POLITECNICO DI MILANO

School of Industrial and Information Engineering Master of Science in Management Engineering



POLITECNICO MILANO 1863

Mobile Advertising: an exploration of innovative formats and the adoption in the Italian market

Supervisor: Prof. Raffaello Balocco Co-supervisor: Claudio Conti Marta Valsecchi

Work of thesis by: Edoardo Reina 858820

Acadamic Year 2016-2017

La realizzazione di questo lavoro di tesi è stata possibile grazie alla collaborazione con l'Osservatorio Mobile B2c Strategy della School of Management del Politecnico di Milano, a cui vanno i miei più sinceri ringraziamenti:

al Prof. Raffaello Balocco per avermi dato l'opportunità di realizzare il presente lavoro di tesi, che mi ha permesso di conoscere meglio il mondo della ricerca e di collaborare con l'Osservatorio;

a Claudio Conti e Marta Valsecchi, per la loro disponibilità e l'aiuto che mi hanno concesso, facendosi trovare sempre pronti e di supporto per qualunque necessità sia sorta durante il lavoro, dedicandomi parte del loro tempo.

Un grazie di cuore va anche ai miei amici e alla mia famiglia, senza la quale il percorso intrapreso in questi anni non sarebbe stato possibile e che ha sostenuto con pazienza e affetto le mie ambizioni, permettendomi di raggiungere un così importante traguardo.

Edoardo

Index

CHAPTER 1	
INTRODUCTION TO MOBILE MARKET	14
1.1 DEFINITION	14
1.2 DIFFUSION OF MOBILE DEVICES WORLDWIDE	15
1.3 DIFFUSION OF MOBILE DEVICES IN ITALY	20
1.4 MOBILE DEVICES IN CUSTOMER JOURNEY	24

CHAPTER 2

MOBILE ADVERTISING	
2.1 WHAT IS MOBILE ADVERTISING	
2.2 BENEFITS OF MOBILE ADVERTISING	
2.3 MOBILE ADVERTISING FORMATS	
2.3.1 Classification	35
2.3.2 Format types	
2.3.3 Integration with other means	52
2.3.4 Formats vs Intrusiveness: the rise of the Coalition for Better Ads	

CHAPTER 3

A FOCUS ON INNOVATIVE ADS FORMATS	59
3.1 OUT-STREAM VIDEO	60
3.2 VERTICAL VIDEO	65
3.3 360 DEGREES VIDEO	
3.4 PUSH NOTIFICATIONS	
3.5 AUDIO ADVERTISING	
3.6 CHATBOTS	
3.7 ADS WITH AUGMENTED REALITY	
3.8 BANNER LOCKSCREEN	

CHAPTER 4

METHODOLOGY OF RESEARCH SUPPORTING EMPIRICAL ANALYSIS	
4.1 OBJECTIVES AND SUBJECT OF ANALYSIS	
4.2 TOOLS OF ANALYSIS	
4.2.1 Sample of analysis	
4.2.2 Structure of interviews	
4.2.3 Track of interviews	

CHAPTER 5

RESULT OF THE EMPIRICAL ANALYSIS IN ITALIAN MARKET	
5.1 SUPPLY SIDE	
5.1.1 Formats	
5.1.2 Data	
5.1.3 Programmatic adoption	
5.1.4 Industries which invest more in Mobile Advertising	
5.1.5 Trends foreseen 5.1.6 Barriers	
5.1.6 Barriers	
5.2 Demand side	
5.2.1 Formats	
5.2.2 Data	
5.2.3 Trends foreseen	
5.2.3 Trends foreseen 5.2.4 Barriers	

CHAPTER 6

CONCLUSIONS	
BIBLIOGRAPHY	

Index of figures

Figure 1- Mobile phone users and penetration worldwide	15
Figure 2- smartphone penetration in US market	16
Figure 3- Tablet users and penetration worlwide	16
Figure 4- Connectivity technologies diffusion	17
Figure 5- Fields of application of 5G technology	18
Figure 6- EU milestones for 5G technology	
Figure 7 - Brands'market shares in smartphones industry	
Figure 8- Annual digital growth in Italy	21
Figure 9- Mobile users and connections globally	
Figure 10- US mobile cuopon users	26
Figure 11- Estimated global ad spend change 2016-2017	32
Figure 12- Mobile internet ad spending	
Figure 13- Mobile internet ad spending share by country	
Figure 14- Mobile internet ad spending growth worldwide by country	
Figure 15- Earned, owned and paid media classification	
Figure 16- Example of an expandable rich media banner	
Figure 17- Mobile video ad spending in China 2014-2020	
Figure 18- Online classified ad model type and penetration among countries	
Figure 19- Multi-screening sub-types	53
Figure 20- Least preferred ad formats on desktop and mobile	
Figure 21- Benefits of outstream vs instream videos	
Figure 22- Challenges of mobile video ads that outstream can resolve	61
Figure 23- Outstream vs instream visible duration	63
Figure 24- Example of outstream video ad	
Figure 25- Results of Lacoste's campaign	
Figure 26- Reach and CPM results of the campaign	
Figure 27- Post reactions and shares of the campaign	67
Figure 28- Completion rates of the campaign	
Figure 29- Cost per 3-seconds-views and cost per 10 seconds-view for the campaign	
Figure 30- Example of the Audi's vertical video ad	
Figure 31- One of the three diferent views for the same frame of the Google and Columbia Sportswear's 30	50
video	
Figure 32- One of the three different views for the same frame of the Google and Columbia Sportswear's 3	60
video	
Figure 33- One of the three different views for the same frame of the Google and Columbia Sportswear's 3	60
video	
Figure 34- Best times to send a push notification according to Kahuna (vertical axis represents the percent	itage
of owners engaged with the app at the correspective time of the day)	0
Figure 35-Best and worst days to send push notifications according to Clevertap	
Figure 36- Example of Waze push notification ad together with statement from an Executive from Fastwel	
Figure 37- Example of Jetblue's request for allowing its app to send notifications in an iOS environment	
Figure 38- Social networks'adopters vs messaging apps'developers	
Figure 39- Example of application of chatbot in a Tommy Hilfiger campaign	
Figure 40- MSC Crociere's chatbot campaign	
Figure 41- Pokemon Go is the most famous game which exploit augmented reality through mobile devices	
Figure 42- Heinz AR campaign example	96
Figure 43- Example of Velar's augmented reality test drive	97
Figure 44- How Unlockd works	
Figure 45- My lockscreen users'levels	
Figure 46 - Degree of interest vs degree of technological maturity of innovative formats	128

Abstract

Il mercato del Mobile Advertising negli ultimi anni ha subito in continui cambiamenti e importanti evoluzioni, come dimostrato dalla forte crescita degli investimenti delle aziende (lato domanda) e dallo sviluppo di nuove soluzioni in termini di formati e tecnologie (lato offerta).

La crescente attenzione al Mobile è legata in particolare al continuo spostamento di utenti e di traffico Internet verso di esso, per la capillare e crescente diffusione di dispositivi Mobile fra la popolazione dei paesi sviluppati e anche in via di sviluppo e il relativo tempo speso dagli utenti a navigare in Internet attraverso questo canale. Inoltre lo smartphone rappresenta un punto di contatto potenzialmente efficace fra brands e consumatori, dal momento che le relazioni attraverso gli smartphones hanno la peculiarità di essere estremamente personali.

Congiuntamente allo sviluppo della industry è emersa la questione dell'invasività e dell'interruzione della esperienza di navigazione degli utenti causata da formati una volta efficaci e performanti: molti attori, inclusa Google, stanno riconoscendo il bisogno di una razionalizzazione dei formati per eliminare quelli non più adatti a una corretta user experience e per questo motivo emerge la necessità di creare nuovi formati capaci di rimpiazzare i più vecchi rimanendo allo stesso tempo coinvolgenti ed efficaci. Inoltre, viene sempre di più riconosciuta la possibilità di sfruttare le caratteristiche uniche che i dispositivi Mobile hanno rispetto ad altri mezzi per l'advertising.

In questo scenario questo lavoro di tesi è finalizzato a esplorare i seguenti argomenti:

- fornire una panoramica generale della situazione della industry del Mobile Advertising a livello internazionale in termini di dimensione economica del mercato e di soluzioni tradizionali disponibili per quanto riguarda i formati e le tecnologie;
- focalizzarsi in particolare sui nuovi formati in via di sperimentazione e che sono visti come promettenti per superare le difficoltà dei formati tradizionali, insieme al tentativo di basarsi sulle caratteristiche del Mobile per creare pubblicità sempre più coinvolgenti;
- analizzare il mercato italiano per cercare di comprendere il grado di consapevolezza degli attori, per quanto riguarda le soluzioni disponibili, i trend in atto e per identificare le barriere incontrate che impediscono una crescita ancora più forte degli investimenti sul canale Mobile.

Abstract

Mobile Advertising market in last years endured continuous changes and important evolutions as the strong growth of investments of companies towards this channel (demand side) and the development of new solutions in terms of formats and technologies (supply side) showcases.

The growing attention towards the mobile device is particularly linked to the constant shift of audience and Internet traffic towards it, to the capillary and increasing diffusion of mobile devices among population in developed countries and in growing ones too and the subsequent time spent by users surfing on Internet through this channel. Moreover, smartphone represents a potentially effective touchpoint between brands and consumers, since relationships with smartphones are extremely personal.

Together with the development of the industry the issue of invasiveness and interruption of user experience caused by some formats that used to be effective and rewarding in the past emerges: many players, including Google, are recognizing the need of a rationalization of formats in order to eliminate those who are no longer suitable for a fair user experience and for this reason the necessity for creating new formats able to take the place of the older ones being at the same time engaging and effective emerges. Furthermore, it is more and more recognized the possibility of exploiting the unique characteristics mobile devices have with respect to other advertising channels.

In this scenario this work of thesis is aimed to explore the following topics:

- providing a general overview of the situation of the Mobile Advertising industry internationally in terms of economic dimension of the market and the traditional solutions available in terms of formats and technologies;
- focusing in particular on new formats that are being experimented and are seen as promising for overcoming difficulties of traditional formats, together with the attempt to rely on the features of mobile for creating more and more engaging ads;
- analizing the italian market in order to find out the degree of acknowledgment of players, as regards available solutions, trends that are occurring and in order to identify barriers that prevent an even stronger growth of investments on mobile channel.

Executive Summary

1-Context of reference

Mobile Advertising, defined as "the communication of products or services to mobile device and smartphone consumers ranging from short message service (SMS) text to interactive advertisements"¹, is proving to be consistently growing, with a pace that sees no similarities in other marketing channels, both traditional and digital. At global level, the industry has experimented an increase in investments by 34% in 2017, reaching the amount of \$133 billion². In the same direction goes the italian market, which in 2017 is forecast to sum up investments for 1,079 billion Euros³, with a 49% growth respect to the previous year. The consistent growth of investments mirrors the more and more widespread adoption and diffusion of mobile devices, which are literally being able to shift the majority of internet traffic towards them; mobile devices posses, moreover, unique peculiarities that should be considered when planning a marketing strategy that encompasses such channel: smartphones are highly personal devices, that users always carry with them and with which they build a relationship that is completely different to the one built with other digital instruments like PCs, thus representing an effective touch-point between brands willing to advertise and users.

In this high-growth context, where there are plenty of players and brands, is emerging the topic of the rationalization of mobile ads formats: in the previous years were used types of ads which worked because the field was completely new and consumers were receptive and willing to know more about banners and traditional formats; however, it has come now to a point of saturation in which often the presence of too many ads leads to the so-called banner-blindness of users, meaning that users are not anymore interested in ads and behave as if they were not present in the screen. The solution can't be found in building more evident and invasive formats, because this would imply a worsening of user experience.

At the same time, often mobile ads are effective in creating brand awareness but lack in performance and conversions: for all these reasons players are continuously trying to innovate formats with the aim of creating something new, engaging and performing that allows to overcome banner blindness without resulting invasive.

¹ https://www.techopedia.com/definition/24260/mobile-advertising

² https://www.recode.net/2017/9/14/16294450/mobile-ad-spending-growth-worldwide

³ Data from the report "Customer journey sempre più mobile: are you ready for the next level?" by Osservatorio Mobile B2c strategy, Politecnico di Milano, 2018

From here the industry is seeing the birth of, among others, vertical Videos, Outstream Videos, 360 Videos, Chatbots, Ads with Augmented Reality, Audio Advertising formats, and many more.

Furthermore, more and more players acknowledge the importance of data when planning campaigns, having in mind the logic of delivering to users messages that are more and more well-fitting and adapt to their interests.

2-Objective of the thesis

The objectives pursued in this work of thesis were the following ones:

- to provide an overall picture of the state of the art as regards mobile devices at international level, by analizing diffusion of mobile devices and mobile subscriptions, infrastructural characteristics such as bandwidth connections and average internet speed, together with the declination of the phases of the relationship with users on the mobile channel (*Chapter 1*);
- to analize the Mobile Advertising environment, by pointing out the dimension of the industry globally and its growth rate in the last years, by describing the peculiarities of the device and benefits of a mobile advertising strategy and by listing the main traditional declinations of formats, with their unique characteristics *(Chapter 2);*
- to study more in deep the more promising new formats that the industry is testing and experimenting, trying to point out the possible benefits and problems each one can imply and to provide, where available, case studies of these formats *(Chapter 3);*
- to get insights about the italian market, by trying to highlight the main messages emerged from interviews with players belonging to the mobile advertising environment, in order to have an idea about the level of awareness of such players as regards solutions available and new trends that will show up in the next years, together with getting to know the most used formats and strategies in the italian context (*Chapters 4 and 5*).

3-Literature of reference

The first chapter presents the mobile ecosystem, by giving a picture about the diffusion of mobile devices worldwide, the rate of penetration among the population and the number of mobile internet subscriptions undertaken, pointing out the growth of such components with comparison to previous years. Then, a short look at the connectivity technologies such as 3g and 4g is provided, together with a very brief introduction to the topic of 5g, which promises

to be a breakthrough innovation in the upcoming years. After that, it is studied the importance and relative market share of principal smartphone brands and the diffusion of different operating system, in order to identify which one is the most widespread globally. The chapter concludes with a comparison between data about Italy and other countries (France, Spain, UK and US) in order to give an idea of the Italian situation when it comes to such themes. Data were searched and found by unifying different sources, mainly reports and researches by international associations and companies.

The last part lists the different steps to follow in order to manage the relationship with customers, starting from the advertising process and going further with Mobile Promotion and Loyalty and Mobile Service, trying to break down each component belonging to the different set of activities.

The second chapter presents Mobile Advertising by defining what it is, the unique features smartphones have and the overall dimension of the industry, trying to highlight the role of certain countries which represent a great component of the amount of mobile advertising investments and others which are growing at a relevant pace. From there, a classification of mobile advertising formats is given, by creating different clusters containing specific ways one can approach advertising on mobile devices. A description about the Coalition of Better Ads is given, thanks to the link it has with banners and the so-called banner blindness affecting more and more users.

The third chapter is entirely dedicated to the exploration of the innovative ad-formats the industry is pushing towards in order to overcome issues that traditional formats imply: for each one, a description of in what they consists is given, together with an analysis of possible benefits and cons their usage could bring with them; where information allowed it, case studies about the adoption of such formats were provided (Mongrel Media, Lacoste, Audi, BMW, Fastweb, Lane Bryant with Pandora Internet Radio, MightyHive and Doubleclick, Tommy Hilfiger, MSC Crociere, Patròn Tequila, Heinz Ketchup, Jaguar Land Rover) with the conclusions deriving from this experimentations. For some formats still lacks a work of research and analysis usually made by specialized blogs and websites, so in some cases data were gathered directly at the source, i.e. by exploring websites of innovative start-ups which developed and based their business models on such innovative items.

4- Methodology of research supporting empirical analysis

After the analysis of literature, an empirical analysis based on interviews with different players operating in the Italian market was conducted.

