the adoption of these technologies will bring mutual benefits to all market's actors (publishers, advertisers and ad networks). It is expected that the programmatic will be the basic environment in which the industry will operate by the 2017, as it is just a matter of moment when all the players will adopt and exploit this opportunity. Big credits are being given to the private marketplaces and their role in the future ecosystem. It is a model many publishers are familiar with in online world. It gives them superior brand safety and price controls, and they can easily run complementary online and mobile private

exchanges. In fact, one of the most prominent Ad Exchanges – Nexage expects to get up to 50% of the 2014 revenues from private exchange, growing 25% from 2013<sup>252</sup>.

At the same time, development of competitive and predictive-driven targeting and retargeting options and solutions will represent a major focus of the companies, as the ability to link consumer across different channels, will be a winning factor in the upcoming period. On mobile, where there are no possibilities for placing cookies, the consumer's tracking across channels and devices will be a solution that will push the industry forward and allow it to monetize entirely its potential.

The advertising spend of \$18 billion for 2014 is predicted, but knowing that Facebook and Google account for roughly 65% of the share, it is expected a big race for the rest, a 35% big piece, of the mobile advertising cake. More than thousand players of the exciting mobile advertising market are competing in this race, investing millions of dollars in researches and improvements of existing technologies and solutions. Adoption of standards given by the MMA, development of new ad formats (rich media, video and native formats), as well as the full adoption of programmatic and the development of new tracking and targeting solutions, will represent the most important challenges of the market in the upcoming period.

## **7.2 RTB**

The approach brands and agencies use to acquire mobile inventory is changing rapidly as they are getting more control over the buying process itself, which is different from the way the business is conducted with conventional players like Ad networks, which in their turn are raising capitals to transform into more high-level operations, bought by industry giants or simple disappear from the landscape due to inability to compete on the refined marketplace. More and more Ad networks start to bid directly on Ad exchanges or work with Mediation players as this give them necessary tools to let their clients target consumers more precisely. As discussed previously the traditional approaches to media buying when an advertisers need to make deal with each of the publishers or Ad networks accumulating their inventory are very time consuming and wasteful. Mobile Ad networks still have direct relationship with publisher away of the RTB environment, nonetheless there is big part of Ad networks that are developing their own bidding solutions or at least using the ones of the existing mobile DSPs. The main motive to use the DSP is the possibility to access the needed

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<sup>252</sup> <http://www.nexage.com/blog/entry/nexage-2014-predictions>

inventory in real time, having an additional layer of targeting on top of it and enhanced with improved performance and tracking capabilities. The usage of DSP and RTB market is much more effective than working with numerous Ad networks, as they allow to bid on the right audience in the real-time, in some milliseconds. Mobile RTB market as already discussed previously in the paper is copying its online counterpart in many ways, however there is a critical difference to keep in mind – the absence of cookies, which are making the tracking of user's precedent activity possible on desktop. This essential difference has forced RTB market players to start the process of finding of new ways to deliver this important data. The mobile RTB technology has the power, that is not possessed by the conventional players of the market and suggests that old system of buying media will be becoming less and less popular among brands and media agencies, as it is a way better for them to have a platform that allows real-time buying of relevant audience at a reduced price on the impression-by-impression basis. All in all it is several hundred billion ad-impressions a day; to which publishers, advertisers and data providers can add context and insight and on which brands can then bid to deliver their advertising message. This whole process occurs as the page loads, typically in 100-200 milliseconds. This scale and complexity of the present market can only be handled by automated systems, which have developed rapidly as RTB has grown. Initially used only for display advertising in performance and direct response, now the technology is determining the mobile landscape as well as multi-screen campaigns. Without any doubt, RTB is becoming an indispensable set of programmatic tools that are empowering new type of relationships between media and agencies.