Interviews

In total were performed 24 interviews, related to different actors along the industry, in order to find out the state of the art of italian Mobile Advertising market, the trends italian players foresee and the barriers that prevent a further growth of the market.

Interviews included:

- 8 advertisers/ brands;
- 2 Media centres;
- 4 Mobile companies;
- 3 Digital companies;
- 4 Dealerships;
- 3 Data provider companies.

The witnesses were gathered through telephonic interviews to Top Management members of companies, allowing to get information about the following aspects:

- Business strategies, core competences and what is offered to the market;
- Position within the production chain and relationships with other actors in the industry;
- Degree of awareness about new trends regarding mobile advertising;
- Investment trends as regards the usage of data for better planning of campaigns;
- Degree of knowledge and usage of main technologies available in terms of innovative formats;
- Expectations and future perspectives about the evolution of the market.

5- Results of empirical analysis

The realisation of interviews allowed to have a concise yet clear view of the Italian market from players' point of reference. Main findings are reported here:

• As regards innovative formats, the common perspective is that more and more companies are experimenting with them foreseeing a future widespread utilisation and acknowledging the novelty they imply; still, though, brands are undecided about jumping on this bandwagon, since there are few examples of successful campaigns in terms of performances, together with the fact that developing such new solutions

is costly and need a dedicated effort in terms of human, organizational and financial resources. At the same time, solutions once innovative are now consistently used by most companies, for example native advertising⁴;

- There is a growing interest around data for better shaping campaigns, with more and more data purchased and used in, for instance, geo-localised campaigns; the issue of quality of data provided emerged though, together with the fact that many brands still are not ready to recognize the value added by high-quality data and refuse to pay for them;
- The issue of attribution and attribution model is strong and relevant, since at the moment being there are no "killer" solutions able to track and identify precisely the role mobile ads have in the conversion process of users, which eventually convert on desktop but enter and follow the conversion funnel thanks to mobile campaigns;
- Programmatic⁵ has now assumed great importance in brands' strategies, as it usually makes up for at least 50% of the total investments made on mobile advertising.

6- Conclusions

In the last chapter some insights based on both the review of literature and interviews are derived, with the main topics consisting in the acknowledgement that some innovative formats are both at a global and italian level still at their early stage and they have to overcome some difficulties, such for instance too costly implementations and unclear performances compared to traditional formats; other innovations are gaining momentum internationally, like chatbots, but italian players conceive them more in a customer-relationship and post-sale service standpoint.

Lastly, a brief analysis about the opportunities offered by new formats is provided, both in terms of the impact they can have on users and their attention or bother and the opportunity deriving from the integration of such formats with data. Further reasoning are then done aimed at understanding how these new format will have an influence on the barriers quoted by italian players.

Finally, through a qualitative analysis based on the review of literature and on the interviews undertaken, a view of such new formats in terms of degree of interest among players and degree of technological maturity is provided.

⁴ "Native Advertising refers to ads that thanks to a perfect integration with the content of the webpage allow to reduce the perception of intrusiveness by users", Osservatorio Mobile B2c Strategy

⁵ "Programmatic Advertising refers to the trading of single advertising impressions in real time through automated technological platforms (with or without allocation machanism through bids)", Osservatorio Mobile B2c Strategy

Chapter 1

Introduction to Mobile Market

The first chapter presents the mobile ecosystem, by giving a picture about the diffusion of mobile devices worldwide, the rate of penetration among the population and the number of mobile internet subscriptions undertaken, pointing out the growth of such components with comparison to previous years. After that, it is studied the importance and relative market share of principal smartphone brands and the diffusion of different operating systemThe chapter concludes with a comparison between data about Italy and other countries (France, Spain, UK and US) in order to give an idea of the Italian situation when it comes to such themes.The last part lists the different steps to follow in order to manage the relationship with customers, starting from the advertising process and going further with Mobile Promotion and Loyalty and Mobile Service.

1.1 Definition

When considering Mobile Marketing one has to acknowledge that it encompasses a wide array of activities, related to the interaction between enterprises and customers through a connected mobile device. Although many definitions of what Mobile Marketing is can be found, the one quoted by the Mobile Marketing Association (MMA) appears to be the clearest one:

"Mobile Marketing is a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through and with any mobile device or network⁶"

This definition is particularly interesting, since it makes clear that Mobile Marketing is a set of practices, often heterogeneous, which includes advertising, promotions, CRM activities, loyalty and fidelity initiatives, social marketing and others. Moreover, the definition highlights the *Engagement* of consumers, which is actually a key point companies should aim to when addressing the Mobile Marketing world. Engaging means building a

⁶ http://www.mmaglobal.com/wiki/mobile-marketing

relationship, stimulating customers to interact and not merely delivering messages on a oneway based funnel. Also, engagement can be initiated by the customer ("Pull") or by the marketer ("Push").

1.2 Diffusion of Mobile devices worldwide

In order to figure out how big is the relevance Mobile Marketing can have on the digital marketing expenditure of companies, one should look at how much widespread mobile devices are worldwide. In particular, smartphones are the main devices through which Mobile Marketing campaigns can be conveyed. Thanks to a eMarketer study on November 23, 2016⁷, it is possible to see that not only Mobile phones owners are already a huge amount of the world population (and among them the majority features a smartphone rather than a traditional feature phone, as it will be shown in the next lines), but it is also worth noting that there is a positive trend over the years which makes researchers forecast that in the next year the amount of mobile phones in the world will reach outstanding numbers.

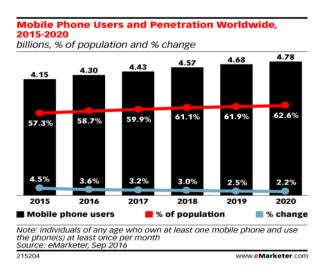
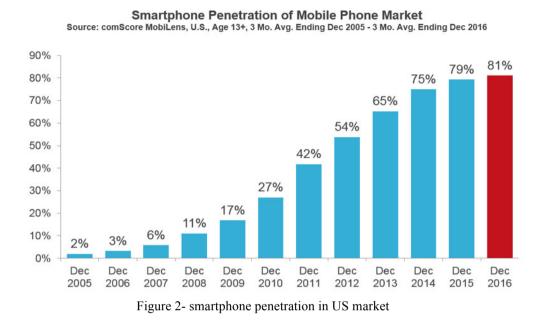


Figure 1- Mobile phone users and penetration worldwide

According to eMarketer, by 2020, the share of smartphones users among the owners of Mobile phones in North America and in Europe will be respectively 87,1% and 82,7%: even more interesting, smartphones users growth will be much stronger in areas where there is currently a lower user base. For instance, in Latin America, the number of smartphone users will climb by 17,1% of 2016 to 49,8% of mobile phone users in 2020.

⁷ https://www.emarketer.com/Article/Mobile-Phone-Smartphone-Usage-Varies-Globally/1014738

In US, for instance, according to a ComScore research, 2016 was a fantastic year for smartphones, as it was the year that smartphone adoption surpassed 80% of all mobile phone users. The milestone was actually reached in July 2016, and that rate has since inched up to 81% in December⁸.



It is also worth noting that Tablets, which are the other main devices that are interested by Mobile marketing definition, see a continuous growth in their adoption, not only in the most advanced countries (where the penetration is way higher compared to low income countries though), but at a worldwide level⁹.

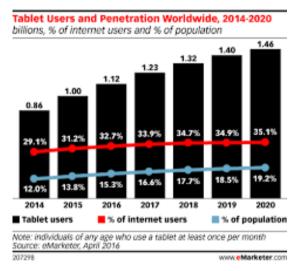


Figure 3- Tablet users and penetration worlwide

 $^{^8}$ https://www.comscore.com/Insights/Blog/US-Smartphone-Penetration-Surpassed-80-Percent-in-2016

⁹ Interpretation of data by Statista.com

Another incredible result achieved in the last term of 2016 consists in the fact that the penetration rate of mobile devices at a worldwide level has reached quota 101%, which means that there are more SIM cards than people. This leads to 7,5 billion of subscriptions worldwide, with a 4% growth year by year. However, unique users of mobile services are 5,2 billion at the moment, meaning that the difference between the total number of subscriptions and the number of unique users is due to the fact that some users possess more than one device¹⁰.

An even more important issue is the number of Internet mobile subscriptions worldwide, because this item shows how many people are able to regularly connect through mobile devices. In general, mobile Internet subscriptions are continuously growing, with the last term of 2016 yielding 220 million new subscriptions; currently they are 4,3 billion, with a 25% growth on a yearly basis. This is mainly due to mobile Internet offerings are more and more cheaper and affordable for any kind of income, besides the fact that the availability of low-price smartphones primarily thanks to Asian Brands plays a great role too. As regards connectivity technologies, 2G still represents the most widespread technology, but there is an accelerating shift towards broadband connections (3G and 4G), recorded above all in 2015. They are actually accounting for almost 50% of total connections and are set to increase to more than 70% by 2020. Of course, different geographical areas see a huge difference in distribution of such technologies, with mobile broadband already accounting for 80% of connections in developed countries and, by 2020, this will reach 92%. Anyway, 3G will have a greater share than 2G in all regions by 2020, and moreover 4G will be the dominant mean in North America and Europe, accounting respectively for 58% and 84%¹¹.

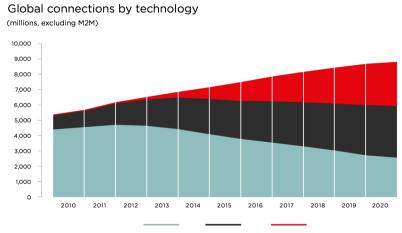


Figure 4- Connectivity technologies diffusion

¹⁰ http://www.lastampa.it/2017/03/02/tecnologia/news/nel-mondo-ci-sono-pi-schede-sim-attiveche-persone-EXioNZRpK2vzSwDTR49C5J/pagina.html

¹¹ Interpretation of the report "GSMA mobile economy 2016"

A breakthrough innovation is expected to appear in this field in the years to come, that is, the 5G connectivity. As explained by Telecom Italia¹², such technology with its applications and services will bring us to the Digital Life, enabling the development and the diffusion of innovations like Smart Cities and Houses, the revolution in public transports, connected cars and vehicles, the Internet of Things, Augmented and Virtual reality, Industry 4.0 and so on. According to Telecom, the main advantages of 5G technology will consist of higher performances (10 times the current ones), longer expected lifetime for mobile batteries, latency times reduced and wide coverage.

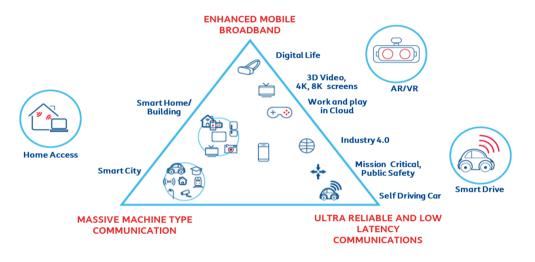


Figure 5- Fields of application of 5G technology

However, this new technology won't be available before 2020, according to researchers. The development is currently being performed in research centres, universities and labs, with Brands and Entities investing in it: Huawei is planning to dedicate 600 million Euro, Samsung 1 billion, The European Commission will undertake a 700 million effort in this direction¹³.

¹² http://www.telecomitalia.com/tit/it/innovazione/rete/5G-la-tecnologia-del-futuro.html

¹³ http://www.futura-td.it/futuracity/5g-cosa-e/

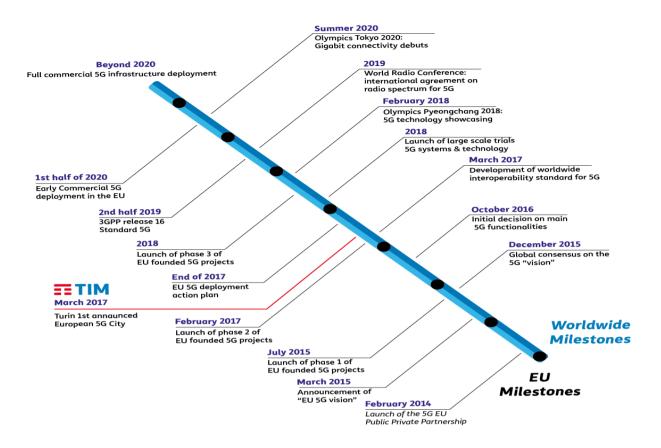


Figure 6- EU milestones for 5G technology

Furthermore, we acknowledge from the Ericson Mobility Report 2017¹⁴ that in March 2017 3GPP (the collaboration between groups of telecommunications associations whose aim is the development and maintenance of standards related to GSM, UMTS, LTE and 5G) introduced an intermediate milestone in the 5G development process, called Non-Standalone 5G NR, that will enable early 5G deployments to such an extent that in 2022, the number of 5G subscriptions is forecast to reach more than a half billion. Over time, hopefully, such technology will enable a wide range of use cases for massive Internet of Things and critical communication. The adoption rate of 5G mobile broadband is expected to be similar to that of LTE, and rollout will commence in major metro areas, reaching around 15% population coverage by 2022.

Let's now address a key topic in order to better depict the smartphone market (which will represent the focus of this work), that is, how is the worldwide market share of such market distributed among principal players.

¹⁴ Interpretation from "Ericson Mobility Report 2017"

First of all, according to a Gartner research¹⁵, the global sales of smartphones to end users reached 380 million units in the first quarter of 2017, a 9,1 percent increase over the first quarter of 2016. The top three Chinese manufacturer Huawei, Oppo and Vivo are experiencing the highest growth rates, since their combined market share in the first quarter of 2017 accounted to 24%, up to 7% year on year.

Samsung is clearly the market leader even if its sales declined by 3,1% in the first quarter of 2017, while iPhone sales are more or less flat.

As regards Operating systems, the battle is between Android and iOS. The growing acceptance of Chinese brands who often run Android is driving its dominance in the market. Moreover, Google announced Android Go, targeted at the entry-level smartphone market, aiming to a continued growth.

Vendor	1Q17 Units	1Q17 Market Share (%)	1Q16 Units	
Samsung	78,671.4	20.7	81,186.9	23.3
Apple	51,992.5	13.7	51,629.5	14.8
Huawei	34,181.2	9.0	28,861.0	8.3
Орро	30,922.3	8.1	15,891.5	4.6
Vivo	25,842.2	6.8	14,001.0	4.0
Others	158,367.7	41.7	156,654.2	45.0
Total	379,977.3	100.0	348,224.2	100.0

Figure 7 - Brands'market shares in smartphones industry

1.3 Diffusion of mobile devices in Italy

Focusing on Italian market, the first data that has to be taken into account is the number of mobile subscriptions, 76,14 millions, which represents 128% of the total population. This gives an idea of how much the mobile presence among population is relevant in such market (unique mobile users are actually 49,19 millions, with a penetration rate of 83%).

Furthermore, according to comScore¹⁶, in December 2017, 77,4% of subscribers owns a smartphone, while 22,6% owns the so-called features phones. This follows an increasing

¹⁵ http://www.gartner.com/newsroom/id/3725117

¹⁶ https://www.comscore.com

trend; indeed, in 2016, the percentage of feature phones owners over total owners was at 26,9%.

Moreover, according to Digital in 2018 by "We Are Social" and "HootSuite"¹⁷, to which the majority of the following data are referred, since January 2017 a growth in internet users and in unique mobile users has occurred, namely of +10% and +0,2%.



Figure 8- Annual digital growth in Italy

As regards brands, the situation follows roughly the aforementioned global chart; indeed, 37,5% of smartphones in Italy are branded Samsung, followed by Apple (18,7%) and Huawei (16,3%), which in the last 2 years saw a stunning growth in the number of users (+413%).

The challenge of Operating systems resolves in favour of Android, which is used by 73,5% of users, followed by the 18,7% of iOS and 6,9% of Windows OS¹⁸.

In the Italian context there is an issue related to the connectivity speed with respect to other EU countries and the diffusion of bandwidth technology, even if the overall speed at a World level (Italy included) is consistently growing for years.

According to a study conducted by the content delivery company Akamai, even if the average connection speed in Italy has passed from 8,2 to 8,7 Mbps in the last term of 2016, the country still loses positions in the global ranking, settling at the 58th position at the global level and at the fourth from the last position as regards EU countries. A similar situation can be found in the Bandwidth diffusion ranking, with Italy settling at the 63th

 ¹⁷ Elaboration from "Digital in Italia 2018" available at https://www.slideshare.net/wearesocial
 ¹⁸ https://www.iphoneitalia.com/646390/smartphone-italia-android-primo-sistema-operativo-iphone-5s-lo-smartphone-ios-piu-venduto

position at global level. Connections higher than 10 Mbps only reach 23%, and just 10% exceed the threshold of 15 Mbps, against a 30% average of EMEA (Europe, Middle East, Africa). A reference point in this sense is Norway, which ranks first both as regards bandwidth diffusion and connectivity speed¹⁹.

Despite this, a good result is achieved in mobile connectivity speed (11,027 Kbps), being UK the country where the highest speed was recorded (26,8 Kbps).

Another interesting finding lies in the fact that smartphone penetrations in Italy reaches 83% of the population, and this makes Italy the third country in the world as regards this statistics, preceded only by Spain and Singapore. This data can be seen as a source of a potential large and exploitable market for mobile marketers, since smartphones are the principal mean for conveying campaigns and ads.

Italians are more and more connecting to the Internet, thanks to the possibility of accessing it in mobility through smartphones: indeed, the percentage of people surfing by computers dropped by 14%, whereas it grows the one referred to all other kinds of devices (+44% by phones, +8% by Tablets and +24% by other devices like Gaming Consoles and Smart TVs).

This section concludes with some snapshots which show the mobile environment at first globally, then compares data about Italy with other main European countries like France, Spain, the UK and the United States²⁰:

• At global level, unique mobile users are 5,135 billion, which are equivalent to 68% of the global population. Furthermore, there are 8,485 billion mobile subscriptions worldwide;

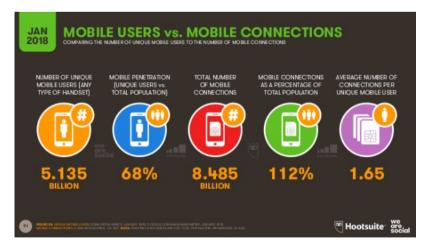


Figure 9- Mobile users and connections globally

¹⁹ http://www.lastampa.it/2017/03/10/tecnologia/news/la-velocit-di-internet-cresce-ma-litalia-arranca-nella-classifica-mondiale-della-connettivit-xt8Dhw4XJAjpTiXUfOLJzM/pagina.html

²⁰ Data taken from the reports available at https://www.slideshare.net/wearesocial

- In France, 93% of the population uses a mobile phone, while 71% uses smartphones; the number of unique mobile users reaches 48,63 million, which represents the 75% of the total population, while the number of mobile subscriptions is 63,96 million, which represents the 98% of the population;
- In UK, 92% of the population currently utilises mobile phones, and precisely 77% smartphones; 49,68 million is the number of unique mobile users, which is the 75% of the total, while the number of mobile connections is 73,23 million, which encompasses the 110% of population;
- In Spain, the share of population using a mobile phone on a regular basis is 96%, while smartphones are used by the 87% of the people; the number of unique mobile users is 37,27 million, which represents the 80% of the population, while the number of mobile subscriptions and the related percentage over the total populations are namely 55,51 million and the 120%;
- In US, 90% and 78% of the population namely regularly uses a mobile phone and a smartphone; 234,8 million Americans are unique mobile users, which accounts for the 72% of the population, while there are 340,5 million of mobile subscriptions, standing for 105% of the total.

In short, mobile pervasiveness is a matter of fact in Italy, also considering data gathered by the "Mobile: Think out of the Box" report elaborated by Digital Innovation Observatory of Politecnico di Milano²¹. Indeed, according to the report's findings:

- More than 25 million italian users navigate online from their smartphones on a regular monthly basis, whereas desktop users are dropping;
- More than 60% of time spent by consumers online comes from smartphones;
- Apps account for almost 90% of time spent online on Smartphones, with those of Google and Facebook leading the group, seizing about the half of total time spent;
- According to 50% of Mobile Surfers, such device has already superseded Pcs, where according to 38% of them the two devices assume the same importance.

²¹ https://www.osservatori.net/it_it

Besides capturing more and more time and traffic, Mobile is also assuming a crucial role in purchasing processes of users: about 80% of Mobile Surfers, indeed, uses Smartphones in order to make purchasing decisions and to connect with preferred brands.

In particular, one user out of three regularly purchases through the Mobile channel, leading to a significant growth of italian eCommerce market too.

1.4 Mobile devices in customer journey

Mobile marketing lies within a larger set of activities that are generally named Mobile Marketing & Service, which includes practices able to explain in detail how mobile devices can be placed and used in the different phases of the lifecycle of interaction between consumers and brands.

In particular, we can subdivide such phases in the following categories:

• Mobile Advertising: it consists in the communication performed by companies not only for getting to know products and services, but companies themselves by conveying messages and ads through mobile devices.

The main objectives of a Mobile Advertising strategy are several, which can be summarized as follows:

- 1. Creating awareness towards products;
- 2. Providing information about certain products or services;
- 3. Building, renewing and developing brand's image;
- 4. Stimulating curiosity, generating requests for information and contacts;
- 5. Stimulating needs and desires within consumers, trying to push them towards the purchase.

Mobile advertising will represent the focus of the next chapter, when data about the dimension of the market and the peculiarities of mobile devices, together with analysis of principal formats used to convey ads on mobile devices will be provided.

• Mobile Promotion & Loyalty: it encompasses the set of activities whose aim is to stimulate consumers in order to increase the frequency of purchases and to create a behavioural loyalty. Performing mobile promotion activities means offering consumers via mobile at any time some advantages which can come in different forms, whether price-cuts, quantity discounts, rewards, presents or services for free. Main tools in this sense are:

- Leaflets: digital leaflets are more and more adopted by brands as they allow to get visibility and to communicate offers and discounts in a strong cost-effective way (no need for printing, stocking and distributing physical leaflets); moreover they result in being more effective, since they are made available only to potentially interested customers;
- 2. Mobile Couponing: the promotion of discounts and coupons through smartphones has taken more and more place, with many companies shifting from paper-based coupons to digital ones. A research from CodeBroker demonstrates this statement and clears the fact that refunds rates of digital coupons are higher than those of paper ones. Since 2012, the number of smartphone users who downloads coupons increased by 66% and keeps growing as years pass by.

According to a Juniper report, 1,6 billion of digital coupons are ready to be distributed by 2020, showing that companies are more and more involved in proximity marketing, since promotions based on localisation proved to yield high refunds rate, meaning increase in profits for companies²².

²² https://www.nearit.com/it/vantaggi-mobile-couponing/

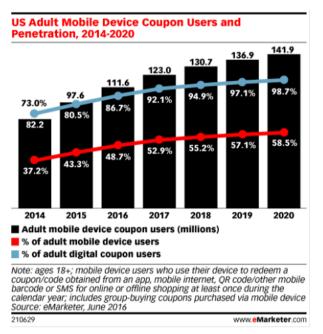


Figure 10- US mobile cuopon users

Most of the customers, indeed, tend to redeem their mobile coupons within the store itself, during the purchase: this easiness in coupons'use leads to the shift towards digital coupons, which are not conceived as an opportunity for customers only, but for brands too; available opportunities include gathering information about customers, reduction in printing and distribution costs, reduction of fraud risk, real-time monitoring of the activity and the possibility to offer targeted promotions rather than generic and unfocused ones.

Other Mobile Promotion tools include²³:

- 1. **Contests and collection of points:** in this category lie all the activities aimed at gathering data from customers in order to enlarge proprietary databases and to create loyalty towards the brand;
- 2. **Dematerialization of loyalty programs:** most of the Mobile Assets developed by retailers allow to digitalize loyalty cards and the access to the prize catalogue, thus enabling also the sending of personalized promotions related to loyalty programs;
- 3. **Gamification and engagement:** activities that reward the customer for performing virtuous actions towards the brand, not necessarily related to the entity of purchases.

²³ From "Mobile Advertising: analisi delle opportunità offerte dalla targettizzazione localizzata e alcuni casi di studio", work of thesis by Federico Colombo and Claudio Conti

- **Mobile Service:** it encompasses all the activities aimed at creating and maintaining relationships with potential customers, including the pre-sale support, the phases of mobile purchasing and post-sale communications:
 - 1. *Pre-sale services:* activities enabling companies to activate relationships with customers, supporting them at the same time during the purchasing process, by offering them value-added information. Since more and more Mobile Surfers use mobile devices when scouting in search for information related to certain products or services, most of the companies have nowadays developed mobile assets, both m-site and proprietary apps, in order to provide the needed support to customers who search for information about companies and/or their products.

Mobile devices, thanks to their hardware features and their peculiarities, provide space for further opportunities as regards customer engagement logics. It is possible, among the others:

- to acquire information about potential customers and to convey customized offers;
- to study users'behaviors within stores in order to collect KPIs related to the purchasing funnel, such as mean visit frequency and mean time of stay;
- to undertake push marketing actions within the point of sale;
- to increase service level thanks to a deeper knowledge about customers who are about to enter the store;
- > to create direct interactions between physical and online store;
- to develop loyalty activities in which the customer is required to perform actions such as sharing of contents on social media, obtaining rewards in turn;
- to integrate CRM systems with information coming from mobile activities.
- 2. *Selection, purchasing and payment:* it encompasses services supporting the purchasing phase which enable bookings, transactions and

payments. It is possible to distinguish between two principal streams in this sense:

- Mobile Commerce: it includes transaction services, where orders emissions and bookings take place. At the moment being, this channel is both used for "time-based" sales, meaning the ones in which the actual instant of purchasing is deemed important, and for sales whose conclusion do not depend on the specific moment in which they are performed. Typical objectives of mcommerce include impulse-purchase (up-selling, cross-selling) and the availability of a further channel, easy and fast, for purchasing goods;
- Mobile Payment: all the solutions enabling the payment after purchases through mobile devices, representing a further channel in this sense. In the italian context, 2016 was the year in which mobile remote payments reached 600 million euro, with a 61% growth with respect to the previous year: if we sum up contactless-technology payments too, we reach the relevant amount of 3,9 billion euro regarding the overall mobile payment ecosystem. In this sense, for instance, payments related to transportation services like bus tickets, taxi services and car/bike sharing have doubled, reaching 90 million euro, representing an industry that can lead to a growth of the phenomenon over years. Indeed, estimations indicate that at global level the frequency of utilisation of mobile devices for those purposes will increase to a point where 2019 will see a doubling of transactions through mobile remote payment. Furthermore, the industry aims at enhancing services related to the Mobile Proximity Payment, meaning the possibility to use smartphones as POS, with both telephones producers (Apple, Huawei, Samsung) and OS providers (Android and Microsoft) confirming the will to enter in this new business stream.

Moreover, there are new trends and scenarios which possibly will lead to a further development of the industry: mobile wallet, for instance, whose concept consists in the fact that smartphones can enrich the purchase experience of users in a point of sale by integrating payment with other services; or Geo-localisation, which can help in understanding who is the individual within the store. In 2016 Google launched a service called "Payments hands free" which thanks to the localisation allowed to pay without even extracting the phone from the pocket. Another interesting experiment was undertaken by Amazon with Amazon Go, a physical store in which payments take place through the Amazon Account of users with no need for cashes and queues, using the smartphone for identifying persons entering the store.

Biometrics too, represents a new interesting field: the activation of payments can be enabled by iris reading, fingerprint reading or facial recognition, and smartphones can be an effective recognition tool. In 2016 MasterCard experimented the Selfie Payment with facial traits reading through smartphone's camera²⁴.

3. *Post-sale:* activities about support, assistance and communication headed to already known customers; the aim is to build a sustainable and consistent relationship after the purchase. Whenever a product is proposed on retail market, brands are exposed to risks related to the bad management of customer care and post-sale services. Being evident and reachable by customers allows to resolve such problems. Moreover, the usage of Mobile in the post-sale phase allows to punctually evaluate the return on investment since it impacts on real benefits of cost savings, together with intangible benefits related to brand image.

²⁴ http://www.businesspeople.it/Business/Economia/Mobile-payment-Italia-il-quadro-103732

Chapter 2

Mobile Advertising

The second chapter presents Mobile Advertising by defining what it is, the unique features smartphones have and the overall dimension of the industry; from there, a classification of mobile advertising formats is given, together with a description of the Coalition of Better Ads, thanks to the link it has with banners and the so-called banner blindness affecting more and more users.

2.1 What is Mobile Advertising

Mobile advertising can be considered to as a component of the bigger item which has been defined in Chapter 1 as Mobile Marketing. It can be basically thought in terms of a method of advertising that involves mobile devices such as Smartphones and Tablets. It can take place as text ads via SMS, or banner advertisements that appear embedded in mobile websites, in downloaded apps or in mobile games²⁵.

Mobile Advertising campaigns can aim to several objectives, among which we can find:

- Creating awareness about certain products or services;
- Spreading information about certain products or brands;
- Building and strengthening brands' image and reputation;
- Stimulating interest, curiosity and engagement that can lead to request for information;
- Spurring needs and desires which can be latent in customer's consciousness, making him more likely to buy.

Mobile devices themselves possess unique characteristics that differentiate this channel from others and should be considered by marketers when planning advertising campaigns. Here some of the most important ones for marketers are listed²⁶:

²⁵ http://www.investopedia.com/terms/m/mobile-advertising.asp

²⁶ https://www.orteccommunications.com/content-marketing-unique-characteristics-mobile-2-2/

- Mobility. People simply carry their phones everywhere they go, all the time; there are no other forms of media that can be accessed by consumers in so many different places. Of course the condition that allows the mobile usage for accessing the Internet and being addressed by marketers is a stable mobile network which provides with Internet access;
- Real-time communication. Mobile devices provide ways to engage with customers and employees in real-time;
- Location-based content marketing. It means that messages and communications can be sent to consumers that relate specifically to where they are, or where they are going;
- Personalization. Messages can be conveyed based on consumers' interests, needs and preferences, since mobile devices are strictly personal and contain information and contents linked to their owners. It is possible then to address specific targets with ad hoc campaigns, based on socio-demographic data that identify each single user;
- Consumer-controlled interactivity. Consumers expect brands to be more open to suggestions, responsive and willing to solve problems. With mobile, messages can be two-way, co-created and co-experienced.

Companies are more and more involved in this advertising channel and they are dedicating growing investments related to this topic. As we can infer from Mobile Advertising Market Report by Allied Market Research²⁷, at global level Mobile Advertising will reach a value of beyond 243 billion dollars by 2022, with a mean annual percentual growth of 15,8% starting from 2016. This would represent a great expansion of Mobile ads market, given that the same article states that in 2015 the dimension of the market was almost 70 billion dollars worth.

At a global level, moreover, mobile ad spending is expected to grow \$27 billion, or 34 percent, to \$107 billion in 2017²⁸, and in this sense mobile is driving most of the spending growth in advertising, since it is expected that spending in digital non-mobile (desktop) will drop \$2,9 billion, 3 percent, to \$96 billion; offline advertising is kind of static, since even if the forecast indicates that investments in television, cinema and radio will slightly grow

²⁷ https://www.alliedmarketresearch.com/mobile-advertising-market

²⁸ https://www.recode.net/2017/9/14/16294450/mobile-ad-spending-growth-worldwide

(namely by \$0,73 billion, \$0,35 billion and \$0,34 billion) investments in magazines and newspaper will consistently drop (by -\$2,28 billion and -\$4,31 billion namely).

To give an idea of how mobile is more and more important in adv market, by 2019 it will account for 62,5% of internet expenditure and 26,4% of overall advertising expenditure, thus overcoming all the traditional media, except television, put together.