As we have noticed during the interviews with the key industry players some of them were mentioning a possible competition between in-house sales force and the programmatic selling as one of the possible reasons for the publishers to be still reluctant to fully embrace the benefits of the Real-time bidding solutions. Elaborating further on this topic it is relevant to note that direct sales add a human interaction to the process, helping the business partners to build a successful relationship- vital thing in the today's environment. From the other perspective programmatic trading gives an efficiency that is hardly achievable by the human interaction. Some of the analysts suggest private marketplaces as a solution to the dilemma, as it may address both the efficiency and direct sales issues at once. However, the market is still getting there, and on its way to success there are few hurdles to overcome. Firstly, brands, media agencies and publishers should be educated about the RTB market, starting

form it operational definition and ending up with the technology processes. Secondly, the quality of the direct relationship has to be somehow shifted towards programmatic space,

In order for RTB to be able to expand, there are a few elements that both publishers and advertisers need to take into consideration<sup>253</sup>:

- **Setting up the right partnerships:** This is a crucial element in the growth of the RTB. Both parties involved in the RTB-the seller and the buyer- need to meet the minimum technical requirements for data safety, so that brand control does not become a problem for any of them. Moreover, both parties are subject to regular auditing of the data that is collected versus the amount of money spent on advertising.
- **The publishers must control the data that is transferred:** Publishers are owners of the data and they need to be able to select which data is transferred to the advertisers, in order to be able to prevent data leakage. There are situations in which advertisers will try to collect more data than needed. In order to protect itself and to ensure development of the RTB, which benefits both the advertisers and the publishers, the supply side should have a way of preserving their data. There are a number of ways to attain this: publishers must have total transparency about what data that is being transferred to the bidders and publishers must decide when advertisers go beyond what would be considered “normal targeting”.
- **Screening ads in real time:** In order to ensure creative control, the SSPs should have a method of screening the advertiser’s creative in real time. In the best case scenario, the SSPs would have a process incorporated into their user interface, so that publishers can view the creatives that are displayed on their website.
- **Preventing Malware:** In order to ensure the best user experience, landing pages should be monitored for malware constantly and if found, campaigns should be paused for that advertiser, until the issue is resolved.
- **Loading Speed:** In order to ensure the best user experience, loading speed should never fall below certain predefined standards. Usually, a global data center makes sure that advertisers return bids into milliseconds, in order to provide for the best user experience.
- **Emerging Standards:** Application Programming Interfaces (APIs) connect the ad management and operations platforms of the publishers with the ad exchanges,

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<sup>253</sup> <http://www.adpushup.com/blog/the-ultimate-guide-to-real-time-bidding/>

enabling RTB trading. For APIs, standardization has been one of the major issues since the inception of RTB trading, as the lack of standards made it particularly hard to trade inventory of the data that accompanied it. Since 2012, a lot of progress has been made in this regard. In order to improve the ability of the various existing platforms to work together, the Interactive Advertising Bureau (IAB) published a new version of the OpenRTB API specification. All major SSPs and DSPs have collaborated for its development and it is expected to greatly improve the interoperability of the systems.

According to all the signs RTB will continue its growth in mobile environment. As a standard, RTB grows more irresistibly the larger it gets. As we saw with banners, once a standard is agreed upon and adopted by the market, it becomes quite challenging to unseat for a very long time. Over 2013, RTB has crossed the threshold and at this point it is a decisively established technological solution. The ecosystem of advertisers, publishers and other industry players who have financed the RTB, and the billions of advertising dollars that now go through it, suggests that the critical mass has now reached and there is no way back, but just forward. It seems that 2014 would be the year when RTB will start becoming the standard for all media buying across all platforms. Although there is a long way to get to the total dominance, the 2014 will be likely the year when topic of conversations would shift from “Is RTB great or bad” to “What the world would look like when RTB is ubiquitous”. Nowadays programmatic is no longer a technique for traditional banner advertising as it is now possible to use programmatic targeting on both Facebook and Twitter. Another important trend that may bring substantial changes to the market is the expansion of the RTB to television and out-of-home advertising, as discussed previously in the description of the Xaxis places.

### **7.3 Identity on Mobile**

Identity in the mobile ecosystem is one of the main challenges on the way to the dominance of the RTB approach to the media trading. In the online world there are cookies which are unsatisfactory but omnipresent, open and comparatively effective. As already discussed previously in the paper, the cookie doesn't exist on mobile apps or TV, and until there is a source of identity, it will be quite a challenge to address these channels completely. It seems

that 2014 will likely be the year when market starts to see some viable solutions to this as companies like Google, Apple, Microsoft, and the browser developers are working on building replacements to the cookie, which can function cross-device as well. Another persuasive way to addressing this problem lies in the capabilities of the companies that can get users to log in to multiple devices they are using. Obviously Facebook and Twitter have a powerful position here, with Google sprinting to catch up with Google+. The discussion about the user identity has evolved into a clash between Internet titans about who will be the owner of the cross-channel cookie replacements. It is still to be seen to which extent Google, Facebook, and others will make these IDs open and accessible.