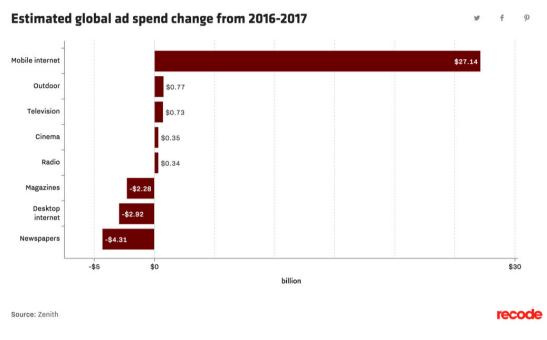


Figure 11- Estimated global ad spend change 2016-2017

If one breaks down the aggregate data to single countries, it is possible to underline the fact that the market is dominated by few nations, lead by US, which account for 40% of all the worldwide expenditure and will continue in this direction in the years to come, even if some regions, like Latin American countries, are expected to grow at a fast pace and have already started in 2015 and 2016. In the top 10 countries ranked by expected spending growth, indeed, 5 out of 10 are Latin American nations, namely Argentina, Peru, Brazil, Colombia and Chile. However, it is worth to notice how US and China more and more have a dimension that is far from any other country in the world and the following years will simply confirm their leadership. The following charts list the worldwide spending by country and the share, again by country²⁹. Data about Italy are highlighted in blue.

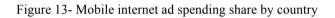
²⁹ Interpretation of eMarketer "Worldwide ad spending" report, October 2016

	2015	2016	2017	2018	2019	2020
US	\$31,420	\$45,659	\$57,147	\$68,640	\$77,607	\$86,564
China*	\$16,902	\$27,888	\$37,928	\$50,445	\$61,038	\$70,804
UK**	\$5,526	\$8,012	\$10,095	\$12,316	\$14,163	\$15,721
lapan	\$3,437	\$4,571	\$5,942	\$7,428	\$8,319	\$9,317
Germany	\$1,751	\$2,562	\$3,510	\$4,388	\$4,826	\$5,213
Australia	\$1,496	\$2,423	\$3,150	\$3,969	\$4,564	\$4,883
South Korea	\$1,489	\$1,936	\$2,323	\$2,741	\$3,124	\$3,437
Canada	\$1,159	\$1,801	\$2,344	\$2,955	\$3,266	\$3,528
Brazil	\$432	\$929	\$1,496	\$2,334	\$2,918	\$3,531
France	\$597	\$866	\$1,212	\$1,648	\$1,896	\$2,123
Netherlands	\$589	\$825	\$1,072	\$1,340	\$1,495	\$1,622
Mexico	\$466	\$699	\$909	\$1,167	\$1,447	\$1,736
Italy	\$463	\$648	\$875	\$1,137	\$1,330	\$1,496
Sweden	\$425	\$625	\$856	\$1,061	\$1,178	\$1,284
Russia	\$284	\$534	\$801	\$1,041	\$1,332	\$1,679
Norway	\$381	\$515	\$659	\$804	\$904	\$994
Denmark	\$356	\$480	\$600	\$720	\$800	\$864
Spain	\$263	\$474	\$688	\$894	\$1,028	\$1,146
New Zealand	\$147	\$265	\$372	\$483	\$565	\$605
India	\$124	\$261	\$508	\$864	\$1,209	\$1,572
Argentina	\$74	\$200	\$421	\$745	\$1,058	\$1,375
Finland	\$128	\$166	\$208	\$239	\$263	\$284
Thailand	\$61	\$112	\$174	\$258	\$322	\$354
Indonesia	\$41	\$102	\$184	\$294	\$376	\$451
Chile	\$16	\$31	\$53	\$84	\$120	\$148
Colombia	\$14	\$27	\$49	\$78	\$110	\$137
Peru	\$5	\$11	\$22	\$38	\$61	\$85
I to all the side of the state	\$71,753	\$108,878	\$143.541	\$184.906	\$217,421	\$247.356

Mobile Internet Ad Spending Worldwide, by Country,

	2015	2016	2017	2018	2019	2020
JS	43.8%	41.9%	39.8%	37.1%	35.7%	35.0%
China*	23.6%	25.6%	26.4%	27.3%	28.1%	28.6%
JK**	7.7%	7.4%	7.0%	6.7%	6.5%	6.4%
lapan	4.8%	4.2%	4.1%	4.0%	3.8%	3.8%
Germany	2.4%	2.4%	2.4%	2.4%	2.2%	2.1%
Australia	2.1%	2.2%	2.2%	2.1%	2.1%	2.0%
South Korea	2.1%	1.8%	1.6%	1.5%	1.4%	1.4%
Canada	1.6%	1.7%	1.6%	1.6%	1.5%	1.4%
Brazil	0.6%	0.9%	1.0%	1.3%	1.3%	1.4%
France	0.8%	0.8%	0.8%	0.9%	0.9%	0.9%
Netherlands	0.8%	0.8%	0.7%	0.7%	0.7%	0.7%
Mexico	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%
taly	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
sweden	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%
Norway	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%
Denmark	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%
Russia	0.4%	0.5%	0.6%	0.6%	0.6%	0.7%
Spain	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%
ndia	0.2%	0.2%	0.4%	0.5%	0.6%	0.6%
New Zealand	0.2%	0.2%	0.3%	0.3%	0.3%	0.2%
Finland	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
Argentina	0.1%	0.2%	0.3%	0.4%	0.5%	0.6%
ndonesia	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%
Thailand	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Chile	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
Colombia	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
Peru	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Figure12- Mobile internet ad spending



The last chart shows the mobile ad spending growth by country from which emerges the Latin American market growth which will take place (red marks signal them).

	2015	2016	2017	2018	2019	2020
Argentina	255.0%	170.0%	110.0%	77.0%	42.0%	30.0%
ndonesia	200.0%	150.0%	80.0%	60.0%	28.0%	20.0%
Peru	140.0%	120.0%	100.0%	70.0%	60.0%	40.0%
Brazil	125.0%	115.0%	61.0%	56.0%	25.0%	21.0%
ndia	125.0%	110.0%	95.0%	70.0%	40.0%	30.0%
Colombia	120.0%	95.0%	80.0%	60.0%	40.0%	25.0%
chile	120.0%	90.0%	70.0%	60.0%	42.0%	23.0%
Russia	130.0%	88.0%	50.0%	30.0%	28.0%	26.0%
Fhailand	150.0%	85.0%	55.0%	48.0%	25.0%	10.0%
New Zealand	165.0%	80.0%	40.0%	30.0%	17.0%	7.0%
Spain	90.0%	80.0%	45.0%	30.0%	15.0%	11.5%
China*	120.0%	65.0%	36.0%	33.0%	21.0%	16.0%
Australia	88.0%	62.0%	30.0%	26.0%	15.0%	7.0%
Canada	65.8%	55.4%	30.1%	26.1%	10.5%	8.0%
Mexico	122.4%	50.0%	30.0%	28.4%	24.0%	20.0%
Sweden	70.0%	47.0%	37.0%	24.0%	11.0%	9.0%
Germany	60.0%	46.3%	37.0%	25.0%	10.0%	8.0%
JS	66.1%	45.3%	25.2%	20.1%	13.1%	11.5%
France	60.0%	45.0%	40.0%	36.0%	15.0%	12.0%
JK**	60.0%	45.0%	26.0%	22.0%	15.0%	11.0%
taly	50.0%	40.0%	35.0%	30.0%	17.0%	12.5%
Netherlands	50.0%	40.0%	30.0%	25.0%	11.5%	8.5%
Norway	65.0%	35.0%	28.0%	22.0%	12.5%	10.0%
Denmark	55.0%	35.0%	25.0%	20.0%	11.0%	8.0%
lapan	40.0%	33.0%	30.0%	25.0%	12.0%	12.0%
South Korea	60.0%	30.0%	20.0%	18.0%	14.0%	10.0%
Finland	50.0%	30.0%	25.0%	15.0%	10.0%	8.0%
Norldwide***	76.6%	51.7%	31.8%	28.8%	17.6%	13.8%

Figure 14- Mobile internet ad spending growth worldwide by country

2.2 Benefits of Mobile Advertising

As showed in the previous pages, Mobile marketing is becoming more and more widespread among companies and is really pushing investments like no other media.

But which are the actual advantages of the mobile channel that other means lack?

Several scholars agree on the fact that mobile advertising can lead both to tangible and intangible effect for companies who invest in it, meaning namely the effects that directly have an impact either on the revenues or on costs structure and all the effects that cannot be directly measured and quantified but in some way imply larger revenues streams or reduced costs over time.

Benefits on which literature agrees on include the following ones^{30, 31, 32}:

- **Cost efficiency:** mobile advertising costs a fraction of what television and radio ad cost, meaning that you can reach more people for less money. The implication is that it is possible to try out mobile ads for effectiveness before moving ads to more expensive mediums;
- Accessibility: Most people who use mobile phones keep them handy throughout the day. This means that it is possible to reach users wherever they are instead of having to wait until they log on the internet;
- Collect relevant and accurate customer data: mobile marketing is an effective way to acquire and maintain customer data, since databases based on phone numbers are more effective as most of the people tend to keep their phone numbers for a longer period of time compared to their e-mail addresses;
- **Customer retention:** since users are very attached to their smartphones, mobile marketing can be perceived as more "familiar"; if two way communication is established, loyal customers can engage their favourite brands to build strong relationships with them;
- **Immediate effect:** most marketing campaigns need time for results while mobile marketing yields immediate results, since most people not only their phone with them but tend to read messages as they receive them;

³⁰ https://www.mmaglobal.co.uk/what-are-the-benefits-of-mobile-marketing.html;

³¹ https://corp.wishpond.com/mobile-marketing-resources/what-are-the-benefits-of-using-mobile-marketing/;

³² http://smallbusiness.chron.com/advantages-mobile-advertising-55314.html

- New customers acquisition: of course, one of the principal purposes is the acquisition of new customers; we can split it in two categories:
 - 1. Lead generation: activity of generation of new prospects that can be interested in specific products or promotions of the company;
 - 2. Conversion: activity aimed at turning prospects into actual customers.

Besides those, which are at a more "operational level", there are intangible effects, which are related to strengthening the brand image in consumers' minds. Here some are listed:

• Increase in brand awareness and reputation: includes all the activities performed by brands in order to attach in customers'mind not only company's product, but the brand itself.

Values and associations related to the specific brand are thus built;

- **Customer experience:** the set of activities aimed at creating a stronger relationship and interaction between user and brands:
 - 1. Engagement: creation of an active and participative relationship with consumers, by putting emphasis on peculiar aspects of the specific company in order to favour the "word-of-mouth" among users;
 - 2. Service level: activities targeted at managing and improving the relationship with customers through value-added services and customization of certain sides of such relationship.

2.3 Mobile advertising formats

2.3.1 Classification

There is not a unique classification when comes to advertising formats, but it is possible to list the main ones³³:

- **Classification based on ownership.** It divides different formats according to ownership relations, which eventually determine cash outflows from the company for using them:
 - Earned media: earned media is essentially online word of mouth, represented by tendencies, mentions, shares, reposts, views or content picked up by 3rd parties.

³³ https://www.titangrowth.com/newsarticles/trifecta.html

They are basically the vehicle that help people get to owned media (ex. company's website) and usually the most effective driving force of earned media is a combined result of strong organic rankings on the search engines and content distributed by the brand. Rankings on the first page of search engines, indeed, place a company's owned media in a position to receive higher engagement and shares; at the same time, when it comes to brand content, blogs, videos, press releases, webinars or e-books are all contents that have to be worthwhile in order to receive the valuable earned media;

• **Owned media:** is any web property that a brand controls and is unique to the brand. Examples of owned media include websites, but also blog sites and social media channels belong to this category, besides creation of branded apps and utilisation of mobile direct advertising exploiting databases owned by the company;

• Paid media: is the traditional way to promote content whose typical purpose is to drive earned media and direct traffic to owned media properties; includes the purchase of databases for direct mobile marketing purpose, as well as advertising spaces on mobile sites or keywords on search engines. Another way to gain more exposure is to pay influencers to tweet or share a brand's content, impacting the reach and recognition a product or a company receives.

Qr codes stand outside the standard classification, since is physically located upon real items (cans, magazines...) but at the same time aims at bringing the consumers to mobile formats. In this sense, can be a powerful mean for integrating mobile campaigns with traditional offline media.

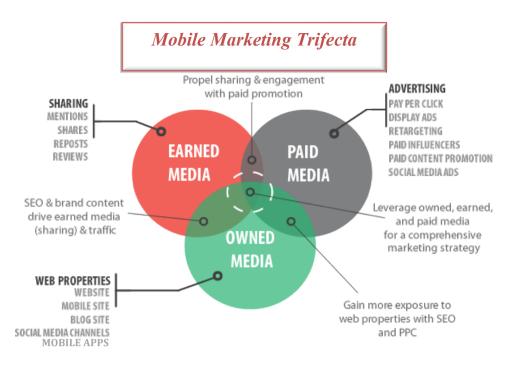


Figure 15- Earned, owned and paid media classification

- Classification based on the solicitation modality. We can distinguish between:
 - **Push:** the initiative starts from the company, which directly addressed the consumer;
 - Pull: the consumer himself activates the initiative.

Besides these main classification methods, we can cluster mobile formats depending on technological platform supporting the marketing activity (such as messaging, mobile browser, mobile applications and proximity networks) or based on the communicative format, where traditionally when it comes to mobile is subdivided in:

- Direct modality, based on a direct interaction with users;
- Display modality, based on the access and visualization of contents performed by users.

2.3.2 Format types

This section aims at describing which are the different options available in terms of format on mobile devices. A general overview will be provided here, but some of the formats shortly listed here will be studied in the following chapters.

The first distinction can be represented by the following ones:

• Direct advertising

- Keyword advertising
- Display advertising

Each type relies on a different mechanism and logic; for this reason, they have to be understood deeply by brands which want to promote themselves and by publishers who develop a mobile offer.

2.3.2.1 Mobile direct advertising

Direct advertising refers to the set of activities aimed at building an interaction with a specific segment of potential or actual customers. It is basically a marketing activity undertaken without relying on intermediaries³⁴.

Traditionally it was declined into different strategies:

- 1. Direct mail: sending mails to a specific target containing advertising content conveniently targeted;
- 2. E-mail marketing: a web marketing tool where mails and newsletters are sent and typically include a call to action;
- Telemarketing: it is based on a telephonic interview, with the purpose of obtaining specific responses about a company's proposal (outbound) and gathering information (inbound);
- 4. Multimedia direct messages: a recent technique which exploits the socalled new media for promotional and commercial communications.

When it comes to mobile, of course, the typical option is represented by sending SMS and MMS to users, trying to rely on the peculiarities of mobile, such as customization, immediate visualization and possibly advertising content based on geolocalization.

Besides SMS and MMS, the Direct Email Marketing (DEM) is among the most used digital marketing tools, since is a well-fitting strategy for reaching consumers, regardless from the company and the industry in which operates.

³⁴ https://www.digital-coach.it/blog/case-histories/direct-marketing/

2.3.2.2 Keyword advertising

Keyword advertising refers to the possibility of purchasing visibility possibilities inside search engines (sponsored links or boxes) for which a company pays depending on the number of accesses on its website due to such visibility. This methodology allows to reach in few time lots of users who surf on the internet.

It is interesting the fact that one has to pay only when a user, by clicking on sponsored ads, enters the website; the company that is promoting itself doesn't have to pay for the visualizations (impressions) which are totally free: thus one is confident about the result of the campaign with the chosen budget. This mechanism is named Pay per Click advertising

(PPC), referring to the fact that there are no fixed costs and all the advertising expenses depend on actions done by users which click on the ads³⁵.

The most recognized players who offer the Keyword advertising service are Google with its Google adWords and Yahoo! Search Marketing. The first one manages campaigns on Google and affiliates, while the latter publishes ads on Yahoo and Msn³⁶.