IAB also has its perspective<sup>254</sup> on the situation, claiming that cookies are no longer an acceptable mechanism for “state management” (i.e. providing the information necessary for content creators and third parties to deliver personalized information and services to end consumers and respect their preferences for privacy, information transparency, and control). Furthermore, the proliferation of cookies has slowed page load times, increased ad discrepancy counts, and led to concerns of data leakage. It has also perpetuated a broken compensation model, whereby publishers risk revenue loss if they don’t support third party cookies, as well as from users who block or delete cookies, and a tilted playing field favors large consumer website brands. Publishers also experience operational and privacy policy burdens as various privacy initiatives, browser defaults, and regulatory measures gain traction. For online consumers the proliferation of cookies has increased anxiety in regards to their online privacy. Data collection is fragmented over many websites, devices, browsers, apps, etc.—making it exceedingly difficult for consumers to understand who may be doing what with their data and to apply privacy controls centrally and consistently, while ensuring these choices persist over time. For third parties the reliance on cookies has resulted in a battle between a rapidly degrading economic model, and the costly, persistent, and high-volume deployment of cookies. Though cookies are increasingly ineffective as a state management mechanism the industry continues to deploy them at an escalating pace causing: excessive network traffic and related costs, “internet bloat,” regulatory threats, and anxiety among consumers and publishers alike.

The realities of the evolving digital ecosystem have resulted in the cookie being pushed beyond its useful and intended purposes. This multi-device, multi-platform, multi-

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<sup>254</sup> <http://www.iab.net/media/file/IABPostCookieWhitepaper.pdf>

environment reality has presented new challenges that the cookie is not able to address. What began as a simple state management solution has become the foundation of a complex and valuable online marketplace. This marketplace has grown to include thousands of stakeholder companies and digital consumption now extends across smartphones, tablets, TVs and an ever-evolving array of Internet-enabled devices. In this new reality, the cookie cannot serve as the foundation for the next generation marketplace. New approaches are required.

IAB is examining different solutions that might resolve the problem and Cloud-synchronized one seems to be the best option in terms of addressing the needs of all the market parties:

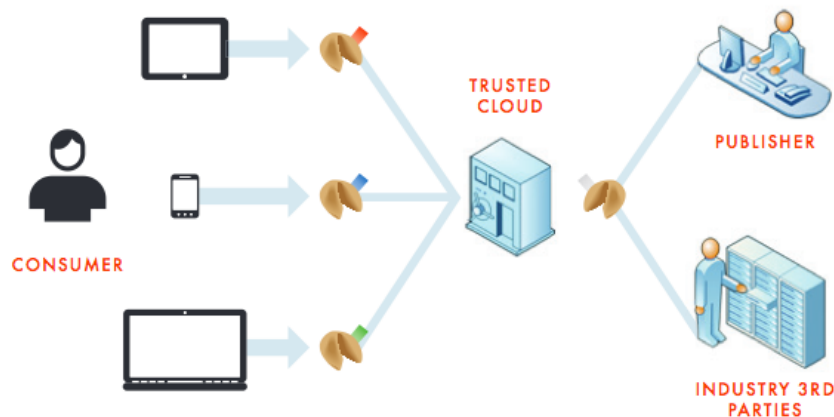


Figure 155. Cloud-synchronized solution

### Cloud-Synchronized State

This solution class provides a layer of synchronization atop other solution classes. This represents state and preferences managed via IDs set and synchronized through a centralized service that all parties agree to work with. This is a concept not broadly offered in the market today. Cloud-synchronized state works across programs and devices. It establishes a persistent state that can be the aggregation of multiple other states (e.g. from other solution classes discussed in this document), and can make this state available to multiple servers in different domains. This is not a standalone state generation technology, but rather a technology that would allow greater consistency of experience based on user preference and the strengths of the other solution classes.

### For Consumers

Establishing a central repository for state, preference, and data permissions management provides opportunities for improving on the current industry preference options, allowing



more fine-grained control, visibility, and greater preference longevity. The cloud-synchronized state could allow users to declare associations between devices, and their IDs from different, previously discussed, solution classes. As such, the cloud-synchronization becomes the glue linking preferences across platforms and devices, solving current inconsistent user experience across programs, apps, and devices.