2.3.2.3 Mobile display advertising

Display advertising is an expositive web advertising format. It relies on proper advertising spaces made available by publishers and websites owners for the placement and exposition of formats and creativity³⁷.

Banners, reference points as display advertising formats, are delivered by an Ad Server in certain web pages in order to catch users' attention and push them to interact with the ad. There are several types of display advertising tools, besides banners, such as Rich Media, Expanding Banners, In-stream Video ads, Overlay ads, Interstitial ads and others that will be shortly described here.

In short, it differentiates from the standard Pay Per Click campaigns because of the graphic component, together with the fact that objectives of display advertising campaigns can be several besides conversion of users: there is a relevant component of such campaigns which are aimed at creating awareness towards the brand rather than being effective from the

³⁵ http://www.areanordcommerciale.com/SEM/cos-e-la-keyword-advertising-e-come-funziona.html

³⁶ http://www.e-leva.it/index.php/keyword-advertising/

³⁷ http://www.glossariomarketing.it/significato/display-advertising/

conversions standpoint. If this is the case, it often occurs that advertisers have to pay per thousands impressions delivered to users (CPM), since an impression already contains the wanted component of visibility; however, there are campaigns which are actually paid with a PPC logic too: in this sense, possibilities are several.

If one goes beyond in comparing keyword and display advertising, it comes to mind that usually ads which are running on Google and affiliates with a keyword strategy are boosted by the fact that the search engine doesn't show the ads in a casual way, but based on the amount of data related to users it owns, shows ads that are strictly related to the searches undertaken by the user; in this way, it allows to minimize the investment and maximize the return, since it produces leads which are strongly interested in the product or service promoted by the ads.

However, it is also worth noting that banners and all the other means at disposal of display advertising are nowadays enriched by a great variety of data allowing them to target users in a more precise way too. Data can be, for instance, geo-local or behavioural, and resulting banners paired with the former will target users which are in specific locations, either near to a certain store or walking in a certain determined geographical area, while paired with the latter ones will appear to people based on their online behaviour, meaning the pages visited in the session, products already seen on a e-Commerce platform, and so on³⁸.

In a mobile environment, moreover, display advertising relies on another interesting plus, which is the interaction degree offered by the device: some ads include the possibility to touch, tilt and shake the phone, and this opens up possibilities in terms of creative ideas that are not possible with other media.

Display advertising ads on mobile can be further delivered in two ways: in mobile-web environment and in-app. Of course, they differ because they tend to intercept users in different phases of their mobile experience, resulting in different behavioural patterns and even different times during the day in which one component or the other prevails. There are some pros and cons of each approach, some of them can be listed as follows³⁹:

- In-app advertising pros:
 - Audience. Consumers spend most of their mobile device time on apps. Indeed, mobile apps account for nearly 86% of time spent using smartphones. For instance, an average adult in U.S spends 2 hours and

³⁸ http://www.semfly.it/come-funziona-il-display-advertising/

³⁹ https://www.clickz.com/in-app-advertising-vs-mobile-web-advertising-which-is-the-better-investment/112937/

25 minutes a day using mobile apps; this massive presence of audience in the app environment appears to be a safe bet for advertisers;

- 2. Better experience. Publishers of mobile apps, as well as mobile app networks, have designed ad formats that are ideally suited to mobile apps. The consequence is that usually in-app ads are more tolerable to users with respect to mobile-web ones.
- In-app advertising cons:
 - 1. Market concentration. It is true that customers are spending most of their mobile device time in mobile apps, but that time is concentrated in a few top apps, which account for upwards of 80% of all time spent in mobile apps. That means that advertisers likely have to allocate a significant portion of their budget to a handful of dominant companies, in which competition for gaining visibility is high;
 - 2. Scaling issues. Although advertisers can purchase in-app inventory through players like AppNexus or Google, many networks have their own ad formats that advertisers need to prepare creative for; for instance, in order to take advantaged of innovative ad offerings offered by companies like Snapchat, both time and money need to be invested in the creative, which can result being very costly.
- Mobile web advertising pros:
 - More diversity. There are a lot more websites than mobile apps and many large publishers with desirable audience either don't have mobile apps or have far more usage on their mobile websites. Thus, mobile web ads allow to reach further segments of users than in-app ones;
 - 2. Standard formats exist. Unlike in-app ads, advertisers can reach audience on the mobile web using standard formats, such as the ones defined by the Interactive Advertising Bureau (IAB), which include a set of flexible size ads based on aspect ratios, making it much easier for advertisers to create ads that display properly on both desktop and mobile devices.

• Mobile web advertising cons:

- AdBlockers. Use of ad blockers grew by 30% in 2016, and a surge in the use of mobile ad blockers is largely responsible in this sense. For advertisers in mobile web, this can represent a warning signal, since the percentage of mobile ad blocking in US and Europe is low and likely to increase in the next years;
- 2. Ad Fraud. Fraud is one of the biggest problems advertisers face in today's digital ad ecosystem, and the ad fraud risk is widely seen to be higher on the mobile web than it is in-app. The widespread use of programmatic to buy mobile web ad inventory is one of the reasons for this to the level that up to a third of programmatic mobile ad impressions could be fraudulent. That's bound to worry advertisers who are increasingly concerned about ad fraud and brand safety.

Banner

Banners are the most widespread ad formats on web pages, both on desktop and mobile devices.

They can be formally defined as follows⁴⁰:

"A web banner or banner ad is a form of advertising on the World Wide Web delivered by an ad server. This form of online advertising entails embedding an advertisement into a web page. It is intended to attract traffic to a website by linking to the website of the advertiser. In many cases, banners are delivered by a central ad server".

They are basically images, usually placed on top of a web page but also in other empty spaces where the user is more likely to notice them; from a technical standpoint, banners can be made of a GIF/JPEG image, a multimedia application developed in Flash or Java or a JavaScript program. The first kind of classification that can be performed distinguishes between⁴¹:

• Static banners. Consist of a single, fixed image;

⁴⁰ https://blog.bannersnack.com/beginner-guide-banner-ad/

⁴¹ https://www.okpedia.it/tipi_di_banner

• **Dynamic banners.** They are made of multiple images visualized in sequence.

Banners were born together with the first graphic browsers which allowed to visualize webpages in which besides text, also images would appear. Their success was immediate as they were considered effective tools of direct marketing: by clicking on them, indeed, the webpage of the company or the promoted product loads; thus, a user clicking on a banner is a highly motivated potential customer, ready to complete his purchasing funnel. This conception of banners led to attribute great importance the Click-Through metrics, meaning the quantity of users clicking on the desired banner.

In brief, the functions a banner can cover in a marketing strategy can be several:

- Increasing customer traffic towards the advertiser's webpage;
- Selling a product;
- Grabbing the customers' attention;
- Announcing discounts and sales.

Banners can vary a lot in terms of shape and dimension, with the latter measured in pixels. At the moment being, the most widespread types of banners are 300x250 (Medium Rectangle), 336x280 (Large Rectangle), 728x90 (Leaderboard) and 120x600 (Skyscraper), but the actual classification encompasses a lot more declinations of banners; the IAB in defining the standard came to the acknowledgement of three fundamental types of banners, considering both the shape and the dimension⁴²:

- **Rectangles and pop-up:** spaces (or automatically opening windows) of squared shape; dimensions 300x250, 250x250, 240x400, 336,280, 180x150;
- **Banners and buttons:** of rectangular shape, can be either 468x60, 234x60, 88x31, 120x90, 120x60,120x240, 125x125;
- Skyscrapers: vertical banners, dimension 160x600, 120x600.

The main issue with banners, especially on mobile devices, is related to the intrusiveness of the image that can ruin the user experience on the internet: most web browsers, due to this reason, offer Adblocks, which are plug-ins that allow to prevent banners to pop up^{43} .

In this direction goes the recent Coalition for Better Ads, that will be shortly described afterwards.

⁴² http://www.consulenzaserviziweb.it/blog/banner-servono.html/

⁴³ https://blog.artera.it/web-marketing/banner-e-pop-up-pubblicitari

Rich Media Advertising

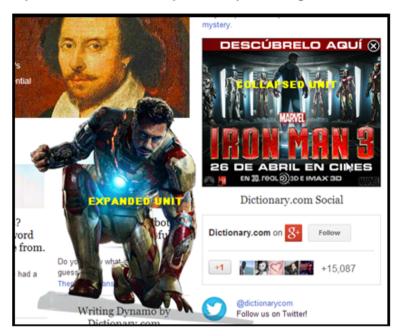
Rich Media refers to the utilisation of various technologies to enhance a user experience and allows a certain degree of interaction with the ad. In short, Rich Media banners are flash creative that employ images, text, sound and video. They include features like inviting users to play a game, navigate through different pages, turn the sound on/off, select an item from a drop down, pause the video and so on.

Many advertisers make now use of rich media for introducing brands, products, services or special offers as it brings more attention of users towards the ad.

It is possible to classify a rich media based on the following categories⁴⁴:

- Expandable: they expand when a user interacts with them; they also come in pre-expandable format, meaning that when the page loads the ads are seen in expanded form;
- In-page: a rich media that has functionality within the same ad (it does not expand) like games, animation, video, forms or brochures; Floating: they appear as a layer on the top of a webpage, floating above the webpage and do not have any base ad like collapsed unit or expandable banner; Transitional/interstitial: these ads play in the main browser window between two pages of a website. When the user clicks on a link, he is taken to the advertising page, instead of the page he requested; Takeover: these ad replace all or part of a publisher's webpage with advertising content, which is often designed as if it's breaking or interacting with webpage's content; Popups: ads that launch a new smaller browser window that appears above the open page, it launches automatically on page load.

⁴⁴ http://www.knowonlineadvertising.com/online-mobile-advertising/what-is-rich-media/



Expandable Ad - 300×250 collapsed unit expands to larger size

Figure 16- Example of an expandable rich media banner

Rich media show a series of benefits over standard banners, as we can infer from this list of key benefits a rich media ad has⁴⁵:

- 1. **High interaction rate:** the enhancement of multimedia elements, like videos and music and other features, potential customers are more likely to interact with the ads. This engagement could provide uplift in brand awareness and message association, even if the risk of being too much intrusive due to an excess of effects is to be considered;
- 2. **More calls to action:** with rich media ads, instead of only being able to link to one landing page, one has different zones to link to a company's social media outlets, contact form or landing page;
- Larger space to provide visuals and messaging: some ads have limited spacing that one has to play with when providing a message. With rich media ads, it is possible to have much more space to display photos, offer more calls to action and engage;

⁴⁵ https://www.mannixmarketing.com/blog/rich-media-ads/

- Video inclusion: since video is becoming a huge marketing medium on the web, rich media are a good way to include them in a campaign, since allow videos to be included in the ad;
- 5. **Increased tracking:** rich media are loved by marketers since it is easy to measure metrics related to users' behaviour, such as completion rate of videos, number of expansion, and so on.

Video advertising

Mobile Video Advertising is one of the most important categories of mobile advertising formats, besides Search and Banner, but most of the scholars are convinced that Videos will more and more gain height and eventually take over other formats.

An interesting trend is indeed the growth in views of videos worldwide, as mobile video views jumped 56% by the end of 2016, up from 46% in 2015 and just 17% in 2013; furthermore, 60% of users aged 18-34 years viewed video on mobile devices weekly, compared to 27% on desktops and 24% on tablets⁴⁶.

This of course led advertisers to focus more on mobile videos, as it is possible to infer from the fact that in 2018 mobile video ad spending is expected to grow 49% to nearly \$18 billion worldwide, while desktop video ad spending is expected to decline 1,5% to \$15 billion⁴⁷.

This relevant trend is due also to the fact that mobile video encompasses a lot of creative formats which are innovative and will possibly paly a relevant role in the future of advertising, but also due to the fact that besides classic videos people are being more and more involved in Live Videos on platforms like Facebook, Snapchat and Periscope, and they represent another source of video advertising for marketers.

In Mobile Video Advertising too, China is more and more a reference market, since videos is fast becoming a leading format. Mobile video ad spending is projected to reach \$4,32 billion in 2017, up from \$1,75 billion in 2015. eMarketer expects mobile video in the country to make up 72% of all video ad spending totalling \$17,37 billion by 2021⁴⁸.

⁴⁶ http://www.mobyaffiliates.com/blog/what-you-need-to-know-about-mobile-video-advertising-in-2017/

⁴⁷ https://www.recode.net/2017/7/17/15981376/mobile-video-consumption-25-percent-in-2018-online-video-peaks

⁴⁸ http://www.mobyaffiliates.com/blog/what-you-need-to-know-about-mobile-video-advertising-in-2017/

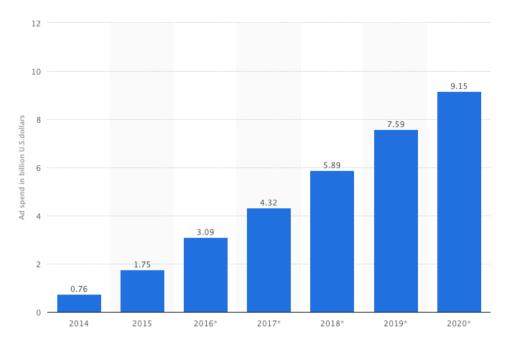


Figure 17- Mobile video ad spending in China 2014-2020

As regards formats, it is possible to subdivide video ads in three main categories, depending on the timing of appearance and the position on the screen⁴⁹:

- 1. **In-stream ads:** they are video ads that play within a video player, whether before (pre-roll), during (mid-roll) or after (post-roll) a piece of video content. Ads typically last between 15-30 seconds. While pre-rolls delay the start of a video by playing before the selected content can be viewed, mid-rolls interrupt the video content just like a typical TV commercial and post-rolls play after the completion of the video, and can be seen as less intrusive. However, viewers have less motivation to watch post-roll as they have already finished watching their requested video content;
- 2. **Out-stream in-read video ads:** they are video units that autoplay on mute in a large format when a user scrolls in an article page. They appear within paragraphs or text or images, shuffle page content as they load, start playing once they're 50% to 100% viewable, and pause when they're almost out of view. Because these ads are unexpected by the viewers who did not initiate the experience, they can be sometimes be seen as disruptive, even if users still have the option to either engage with the ad, close it or scroll away. Outstream videos are a fairly recent format that is still gaining momentum

⁴⁹ https://www.pulpix.com/insights/blog/what-are-different-video-ad-formats/

and can be considered innovative as many developments and experimentations are being undertaken; for this reason, it twill be further analized in the following chapter;

3. **In-banner video ads:** they are videos that are embedded within standard display banner ads on a webpage. The videos, typically autoplay on mute, can expand to a larger area if the user interacts with them, and have no length limitation. This type of ad ha slow viewability compared to in-stream and in-read ad as they are not the primary focus of the page, and they can also result in poor user experience as the movement in the ads distracts the users, and there is usually no way to pause or stop the video content from playing.

As regards metrics, the most widespread ones are basically similar to the ones used for video delivered on desktop devices, such as⁵⁰:

- Start: number of times that a video is started;
- Quartiles (first, third): number of times a video plays namely to 25% and 75%. They apply to in-stream videos only;
- Completion rate: percentage of times the video played to the end;
- Average view time: average time, in seconds, that a video is viewed per view;
- Skip shown: number of times the "skip" button was shown.

Native advertising

Native advertising is a sponsored content blend with the content offered to readers. Differently from traditional advertising, which aims at "distracting" the user from the content in order to communicate the message, Native advertising aims to "soak" the ad into the context. Who plans and makes native campaigns, indeed, doesn't just want to catch the attention, but strives for creating engagement. Native ad's peculiarity is being absolutely not intrusive because the message assumes the same layout of the content, with the aim of capturing users' interest.

IAB defines the term "Native Advertising" as follows⁵¹:

⁵⁰ https://support.google.com/dfp_premium/answer/2759433?hl=en

"Paid ads that are so cohesive with the page content, assimilated into the design, and consistent with the platform behaviour that the viewer simply feels that they belong".