### **For Publishers**

The centralized repository for state, preference, and data permissions management improves the publisher experience in several core ways:

- Reduction of tags needed for ID synchronization, resulting in a decrease in page load time (PLT), and a reduced exposure to data leakage situations.
- Reduced spin-up time for new data partners, and elimination of retagging to add and remove data partners.
- Better persistence and access to user preferences.

User ad-related Opt-Out preferences are often only sent to ad servers and not publishers, which impacts the value of an impression in an unpredictable manner for the publisher. A cloud-based state synchronization technology is most compelling when it is managed by a neutral body—it must be trusted by companies that would otherwise be competitors.

Establishing a singular trusted tracking provider and clearinghouse could result in improvements to the usage of all other solution classes, as the guidelines established by this one party would guide the whole industry. It is important to note that there are risks of having only one organization through which identity synchronization occurs, and that the oversight of such an organization must be thorough.

### **For Industry 3rd Parties**

A centralized repository for state has the potential to reduce primary infrastructure requirements for industry third parties, by centralizing all beacon calls to one exchange, and to remove the technical requirement of retagging when establishing new business relationships. Therefore, it is expected that such a solution would lower operating costs and barriers to participation for smaller organizations. The centralization comes at a risk as identified above—while a single organization for synchronization is the most technically efficient, such centralization must be transparent to all participants in order to allay concerns of skew towards any other participants. This market-driven need to be transparent is a strong positive message to consumers and regulators. The ability of a cloud-synchronized state

solution to associate multiple types of IDs with one another allows the strengths of previously discussed state management solution to complement each other, providing opportunities for cross-device tracking, reducing redundant ad exposure, data collection, and data transfer. To do this effectively, the solution would need to solicit user input, thereby strongly identifying value to the consumer. These upsides do come at the cost of significant changes to the current infrastructure for the industry

## 7.4 Ad formats

Speaking about Ad formats it is important to acknowledge that although the market is flooded with traditional banners, that were developed 15 years ago and are no longer impactful in the today's world where people have developed a "banner-blindness" partly because they are already trained to so and partly because banners occupy a very little space of the screens are not exactly big themselves. Compared to TV where you may remember a commercial you saw a year ago, one would hardly remember the banner he saw in his favorite app some hours ago.

Quite logically the publishers have realized it and started to innovate the ad space with so called Native ads, examples being Facebook with their News Feed ads and Twitter with Promoted Tweets. As we have seen over the 2012 and 2013 with the launch of FBX, Facebook has done astoundingly with native programmatic. Twitter, on the other hand, is just getting ready to monetize on programmatic. With its acquisition of MoPub, they laid the groundwork to do some really exciting thing; therefore the 2014 seems to be a big year for Twitter, especially if the launch of recently announced<sup>255</sup> app-download product repeats the success of its Facebook counterpart. As for the Facebook, it clearly has an unconditionally gigantic opportunity in video if they can solve the riddle with auto play video ads in the feed and it is expected to do its best to integrate the video seamlessly into the user experience.

Previously in the paper we saw the massive amounts of revenues these players on native advertising and it is natural to predict that over the course of the next years more and more publishers would be shifting toward the model where the look and feel of the ads resembles the content of the game. Other prominent sign of the industry shift towards Native advertising

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<sup>255</sup> <http://www.bloomberg.com/news/2014-03-27/twitter-said-close-to-releasing-new-ad-product-for-apps.html?src=whatech>

could be the collaboration between the leading mobile Rich media solutions provider Celtra and companies like Rovio and Shazam, where Celtra helped the two publishers to bring native ad experiences to the apps.<sup>256</sup> Speaking about the results of such a collaboration, the authors of this paper had a chance to attend Celtra's workshop in March 2014 in Milan, during which the Celtra representative assured the public that ads delivered in a native way bring a way different level of interest and user engagement.

Speaking about exact formats, as already discussed before in the paper the most promising formats in terms of user engagement and memorability are the Rich media and Video ads that will keep dominating the market when it comes to the delivery of a brand message.

Among the enablers for the future proliferation of these types of advertising experts name the adoption of the formats by the publishers, and not only adoption but rather adoption of the formats that are proposed by institution like IAB and MMA, bringing standardization to the industry and allowing more and more advertisers to invest money in Rich media and video campaign. Arrival of the 4G technology is seen as another enabler of the engaging types of the advertising units, as it will enable more rich media and video campaigns – especially on tablets and bigger smartphones. Pre-roll video seems to be advertising is the clear start point for the advertisers. It has a proven track record in other media and it has understandable potential on mobile where consumers are clearly interested video content. Rich media units seem to be more exciting though as they may combine video, audio and interactive elements at once, delivering extraordinary rich experience to the final user, blurring the boundaries between the content and the advertising unit, as the unit could have the entire functionality up to the point when user can actually purchase a good without leaving the ad unit. It may take some time, but we believe that mobile Rich media and video advertising will become standards in the mobile advertising, not only because of the higher interest from the users, but also because they perform a way better than direct response ads in communication of the advertising messages.

## **7.5 Multi-screening and cross-device targeting**

Nowadays there is little or no doubt that place of mobile is right in the center of the new digital universe, thanks to its portability and uniquely personal qualities it is valued higher

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<sup>256</sup> <http://www.celtra.com/adproducts/adformats#native>

than any other device. The multi-screening is one of natural consequences of it, as mobile is nowadays is extensively used to enhance the TV viewing experience. All of the cross-platform experiences when users use their mobile phones, tablets, laptops and desktops to access their preferred websites and mobile application brings a marketers a challenge of tracking the same user across various platforms. Clearly the solution of this problem will give marketers immense opportunities bringing the mobile ad spend to a totally different level. In some cases the sign-in process, for example by Google or Facebook sign-in, addresses the issue. Other companies are also working on the problem, for instance Drawbridge, that was mentioned several times in the present paper, is solving the problem crunching anonymous data using statistical tools to track activity of users across different device. Company claims there is no privacy issue attached to its researches, as there is no exact fingerprinting of various individuals as they use a type of triangulation of the user behavior prior to the conclusion that the different data points represent with a high probability the same person. It is to be noted, that there is a lot of attention is drawn to the activities of companies like Drawbridge, as the privacy is one of the broadly discussed topics in today's big data environment. In fact, the privacy questions prompted Apple to forbid the usage of the unique device identifier, as it could be linked to the personally identifiable information, and substitute it with so called identifier for advertisers, that does not allow the individual identification, but instead it records the patterns of activity, so that more precisely targeted ads can be delivered, additionally it can be switched off is there is an opt-out option. Going back to the multi-screen advertising one could mentions the research of Exacttarget<sup>257</sup> according to which 65% of tablet users reported using their tablet at the same time as watching TV at least once a day, and 41% said they use their smartphone and tablet simultaneously at least once a day. The smartphone is the mobile device, and 85% of consumers consider it a central part of their lives. Meanwhile, 54% of consumers also say that sites optimized for that central device don't provide enough content. In the medium-term perspective to win the consumer's mobile time, brands will need to deliver an integrated, multi-channel experience, as the ultimate goal of the marketers is to engage the consumers as they go through their day, as they move across various media channels and various devices. The current customer-centric approach that dominates the market inevitably brings to the cross-channel strategies, where the overall strategy and broad

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<sup>257</sup> <http://www.exacttarget.com/sites/exacttarget/files/deliverables/etmc-2014mobilebehaviorreport.pdf>

campaign management are cross-channel, but the tactical campaign execution, creatives and spend are channel specific, so that the message would be conveyed in the most efficient way. In the following years mobile will continue its growth becoming by far the first screen device for a broader public, remaining the most personal medium for consumer.

## 7.6 Data

According to the paper findings, elaborated through the theoretical and empirical parts it became quite clear that the Data is one of the main drivers of the existing ecosystem of mobile advertising as one of the interviewees stated: “Data is definitely the key asset if you want to compete on mobile” and in fact majority of the industry actors see the data as the main ground of competition in the next years as the companies that will be able to have real data will be ahead in the race.

As an additional evidence of the importance of data one can cite eMarketer<sup>258</sup>, which in its March 2014 article describes the research that queried client-side marketers worldwide about the most important areas of focus in 2012 and the big data wasn't even in the picture. By 2013, the first year the response was an option, more than one-third of marketers chose it. Though it's still not as important to most client-side marketers as understanding how mobile users research and buy, or finding out where and when people use different devices, more than two in five marketers know they need a handle on big data. Perhaps that's because they realize big data has the power to change their whole business strategy. A separate survey, mentioned in the same article, found that nearly two-thirds of CFOs and CIOs in the Americas had changed their business strategy because of big data. The C-suite was nearly as likely to do so in Asia-Pacific, and the worldwide rate was 56%.