This format is born in reaction to the spread of the so-called "banner blindness", meaning that a person used to surf on the Internet regularly has an augmented capability of spotting ads contained in webpages, and this deeper knowledge of the advertising tool allows him to develop a sort of disregard towards advertising, which results ineffective.

Native ads allow to bypass this problem, by immersing the ad into the content and thus increasing the reach of the message. Many brands are shifting from classic PPC (Pay Per Click) ads to promotion into streams of more prestigious content, where the users'attention reaches the maximum and the engagement is more likely⁵².

In order to obtain good results, native ads should respect precise indications, because it has to be recognizable and should not deceive the audience; it is easy to mistake an ad with an editorial content. There are details which make the difference and help being compliant with the indications from FTC (Federal Trade Commission), which identified inconsistencies between content created without double ends and sponsorization.

Users behave differently with non-commercial content, tend to trust it more and interact in a different way. That's why Native advertising should possess these essential features⁵³:

- 1. Their sponsored nature is clear and evident;
- 2. The editorial line is respected;
- 3. The design is close with the platform;
- 4. The added value native ads can bring to the user experience.

Which are the different ways a native ad can be declined? Here it is possible to define some categories:

- **In-feed:** ads which are placed in feeds of platforms'updates, such as advertising used in Facebook and Twitter. Peculiar characteristic is that they are recognizable with a tag "promoted post", even if the layout is the same of other contents;
- **Paid search:** the focus is on results from queries in search engines. Advertisers pay for being present in the list, in a favoured spot;
- Recommendation widgets: ads used to correlate sponsored contents to a certain article thanks to a widget, which is basically a box in which it is

⁵¹ https://www.iab.com/wp-content/uploads/2015/06/IAB-Native-Advertising-Playbook2.pdf

⁵² http://nativeadvertising.it/cose-la-native-advertising/

⁵³ http://www.mediabuzz.it/native-advertising/

possible to place titles and miniatures in order to catch readers'attention. Performed by players like Taboola, Gravity and Outbrain;

- **Promoted listing:** in this case the publisher inserts the promoted content in a list. This implies benefits, of course, for all projects that in some way create archives, such as Amazon, Foursquare and Etsy;
- **In-ad:** ads that are close to traditional banners, but with a peculiarity that differentiates them, which is the relevancy with the editorial line of the platform, a contextualization with the audience and the content;
- **Customized content:** refers to sponsored posts, contents that are written to be published in other websites. In this case advertisers create an article according to certain rules, and the publisher make some space available for this purpose;
- **In-game:** ads which are placed inside games and typically invite users to watch a video in order to obtain a reward, that can be either a virtual coin or a value added element for the user experience.

Classified Advertising

It consists in a method of advertising which was originally conceived to be delivered on newspapers, but since then has gained momentum in an online environment too, even on mobile. This format offered advertisers cheap, small-type notices sorted under specific categories and gave shoppers an easy way to browse various local offers, usually from private sellers. The jump from print to digital was inevitable and has proven itself to be quite lucrative for digital players. A growing number of sites and companies have started providing specialized classified marketplaces online, especially for niche market products or services. Sometimes classified ads are able to provide better and more targeted search capabilities than general search engines⁵⁴.

According to a McKinsey research, the industry is basically split in two primary online classified ad business models that have evolved. The first one, the horizontal model, offers ads across a wide range of categories, from bicycles to hair styling, and is represented by important websites like Craigslist in US and FINN in Norway.

⁵⁴ https://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/11860-classified-displayadvertisement.html

In the second one, the vertical model, a site focuses on a single category, such as cars with Autoscout24, the European automotive leader in the category.

Findings of the research, which included a survey around 11000 classified ad consumers online in countries like Brazil, France, Germany, India, Italy, Norway, Russia, Spain, Turkey, UK and US, indicate that while both models are evolving, each model's speed of penetration and level of dominance varies by market. Countries like France and Norway, for instance, are moving faster under the horizontal model, with about 75 percent of the consumers surveyed turning first to online advertising when searching for second-hand merchandise across a range of categories. Others, such as Germany and the United Kingdom, feature a strong mix of print and online classifieds, with the vertical model dominating. And finally, in Brazil and the United States, consumers surveyed turned to online ads first when searching for a used car, compared with an average of 43 percent in other developed markets⁵⁵.

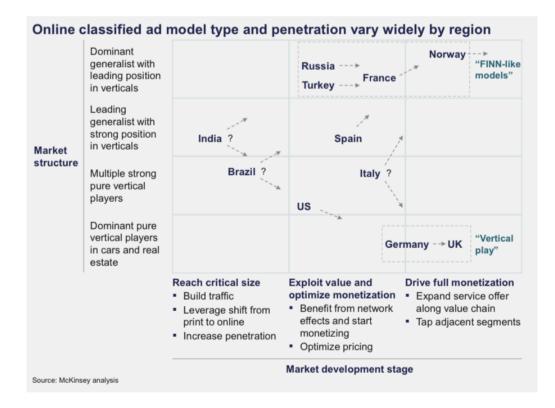


Figure 18- Online classified ad model type and penetration among countries

⁵⁵https://www.mckinsey.com/~/media/McKinsey/Industries/Media%20and%20Entertainment/Our%20Insights /Online%20classified%20ads/Online-classified-ads.ashx

2.3.3 Integration with other means

Among the great opportunities offered by mobile, the possibility of integrating mobile channel with more traditional, offline ones represents one of the most interesting ones: advertisers are more and more conscious about this opportunity, but often it is hard to engage audience in order to encourage the exploitment of synergies between channels, and the effectiveness of a multi-channel approach get lost.

Some of the advantages a fair integration between mobile and offline channels allows can be listed:

- Better usage and effectiveness of already leveraged media;
- Driving a growing number of users, used to stick with traditional media, towards mobile contents;
- Promoting an immediate and targeted action to consumers.

Media that are being leveraged in the last years as means through which the integration with Mobile Advertising is performed include TV (Second Screen Advertising) and the posting of advertising posters (Interactive Out of Home).

TV

The Second Screen phenomenon refers to the practice of watching a TV program and, at the same time, using a smartphone, a tablet or other devices for commenting on social media about what one is watching or for interacting with the TV program⁵⁶.

Possible behaviour of users exposed to this second screen phenomenon varies according to how the second screen is used: when the second screen is used to access to content that is related to the one broadcasted on television, such as commenting the characteristics of products on social media or searching for further information about certain products or services just saw on the television, the resulting attitude is named **media meshing**;

when, instead, smartphones are used during television breaks or for the fruition of unrelated online content, the attitude goes under the **"simultaneous disruptive usage".**

In general, second screening is a peculiar type of multi-screening, the usage of several devices simultaneously. The sequential usage of devices, on the other hand, is called "screen-stacking" or simply "stacking".

⁵⁶ http://blog.terminologiaetc.it/2013/02/18/significato-second-screening/

There are two modes of multi-screening

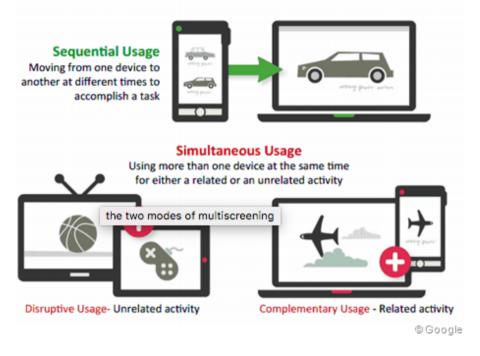


Figure 19- Multi-screening sub-types

A research conducted in 2017 by Millward Brown among 30 countries aimed at understanding the attitudes and behaviours of people about second screening reveals that globally, when consumers are watching television and simultaneously use smartphones/tablets, 62% of them does not search for related content between the two screens. Who does this, instead, declares that smartphones and tablets are used for going more in deep about the issues presented in television⁵⁷.

In Italy, in particular, emerges an interesting trend related to the dimension of the second screening phenomenon among the different generations: as one can easily infer, younger generations are the ones which are more involved with second screening, with 89,3% of Millenials, 86,2% of Z Generation and 87,1% of teens and early teens adopting such practice⁵⁸.

An important trend marketers foresee and are trying to exploit is the synchronization of channels thanks to the interaction of proper technologies, such as ACR (Automatic Content Recognition). It is an identification system that recognizes advertising on TV as it is broadcasted. The real-time advertising detection combines with statistics of advertising and

⁵⁷ http://www.communicanimation.com/pensacreativo/diffusione-second-screen-italia/

⁵⁸ http://www.ninjamarketing.it/2017/05/24/social-tv-second-screen-italia/

tracking platforms. In this way it is possible to sync with TV digital campaigns, for instance by broadcasting simultaneously an advertising campaign on TV and activating one online, based on SEA strategies.

When advertising occurs on both screens, it can be more effective, since if one doesn't pay attention to the TV ad, can be reached by the online ad on the other device. The message promoted will be thus amplified and chances to be memorized will become greater⁵⁹.

Advertising Posters

Integration between mobile and advertising posters takes place thanks to technologies such as QR codes, shortURL and NFC tags which push consumers towards a call to action, thus making the advertising interactive.

Users, once performed the action requested, are sent to dedicated landing pages, which aims at showing more features of products or services promoted.

Posters and mobile devices tend to be more and more integrated thanks to the growing diffusion of Digital Out-of-Home (DOOH) contents, defined as multimedia contents delivered via Internet and displayed on screens placed in cafes, restaurants, fitness centres, stores and public spaces. DOOH systems are replacing traditional paper posters and creating space for the widespread usage of the integration with smartphones. Citizens are more and more exposed to such advertising tools, as the average consumer is exposed to various Digital Out-of-Home Media 14 minutes per week⁶⁰.

2.3.4 Formats vs Intrusiveness: the rise of the Coalition for Better Ads

The issue of intrusiveness of certain typologies of ad formats has assumed more and more importance recently, since they are seen by more and more players as a source of damage for the industry as a whole, because they ruin the user experience and large, intrusive banners are seen as the wrong answer to the "banner-blindness" phenomenon. In this direction 2017 saw the birth of the Coalition for Better Ads, which defines itself this way: "Leading international trade associations and companies involved in online media formed the Coalition for Better Ads to improve consumers' experience with online advertising. The Coalition for Better Ads will leverage consumer insights and cross-industry expertise to

 $^{^{59}\} https://www.landl.it/digitalguide/online-marketing/vendere-online/il-fenomeno-second-screen-nellonline-marketing/$

⁶⁰ http://www.programmatic-rtb.com/il-web-marketing-manager-si-occupera-anche-di-digital-out-of-home/

develop and implement new global standards for online advertising that address consumer expectations."⁶¹

Members of the Coalition belong to all categories within the digital advertising industry, from big publishers like Axel Springer and The Washington Post, to international media agencies such as GroupM and Publicis, to associations like IAB, to networks of advertising investors.

The starting point was a survey made on 25000 users belonging to Northern America and Europe markets; they were asked to point out which advertising formats were least preferred because of their invasiveness, both on PC and on smartphone.

An initial result of the Coalition is a list of the least preferred ad formats to mobile users, and most of them are part of the banner-entity; they are described as follows⁶²:

- **Pop-up ads:** Pop-up ads are a type of interstitial ads that do exactly what they say pop up and block the main content of the page. They appear after content on the page begins to load and are among the most commonly cited annoyances for visitors to a website. Pop-up ads come in many varieties they can take up part of the screen, or the entire screen;
- Prestitial ads: mobile prestitial ads appear on a mobile page before content has loaded, blocking the user from continuing on to the content they have sought out. These pop-ups vary in size from full-screen to part of the screen. They may also appear as a standalone page that prevents users from getting to the main content; Ad density higher than 30%: when ads on a mobile page take up more than 30% of the vertical height of the main content portion of the page, the result is a disruptive ad experience, regardless of whether these ads are text, video, or static images. This includes "sticky" ads and in-line ads. This kind of density makes it very difficult to focus on text content on a mobile device, and can lead to frustrated users; Flashing animated ads: Ads that animate and "flash" with rapidly changing background and colours are highly aggravating for consumers, and serve to create a severe distraction for them as they attempt to read the content on a given page.

Animations that do not "flash" did not fall beneath the initial Better Ads Standard;

⁶¹ https://www.betterads.org/about/

⁶² https://www.betterads.org/standards/

• Auto-playing video ads with sound: Auto-playing video ads with sound automatically play with sound, without any user interaction.

This ad experience is especially disruptive because it catches the reader off guard and often compels them to quickly close the window or tab in order to stop the sound — especially if they are on their mobile device and in a public place, where such noise can be a public nuisance and personal embarrassment.

Ads that require a click to activate sound did not fall beneath the initial Better Ads Standard;

• **Postitial ads with countdown:** Postitial ads with countdown timers appear after the user follows a link. These ads force the user to wait a number of seconds before they can dismiss the ad, or for the ad to close or redirect them to another page.

These ads frustrate users by breaking the flow of content in a manner that can prove distracting — if a user is trying to navigate from one page to another, only to be delayed by this ad, they might abandon the page entirely.

Postitial ads with countdowns that can be dismissed immediately did not fall beneath the initial Better Ads Standard;

- Full Screen scrollover ads: Full-Screen Scrollover ads force a user to scroll through an ad that appears on top of content. These ads take up more than 30% of the page and float on top of the page's main content, obstructing it from view. The result can be disorienting for users, as it obscures the content a consumer is attempting to browse. These are different from similar ads that scroll in-line with the content and more smoothly scroll out of sight;
- Large sticky ads: Large Sticky Ads stick to a side of a mobile page, regardless of a user's efforts to scroll. As the user browses the page, this static, immobile sticky ad takes up more than 30% of the screen's real estate.
- A Large Sticky Ad has an impeding effect by continuing to obstruct a portion of the mobile page view regardless of where the user moves on the page. A Large Sticky Ad's positioning disrupts and obscures a page's main content unavoidably leading to a negative user experience.

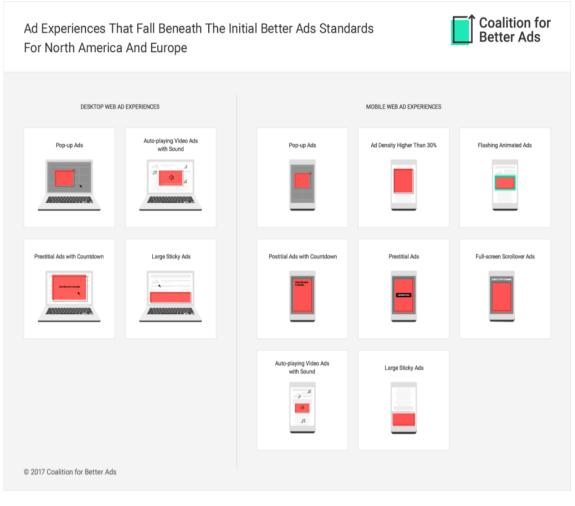


Figure 20- Least preferred ad formats on desktop and mobile

Moreover, starting from 15th of February 2018, Google started to block all the formats deemed intrusive by the finding of the Coalition on its browser Chrome⁶³. The initiative was greatly criticized by many players, since Alphabet- the Holding company owning Google-it's not only the producer of Chrome, the most adopted worldwide browser,

but one of the largest publishers in the world: it controls an important part of the market and can condition commercial choices of smaller dealerships and companies in the industry. Google is convinced that the initiative is the perfect trigger for a more responsible use of advertising, even if the issue is complex and delicate: advertising is still the main revenue stream for most websites, but more and more advertisers concentrate investments on bigger entities which ensure larger audience, the so-called OTT-Over The Top- (primarily Google and Facebook). At the same time, those OTT are subject to an important conflict of interests: they at the same time publish ads on their spaces and behave as intermediaries for the sale of ads themselves on websites through their distribution systems.

⁶³ https://www.ilpost.it/2018/02/15/chrome-blocca-pubblicita/

This condition, together with a decline in the banner effectiveness, led to the proliferation of formats, used by websites for compensating smaller revenues.

From here, the idea that was conceived consists in the fact that, with shared rules defining the allowed formats and an automatic block for the most intrusive ones, the effectiveness of compliant ads will increase, improving at the same time users'experience and leading to a decline in downloads of AdBlockers, which actually cut off each revenues possibility for websites.

Since critics were headed also to the methodology Google would have used to block intrusive ads, the OTT conceived a progressive-steps system, in order to provide flexibility in the early stage of transition. Through the Search Console, a set of tools Google offers to websites, each website owner can verify whether he is respecting the Coalition's standards. If Google notices the presence of ads not anymore allowed, sends a warning to the website's owner, who has 30 days to fix the issue, otherwise Chrome blocks all the ads on the website. Still, the owner has time to intervene, by signalling that the issues were fixed belatedly; after a new check by Google, then, the block is removed.

From a users'standpoint, it means that Chrome will report to each web surfer entering the website that ads are disabled, leaving the possibility to re-include them by users'choice.

Chapter 3

A focus on innovative ads formats

The third chapter is entirely dedicated to the exploration of the innovative ad-formats the industry is pushing towards in order to overcome issues that traditional formats imply: for each one, a description of in what they consists is given, together with an analysis of possible benefits and cons their usage could bring with them; where information allowed it, case studies about the adoption of such formats were provided.

The strong growth in diffusion of mobile devices at global level, of number of users and the acknowledgement that the Online traffic is more and more shifting from desktop towards smartphones has led, as data presented in previous chapters witness, to a greater interest from companies' side towards Mobile Advertising market, which indeed is consistently growing and is expected to be the tool that will gather most of the investments and efforts in the years to come. But still, this means that issues related to a mobile advertising strategy emerge and marketers should consider them, starting for instance from one of the biggest ones, which is the creation of an effective conversion funnel and the choice among the available formats⁶⁴. As it was already mentioned, users are more and more aware of advertising contents in webpages and tend to ignore formats which are not engaging, like static banners, whose effectiveness is indeed fading away; at the same time, one should be aware of the fact that intrusiveness and interruption of user experience due to unrequested ads are issues that have to be taken into account, since organizations like the Coalition for Better Ads are born to regulate this side of the advertising world, too. So, in this context, is crucial to try to orientate towards new innovative formats, which can catch users' attention without resulting intrusive, and that's why new solutions are being created.

In particular, some new formats that are worth to be investigated in the following sections are:

- Oustream Videos;
- Vertical ads;

⁶⁴ http://www.ninjamarketing.it/2017/11/22/mobile-advertising/

- Video 360;
- Push Notifications;
- Audio Advertising;
- Chatbots;
- Ads with Augmented Reality;
- Banner Lockscreen.

3.1 Out-stream video

Out-stream video (also called inRead Video) is a new format that has earned overnight notoriety among big-name publishers and well-known marketers. It is actually quite recent, as two thirds of brand professionals discovered it in the last year.

The best description of the new ad unit comes from the AppNexus team⁶⁵:

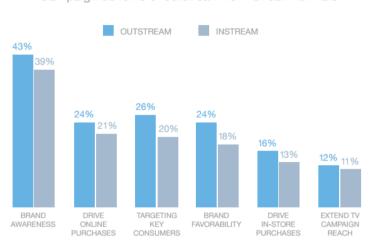
"An 'outstream' video ad unit, also commonly referred to as 'in-read' or 'native video', is a new video advertising unit that autoplays in a large format player whenever a user navigates to it within text content (typically an article), even if the publisher doesn't have their own video content. It's called outstream because the video ad exists outside of online video content – also known as instream video content — where the ad plays either before (pre-roll), during (mid-roll), or after (post-roll) the publisher's video content".

The rest of the definition actually varies depending on who one asks. Google says an outstream ad is typically without sound, like the autoplay silent videos on Facebook; on the other hand Mark Book, VP of digital Studios does not consider to be outstream placements within a feed, rather would consider them pure native in-feed advertising.

It was already highlighted the fact that video ads as a whole are more and more growing, and big publishers like Buzzfeed already generate more than 50% of their ad revenues from online video, but until recently, if one wanted to run a video ad online, had to do so before or during an actual video; this meant publishers without video content could not sell space for video ads, and advertisers were restricted to running campaigns within video players on sites like Youtube. But with oustream, one can publish video ads in all kinds of content, like editorial pieces for example. This implies they usually are published natively, and this less-intrusive nature of the ads, along with their expanded reach makes them far more valuable.

⁶⁵ https://instapage.com/blog/what-is-outstream-video

According to a Teads report⁶⁶, indeed, 37% of brand professionals agree that outstream spending will outpace instream, and, for every objectives listed in the following picture, respondents say that outstream videos offer more benefits that instream.



Campaign benefits of outstream vs. instream formats

Figure 21- Benefits of outstream vs instream videos

As one can infer from the picture, professionals are convinced, in particular, that this outstream format is able to create brand awareness in an easier way than instream video and that outstream videos are able to better reach the right target of audience. While the latter statement can be justified by the fact that, since outstream videos don't need a video player to be broadcasted but they flow into text content, they have more websites at their disposal, meaning a higher reach of users, the former one derives directly from the fact that most of professionals who are planning to expand their digital investment in the next years believe that such format is better optimized for mobile and allows to overcome challenges traditional video ads imply, such as the shorter consumer attention span, the viewability of ads and the smaller screen size.

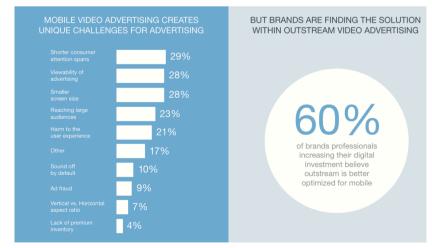


Figure 22- Challenges of mobile video ads that outstream can resolve

66 http://info.teads.tv/outstream-the-new-wave-of-video-advertising

According to eMarketer, in 2017 about \$7,77 billion will be invested in outstream videos only in US, with a 33% increase with respect to 2016; this will make in-read videos account for 13,3% of total investments on digital advertising campaigns⁶⁷.

As regards performance, in order to measure the effectiveness of such formats with respect to traditional ones, important players like Nielsen and Teads performed a joint research with the aim of demonstrating that the format of an online video ad and the context in which it appears impacts on effectiveness metrics. In this particular experiment, Teads worked with Nielsen to measure the effect of exposure to the inRead video ad format versus a skippable pre-roll video format; Nielsen created two mock-up ad environments, each featuring the same consumer electronics video ad, with different display and surrounding content. The main KPIs taken into account for the research's purpose included awareness, recommendation, favourability and purchase intent. The research consisted in respondents who were asked 22 questions rating their perceptions of the ad after engaging with it; the results were quite significant: one third of users shown adverts through the Teads formats said they were likely to purchase the advertised consumer electronics product compared to 20% of those who watched it through skippable pre-roll, an increase of about 50%; the growth was even greater among viewers aged 18-34, where purchase intent increased by 74% compared to skippable pre-roll. Millenials also show a 60% increase in brand recommendation when viewing inRead; moreover, inRead viewers, not depending on the age, were less likely to skip the ad, since it provided a more natural user experience⁶⁸.

Teads is actually the company who invented the outstream video format, and is already introducing new ideas for making outstream more engaging and effective; thanks to this, new creativities based on outstream videos are being developed, one example being the release of inRead 3D, the company's latest video format which leverages depth of field perception to create a 3D effect for any video creative⁶⁹. This showcases that outstream is a format that possibly will be used as base for further innovations in the video advertising field.

⁶⁷ https://www.axelero.it/video-outstream-ads-evoluzione/

 ⁶⁸ http://www.getmemedia.com/ideas/research-inread-outperforms-pre-roll-from-nielsen-research/teads.html
 ⁶⁹ https://www.prnewswire.com/news-releases/teads-expands-video-offering-with-launch-of-inread-3d-300530977.html

But which are the benefits and the negative sides of Outstream videos? Most scholars agree that the formers overcome the latter, and benefits involve both publishers and advertisers; here the main ones are listed^{70, 71}, ⁷²:

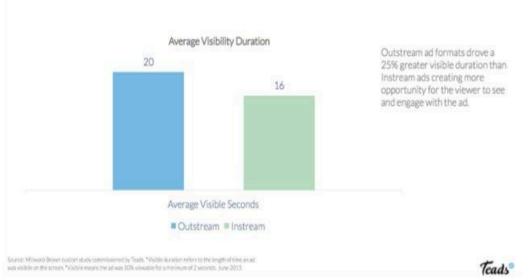
• They can be monetized by all publishers; one doesn't need to host video content on his website to sell video ad placements; it is possible to do so within text or even in the corners of a web page;

• Advertisers can expand their reach far beyond video players, to publishers of editorial content like CNN and Forbes;

• Advertisers can worry less about whether or not their videos are actually being seen by viewers because they're only set to play when they're 100% inview. If the user scrolls away, the ad pauses until that user scrolls back;

• No ad fraud: outstream ad units only launch when the page they're on registers a user action. Those actions are difficult to be faked by bots;

• More time spent viewing outstream: a research commissioned by Teads from Millward Brown Digital⁷³ shows that people view outstream video for 25% longer than instream;



Outstream ads drove a higher visible* duration

Figure 23- Outstream vs instream visible duration

⁷⁰ https://instapage.com/blog/what-is-outstream-video, https://blog.taptica.com/instream-vs-outstream/ and https://www.blog.geoedge.com/single-post/2017/06/20/The-Pros-Cons-of-Outstream-Video-for-Publishers
⁷¹ https://blog.taptica.com/instream-vs-outstream/

⁷² https://www.blog.geoedge.com/single-post/2017/06/20/The-Pros-Cons-of-Outstream-Video-for-Publishers

⁷³ http://iq.videonuze.com/article/research-outstream-video-ads-viewed-longer-and-more-effective-than-instream

• Advertisers only pay when their videos have been viewed for a certain amount of time;

Of course, they carry some risks with them:

- They are susceptible to scammy publisher activity, meaning that untrustworthy publishers can claim to sell outstream video placements, only to drop ads in standard banner inventory;
- If users don't have their sound on, they won't hear the ad, which can render it ineffective;
- Due to confusion about how to best offer them, they are difficult to find in ad marketplaces. As a result, many outstream video campaigns have to be built on as part of a bundle with pre-roll placements and banner units;
- As a fairly new format, KPIs are difficult to track since many platforms lack adequate outstream analytics.

Case study: Mongrel Media

Since no clear examples of successful campaigns based solely on mobile devices are already available, the case studies focus on the successful usage of outstream format in multi-device campaigns: the aim here is to proof the effectiveness of the innovative format, waiting for it to be declined on mobile-only campaigns. An example of successful outstream video campaign was performed in order to promote Mongrel Media, a leading independent film distributor focused on bringing the best of local and world cinema to Canadian audiences.

The objective of the campaign was to generate awareness while targeting within the client's intended audience, trying to boost viewability and to increase completion rate of video ads.

Both an in-stream and an outstream ads were developed and launched on sites with categorically relevant audience. An example of the outstream ad lies in the following picture.

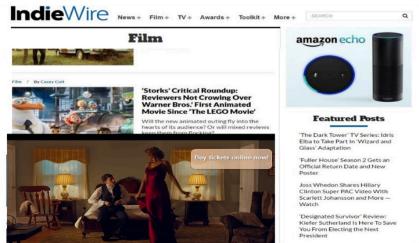


Figure 24- Example of outstream video ad

Results proved to be interesting; outstream viewability performance, indeed, exceeded instream, reaching a relevant result of 82%, while completion rates on in-stream rendered better performance.⁷⁴

Case study: Lacoste

Another example can be found in the campaign made by Lacoste in collaboration with Teads, which aimed at strengthening the brand's visibility and notoriety towards its target. The solution adopted consisted in a video ad campaign available in several languages and countries, displayed in HD using the inRead format on premium publishers like Reuters in UK, El Mundo in Spain and La Stampa in Italy. An ad smartly placed below the fold in the heart of articles, a position where the reader's attention is at its highest. A 100% CPV campaign.

Results were rather satisfying: Lacoste achieved its goals by reaching a maximum audience. Its broadcast via inRead allowed Lacoste to reach over 2,044.414 viewers⁷⁵.



Figure 25- Results of Lacoste's campaign

3.2 Vertical Video

The terminology "vertical video" references any video that is played and formatted for the portrait layout against the classic landscape layout (horizontal). Actually, from the very beginning, video has always been wide. Through the years the recordings have shifted from 4x4 to 16x9, but the essence has stayed unchanged: they were horizontal⁷⁶.

Vertical video only began to take off as smartphones began adding video capabilities, but since they were not built to shoot videos, vertical ones were considered as a mark of an

⁷⁴ http://clearpier.com/2017/03/07/case-study-stream-stream-video-mongrel-media/

⁷⁵ http://docs.teads.tv/transfer/Pres_InRead_Advertisers_EN_final.pdf

⁷⁶ https://www.acuityads.com/blog/2017/08/10/vertical-video/

amateur. But recently, vertical video has made the leap, it shed its stereotypes and is quickly becoming a common format for a wide variety of new video uses, including marketing campaigns.

There are three main motivations for this shift⁷⁷:

- 1. **Content:** any subject that needs to be understood from top to bottom, down to up, or near to far is done a disservice when recorded in a horizontal frame, a bright example is human body;
- Convenience: today's mobile devices are, for the most part, designed to be held vertically; this makes shooting vertical video more natural by comparison, a feeling that is only reinforced by apps like Snapchat that rely on vertical video as the default recording format;
- 3. **Context:** many professional video producers are turning to vertical formats after seeing user experience tests indicate viewers are simply choosing to watch scaled-down horizontal videos while holding their phones upright, rather than bother to shift the phone for the full-screen view.

As a consequence, the industry is reacting too. Besides Snapchat who led the charge, Facebook's recent vertical update consolidated this direction. That's why brands are more and more interested in this format for marketing purposes. The fact that social media are the true engines of this spread of vertical videos can be seen by marketers as an opportunity to think in the "feed" perspective when designing a campaign which includes vertical video.

Some more reasons most scholars think vertical video are the future for advertising include the consideration that people hold their phones vertically 94% of the time, so it's no use to produce content that only 6% of people would view appropriately; furthermore, according to internal data from Snapchat, content filmed vertically has a 9 times higher completion rate that content filmed in traditional landscape mode. Since Snapchat is setting the standard with nearly 3 billion video views daily, it is expected that brands could see similar results with vertical video in other apps too⁷⁸.