As reported by Smaato<sup>259</sup> Data drives higher eCPM as through the efficiencies and technological advances of RTB ad exchanges, advertisers were better able to match brands and messages with their target audiences in Q4 2013. When location and device ID data are present in a SMX bid request, eCPMs increased by up to 264%. Presence of gender and age data increased eCPMs by more than 150% as well.

Another example of great of application of Data is Facebook, that is getting massive amount of advertising dollars thanks to its capability to its reach and capability to operate data at scale, this is what Facebook's Head of Analytics said about the role of data in the success:

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<sup>258</sup> <http://www.emarketer.com/Article/Marketers-Recognize-that-Big-Data-Big-Deal/1010695>

<sup>259</sup> <http://www.prnewswire.com/news-releases/smaatos-global-mobile-rtb-report-finds-importance-of-data-growing-in-mobile-advertising-243670611.html>

“Before placing ads directly into mobile user new feeds, the company ran data analysis to gauge both user reaction as well as the optimal ratio of ads to user-generated content. Data analysis had a huge impact on the development of mobile advertising, I am not sure we would have had the nerve to throw ads into the news feed without it.”<sup>260</sup>

Data is progressively seen as the “fuel” that powers audience-centered programmatic campaigns and according to the industry experts it will keep growing in strategic value. As already mentioned previously, data, which is leveraged to provide both total and individual-level audience insights, is a critical tool in driving customer engagement and advertising importance. A mix of factors has endangered data’s continual obtainability:

- Possible government regulation
- Browser privacy standards
- Marketer-side gaps in data security and obedience to expressed consumer preferences

As a result of a shift towards use of mobile devices and social media marketers have gotten potent instruments to reach customers via various channels such as mobile, social, video, display, email, and search. With all the developments of these technologies, elaboration of marketing strategy becomes as complicated as never before. Nowadays the marketers poorly understand the nature of how different channels relate one with other. The main challenge comes from the fact that the data that could be potentially leveraged is on different platforms and in different formats. This is the reason of the current and future success of the Data Management Platforms that create a central hub to rapidly collect, integrate, manage and activate massive amounts of data, allowing marketers to even finer granular analytics across various media channels, leading to a higher effectiveness, more precise attribution and higher ROI. DMPs, however are extensively used by the publishers as it is the tool that allows true understanding of the audience as well more effective segmentation of the inventory and obtainment of a rule-based control over audience and ad distribution to upstream players.

The role of Data is already quite high, but still it is still hard to overrate its importance for the future of the mobile advertising. According to the eConsultancy research<sup>261</sup> 22% of publishers are currently using a DMP. The importance of first- and third- party data in

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<sup>260</sup> <http://blogs.wsj.com/cio/2014/01/29/facebook-ad-surge-reflects-impact-of-big-data/>

<sup>261</sup> <https://econsultancy.com/blog/64088-publishers-embrace-real-time-bidding-as-data-takes-centre-stage-new-report>

allowing for better targeting and ad relevance is clearly having an effect on the display buying and selling landscape. Forrester analysts agree with the statement and claim<sup>262</sup> that in 2014 competitive advantage in mobile will shift from experience design to big data and analytics. Mobile is transformative but only if you can engage your consumers in their exact moment of need with the right services, content, or information. Not only do you need to understand their context in that moment but you also need insights gleaned from data over time to know how to best serve them in that moment. Mobile is a key driver of big data. Most advanced marketers will get that mobile's value as a marketing tool will be measured by more than just the effectiveness of marketing to people on mobile websites or apps. They will start evaluating mobile's impact on other channels.

Mobile advertising has already reached a point where the path between publishers on the supply side and advertisers on the demand site comprises various technology enablers to help them trade in real-time in an automated and smooth fashion. Among these technology companies, Data companies occupy a noticeable role as the central hub where all data relevant to reaching the audience over is incorporated, examined, and activated.

With the mobile going more and more towards programmatic buying the role of Data will remain a key driver of successful business undertaking for both publishers and advertisers.

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<sup>262</sup> [http://blogs.forrester.com/thomas\\_husson/14-01-13-predictions\\_2014\\_mobile\\_trends\\_for\\_marketers](http://blogs.forrester.com/thomas_husson/14-01-13-predictions_2014_mobile_trends_for_marketers)

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eMarketer	"Social Ad Spending per user"	January	2014
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eMarketer	"Worldwide Ad spending forecast"	November	2013
eMarketer	"Programmatic Techniques"	November	2013

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eMarketer	"Programmatic Buying Gains Steam"	April	2013
eMarketer	"Mobile Facebook Ads Facebook Exchange Delivering better ROI"	September	2013
eMarketer	"LATAM nearly triple RTB Spend this year"	October	2013
eMarketer	"Mobile Gains Greater Share of Search Display Spending"	August	2013
eMarketer	"Video Advertising beyond top of funnel"	October	2013
eMarketer	"Online Video advertising moves front center"	May	2013
eMarketer	"Mobile growth pushes facebook become No 2 US Digital Ad Seller"	December	2013
eMarketer	"How Native Ad Campaigns shaping up"	July	2013
eMarketer	"Premium Publishers see hope native sponsorships"	November	2013
eMarketer	"Real time location data gets bigger slice of mobile targeting"	February	2013
Forbes	"Fastest growing game"	April	2013
Forbes	"Millennial Media Appnexus CEOs explain new partnership"	September	2013
Forbes	"The 2.4M per day - Supercell"	April	2013
Forrester	"Predictions 2014 mobile trends for marketers"	January	2014
Gartner	"Mobile Advertising Spending Will Reach \$18 Billion in 2014"	January	2014
Google	"Developer content policy"		2013
Huntmads	"Hunt mobile ads launches its mobile RTB platform"	March	2013
IAB	"IAB Mobile Local Buyer's Guide"	June	2012
IAB	"IAB Releases New Standard Ad Unit Portfolio"	February	2012
IAB	"Native Advertising Playbook To Establish Common Industry Lexicon, Evaluation Framework & Disclosure Principles"	December	2013
Infobip	"Boosting App downloads with SMS"	September	2013
Kathy Crosett Margaret	"Mobile Game Marketing to Increase"	December	2011
Rouse	"Search CRM"	November	2013
Marketing Charts	"IAB says mobile rising star units outperform standard banner ads"	June	2013
MarketingVox	"IAB Rising stars display ad units lead to more interaction"	February	2012
MDG Advertising	"Marketers guide to retargeting on facebook"	August	2013
Mediapost	"90% Of Trading Desks Buy Mobile Inventory Via Automation, Ad Spend Set To Double"	February	2014
Millennial	"Millennial media completes acquisition of Jumtap"	November	2013

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MM magazine	"Startmeapp launches mobile RTB ad exchange"	November	2013
MMA	"Mobile Ad Overview"		2013
Mobile			
Entrainement	"Mobile SMS ad spend to hit \$7.4bn by 2017"	August	2012
Nexage	"Rich Media - Video"	n/a	2013
NY Daily			
News	"Twitter public NY stock exchange article"	November	2013
NY Times	"Old navy replaces mannequins with music"	February	2011
Onbile	"Worldwide mobile advertising revenue"	February	2013
Oxygen	"Five Metrics to assess the effectiveness of SMS Marketing"	July	2013
	"NewIDC Study shows RTB display ad spend to grow worldwide to 208Bln by 2017"	October	2013
Pubmatic	"Integrating mobile demand platform AdsMobi to drive global mobile RTB revenue"	July	2013
Smaato	"Google's New Ad Push Policy – How It's Affecting Advertising"	September	2013
Smaato	"Increase your revenue and eCPM with Smaatos new positional ad-unit"	May	2013
Smaato	"Infographic – 5 Points Mobile Marketers Should Be Familiar With In 2014"	February	2014
AdServer	"SMS Marketing case study"	July	2013
Tatango	"Vans Launches MMS Campaign For Valentines Day"	March	2013
Techcrunch	"Facebook is a mobile ad company"	January	2014
The Guardian	"Supercell funding Softbank-Gungho: "Clash of Clans"	October	2013
Tnooz	"How expedia ads now trail you from desktop to mobile"	July	2013
TNV	"Why old-school SMS is still a powerful mobile marketing tool"	November	2013
Trademob	"Mobile Ad Formats Explained"	November	2013
Unbounce	"Native ads vs banner ads"	May	2013
	"Company in 43 categories the increasingly crowded marketing technology landscape"	January	2014
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