A very interesting insight about the effectiveness of vertical videos with respect to horizontal ones comes from the experiment made by Animaker, an Indian creative studio that undertook a research in order to find out whether vertical videos actually overperform traditional ones, especially on social media platforms (in this case Facebook). So they acted as follows: they chose the topic " Men vs. Women" as it is one of the most debated topics

⁷⁷ https://www.panopto.com/blog/breaking-mobile-video-rule-1-shooting-vertical-video/

⁷⁸ http://blog.kiip.me/advertising/5-reasons-your-brand-should-be-buying-into-vertical-video/

worldwide and then developed two videos which were the same in everything from script to design but the format (the former was vertical, the latter horizontal); they also made sure the target for the campaign was the same and the investment (\$200) was equally split between the two formats. The findings proved to be relevant⁷⁹:

 Vertical videos have more reach and at a lesser cost: while the horizontal video managed to reach 103 397 people, the vertical one reached 163.871 people; furthermore, the cost per 1000 impressions for horizontal videos was \$0,85 while for Vertical videos it stood at \$0,52;

Advert name	Delivery 🚯	Reach 🕜	Frequency 🚯	Cost per 1,000 people reached 🚯	Impressions 🔞	CPM (cost per 1,000 impressions) 🕧
Animaker - Vertical Video	Inactive	163,871	1.25	\$0.65	204,434	\$0.52
Animaker - Horizontal Vid	Inactive	103,397	1.16	\$0.99	120,332	\$0.85

Figure 26- Reach and CPM results of the campaign

2. Vertical videos got better post engagement levels: post reactions (in terms of likes and other reactions) scored 338 for Vertical video, which is 28,5% more than the Horizontal video got. Besides this, the Vertical video got 231 shares against 166 of the Horizontal one, being 39% higher;

Advert name 🔹	Delivery 🔞	People taking action 🔞	Post reacti 🔞	Post comm 🔞	Post shares 🔞
Animaker - Vertical Video	Inactive	39,120	338	6	231
Animaker - Horizontal Video	Inactive	27,472	263	3	166

Figure 27- Post reactions and shares of the campaign

3. Video completion rates were almost the same: for the vertical video, the number of people who viewed the whole video dwindled to 7832 from 22,443 which meant a completion rate of 34%. While for horizontal videos, the number who completed the whole video dwindled to 4362 from 14,158 which meant completion rate of 30%. This means that even here, vertical video slightly overperformed its horizontal counterpart;

⁷⁹ https://blog.animaker.com/vertical-video-facebook-ads-case-study/

Advert name	0	Video watches at 25% 🔞	Video watches at 50% 🔞	Video watches at 75% 🚷 🛛 👻	Video watches at 95% 🕧	Video watches at 100% 🔞
Animaker - Vertical Video	1;	22,443	16,938	12,137	9,990	7,832
Animaker - Horizontal Video	1	14,158	10,011	6,960	5,727	4,362

Figure 28- Completion rates of the campaign

4. **Cost effectiveness in terms of time viewed:** 3 second-view refers to the number of people who watched for at least 3 seconds. Thus, the cost per 3-second-view is calculated by dividing the total amount spent by the number of 3-second-views.

As one can argue from the following table, the number cost per 3-second view is same for both videos. However, when it comes to cost per-10 seconds-views, the horizontal video stood at \$0,10, which is 150% more than vertical video, which was \$0,04. This also means that a lot of people dropped off the horizontal video before the ten-seconds mark;

Advert name 👻	Delivery 🕥	Impressions ()	Three-second vi 🔞	Cost per three-sec 🔞	Ten-second vi 🔞	Cost per ten-sec 🗊	Reach 🕦
Animaker - Vertical Video	Inactive	204,434	41,141	\$0.003	29,480	\$0.004	163,871
Animaker - Horizontal Video	Inactive	120,332	29,214	\$0.003	19,306	\$0.01	103,397

Figure 29- Cost per 3-seconds-views and cost per 10 seconds-view for the campaign

The bigger picture that Animaker depicts is clear and concise by quoting their statement:

"Desktops PCs and Laptops are no longer the places people go to for content consumption. With Smartphones becoming more powerful and affordable with each passing year, it doesn't really make sense for people to buy PCs for online content consumption anymore. This also explains the immense drop in the sales of PCs, Laptops and even Tablet devices in the recent years."

And again: "Social media platforms such as Facebook, Twitter and LinkedIn which have understood this have made their applications immensely mobile friendly so that they don't become irrelevant."

The verdict then is the following one: "From the recent post published by VentureBeat, it is clear that 92% of all daily active users on Facebook access the application through their

mobile devices. Brands which are still using Horizontal videos are literally burning their money. And most of the videos which dominate in performance are vertical".

Case study: Audi

An example of campaign based on vertical video is provided by Audi, which empowered by vertical video format developed by Celtra, managed to create an immersive ad experience idea 1 for video content consumption on mobile devices. The objectives of the campaign were several: from presenting video content in a way that is native to mobile consumers, to looking for innovation in creative and aiming at partnering closely with suppliers able to spearhead and deliver creative first, to reaching mobile consumers with a message focused on branding, promoting the brand's values and generating awareness around the Le Mans event⁸⁰. Given the amount of time users hold smartphones in portrait mode and how they are unlike to rotate the device in order to watch an ad, Celtra developed the Short Form Vertical Video, which enabled to transform a TV spot into an attractive mobile video ad served on portrait mode, leveraging the full screen of the device.

Other features of the campaign included intelligently cropped video for important content, auto-play enabled across all environments, text cards used to highlight key messages and full-screen responsive ad design.

Results were encouraging: the Short Form Vertical Video allowed Audi to design a video ad specifically for the mobile environment, able to fully leverage the mobile screen and at the same time rewarding and enjoyable for the user, with a 36% effective video Completion Rate, a result which is 80% higher than Q1 2015 automotive benchmark.



Figure 30- Example of the Audi's vertical video ad

 $^{^{80}\} https://www.celtra.com/insights/case-study/vertical-video-helps-audi-achieve-80-increase-effective-video-completion$

3.3 360 degrees video

360 degrees video (referred to also as VR video) are defined as "video recordings where a view in every direction is recorded at the same time, shot using an omnidirectional camera or a collection of cameras. During playback the viewer has control of the viewing direction like a panorama⁸¹".

Some people simply refer to them as all angle videos. Facebook and Google stand out as the first tech giants who made 360 videos part of their platform before other platforms like Vimeo followed suit.

To better give an idea of the direction companies like Facebook are undertaking, in an interview with Fortune Magazine, Nicola Mendelsohn, Facebook's Vice President of the EMEA region, stated that by 2021 the platform will "probably be all video" and that it'd be more immersive, with 360 feeling "very common"⁸².

360 video advertising is a mainstream use of these videos in which brands put viewers inside an experience with the aim of encouraging them to interact with the content and probably take a particular action thereafter.

As a business, there's every reason to take one step back and think of ways of leveraging these new technologies, especially in marketing. 360 videos hold so much potential as a marketing tool and thus, investing in them is a way to stay ahead of the competition.

What sets these types of videos apart is that the viewer usually feels as though they are right inside the video. It even scores high on the interactive part as the viewer can just drag their finger or a pointer across the device's screen to adjust movement.

But more important than anything else is the engagement levels of these videos. Proof of this, as the Google experiment here described will show, is in the high shareability rate and better click-through rate. On these two, 360 videos score relatively high⁸³.

Of course, some industries could benefit more from this format than others; John Mowat, former BBC documentary filmmaker, found out that 360 videos are especially effective for travel companies, because in this way it is easy to invite potential customers to experience destinations before they book; car manufacturers are also well-positioned to showcase their latest vehicles and take fans along for a ride, giving a real taste of what to expect from new

⁸¹ https://en.wikipedia.org/wiki/360-degree_video

⁸² https://www.talk-business.co.uk/2017/05/25/embrace-360-degree-video-marketing/

⁸³ https://videoremix.io/360-video-advertising/

motors. On the more extreme side, Red Bull Racing pull this off extremely well, allowing viewers to experience life in fast lane.

Other brands had benefits from investing in this new format, in terms of views and shares with respect to a traditional video campaign. Examples include Warner Bros, which for the movie The Conjuring 2 created a 360 video trailer in which one can enter a virtual house with creepy music and horrifying sounds in the background; the video is interactive and the viewer is constantly trying to figure out what is going to happen next. In nine months, it garnered over 8.4 million views and over 27.000 shares⁸⁴.

Another one regards the travel operator Thomson Holidays, which captured the changing in the light and movement of Iceland's aurora borealis in a 360 video in which it was possible to change the view to see different parts of the sky; by pairing the video with a relevant daily hastag and adding a link to their website, Thomson Holidays made it easy interested travellers to book a vacation. The result was that in three months the video gained 438.000 views, 4.600 likes and 1.500 comments.

The Google experiment

Google, in particular, tried to give an answer on whether 360 videos ensure higher viewer metrics in the context of advertising, by partnering with Columbia Sportswear to create a video advertising campaign around two US Olympic skiers enjoying an epic season in Chile. To find it out, they created two similar campaigns using TrueView, Youtube's choice-based ad format. Each campaign featured a 60 seconds spot for Columbia Sportswear; one version was shot and presented in 360 video, and the other was a standard format video ad. Both ads included CTAs in the lower left corner that drove to an extended version, so that it would have been possible to see if the 360 video was better than the standard ad driving viewers to a full-length video.

Metrics considered were the classic ones, like view-through rate and viewer retention, and besides those a new metric for the 360 video ad was introduced, called interaction rate, which measured whether viewers engage with the functionality of 360 videos by dragging the viewfinder on desktop screen or tilting a mobile phone.

Both of the ads remained unlisted throughout the experiment, meaning that the only way to see any of the videos was through Google in-stream campaign or peer-to-peer sharing.

⁸⁴ https://blog.hootsuite.com/creative-uses-of-360-video-by-brands/

The standard version of the ad, together with the extended cut was visually framed around the skiers with aerial and wide-angle shots of their runs and the landscape, while the 360 version planted the audience within the terrain, allowing viewers to explore independently⁸⁵.

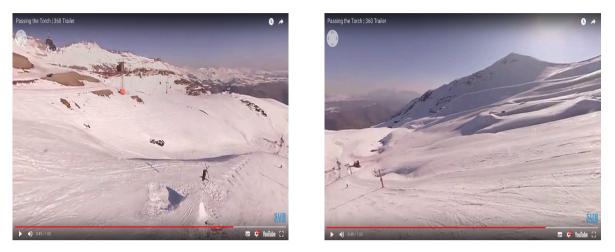


Figure 31- One of the three diferent views for the same frame of the Google and Columbia Sportswear's 360 video



Figure 32- One of the three different views for the same frame of the Google and Columbia Sportswear's 360 video

Figure 33- One of the three different views for the same frame of the Google and Columbia Sportswear's 360 video

Once the campaign was over, the findings proved to be the followings:

1. 360 video didn't overperform on traditional video: the 360 ad actually underperformed the standard ad on view-through rate; it seems then that

⁸⁵ https://www.thinkwithgoogle.com/advertising-channels/video/360-video-advertising/

viewers aren't always in the mood to interact with a 360 video if they're primarily watching standard video;

- **2. 360** video motivates viewers to watch more and interact: even if the 360 video had a lower retention rate than the standard one, it had a higher click-through rate, meaning that viewers were more interested in checking out the full-length version of the video. So, as a promo for the longer video, the 360 ad worked really well. Viewers didn't even need to watch the full cut to know they wanted more; and the new metric of interaction rate (which measures how often viewers explored the 360 functionality by tilting or scrolling, was higher than the view-through rates for the 60-second 360 ad, meaning that the 360 ad drove engagement via interactions, even if people didn't watch 30 seconds or more;
- **3. 360 video drives viewers to share, subscribe, and view other videos:** the 360 ad trounced the standard ad on all the earned action metrics, including views, shares, and subscribers. In total, the 360 ad drove 41% more earned actions than the standard video and drove also more engagement with Columbia's YouTube channel than the standard ad.

Furthermore, since the only way a viewer could get to a longer piece was to click from the ads, it was expected views for the longer 360 ads piece to match the clicks for the 360 shorter ad, but they didn't; this means that people who saw the longer 360 ad were copying the URL to share directly with others. Apps like WhatsApp and iOS messenger, indeed, resulted to be listed among the traffic sources for the 360 version, but not for the standard version; the full-length 360 video had a 46% higher view count at the end of the experiment. As a result, the 360 ad was a more efficient buy since its cost-per-view was lower when organic and paid views were combined.

As this experiment showed, 360 video has the potential to drive engagement in promising new ways. The technology encourages viewers to get in on the action by controlling their perspective with a simple tilt of a smartphone or nudge of a mouse. That's great news for brands, as the novelty of that viewing experience not only makes people want to watch 360 videos, it also makes them want to share.

Case study: BMW

A 360 campaign which encompassed mobile component was undertaken by BMW that, for the launch of the new M2 model, had the objectives of re-establishing its reputation as the leader in driving performance and of courting a new generation of entry-level BMW owners, such as males in their 20s and 30s. The brand teamed up with Gigi Hadid, a Victoria's Secret model with an engaged social following, to create a digital video and 360 video experience, called "Eyes on Gigi". In practice, the ad was a reinterpretation of the classic game of three-cup shuffle, where the ball was Gigi and the cups the new M2 cars; the video played out in one continual shot, as five total M2s began to weave around each other, leaving the viewer struggling to follow. Moreover, BMW created a 360-degree version of the video, allowing viewers to use their mobile devices to watch the action unfold all round them, as they rotated the camera to try to keep track of Gigi's M2. Mobile media dollars were split between a traditional 45-second video and the 360-degree version. Particularly on Facebook, users could interact with the 360 video right within their News Feed without even having to click.

The campaign surpassed its goals. This campaign not only achieved its goals, it surpassed them. In less than six weeks, the campaign was viewed 36 million time across YouTube, Facebook and Instagram, with an additional 162 million views garnered via WeChat in China. YouTube named the 360-degree Gigi video "The Most-Viewed 360-degree Video in 2016." In addition to views, online buzz and purchase intent both increased, with a 40 percent increase in M2 mentions across social media. The campaign also garnered global press coverage among many publications including Fast Company, InStyle and Vogue, as well popular international publications BMW's as among target audience. like Maxim and GQ.

Eyes on Gigi was an innovative campaign in its use of immersive and interactive video content, which allowed the viewer become part of the commercial itself, natively on each platform. Additionally, it was one of the first big automotive efforts to leverage 360-degree video technology to date. And consumers loved the campaign, with many guessing and debating what car Gigi was in right in the comments sections on Facebook and YouTube⁸⁶.

⁸⁶ http://www.mmaglobal.com/case-study-hub/case_studies/view/41355

3.4 Push Notifications

A push notification, declined in the mobile marketing context, can be described as a message that pops up on a mobile device. App publishers can send them at any time, users don't have to be in the app or using their devices to receive them. They can do a lot of things: for example, they can show the latest sport scores, get a user to take an action, such as downloading a coupon, or let a user know about an event⁸⁷.

Basically they look like SMS text messages, but they only reach people who have installed the corresponding app. Each mobile platform has support for push notifications, as iOs, Android, Windows and Blackberry all have their own services.

Main components of a push notifications are⁸⁸:

- 1. **Title + time:** indicates who sent the notification;
- 2. Icon: another indication about who sent the message;
- 3. Text: contains the message of the notification.

They can be seen as a direct, more intimate way to get in contact with users; for instance, they don't get caught in spam filters, or forgotten in an inbox.

They can actually have multiple purposes, depending on the situation:

- Promoting products or offers to increase sales;
- Improving customer experience;
- Converting unknown app users to known customers;
- Sending transactional receipts right away;
- Driving users to other marketing channels, such as social networks.

It will be shortly described how do they work, since they are relatively recent tools for marketers. The main actors involved in the process are:

- 1. An operating system push notification service (OSPNS): each operating system has its own;
- 2. The app publisher: he enables his app with a OSPNS;
- 3. The client app: an OS's specific app, installed on a user's device, which receives incoming notifications.

⁸⁷ https://www.urbanairship.com/push-notifications-explained

⁸⁸ https://iquii.com/2015/05/11/push-notification/

How it works

The process starts when the app publisher registers with the OS push notifications service and the service in turn provides an application programming interface (API), which is a way for the app to communicate with the service, to the app publisher.

Then the publisher adds the SDK (a code library specific to the notifications service) and uploads the app to the app store.

Once the user downloads, installs the app and opens it, unique identifiers (IDs) for both the app and the device are registered with the push notifications service. Actually the identifiers are passed back to the app and they are also sent to the app publisher, who receives and stores these registration details.

The subprocess of sending a push notifications is quite straightforward, as the app publisher composes a manual message through a message composer interface or sets up an automated message to be sent via the API; then he defines the audience to whom the push notifications will be sent and whether the message should be sent immediately or scheduled.

An easy-to-catch advantage compared to SMS messages is that push notifications can be targeted to segment a specific user base, or even personalized for specific users.

Of course, they require the management of user identification data, which can be undertaken by publishers themselves (by building their own infrastructure) or by vendors, which is the most widespread solution, since building and maintaining such platforms takes significant resources and time. Besides this, vendors can also provide capabilities such as reporting, scheduling, user attribute collection and segmentation, security and cross-platform support.

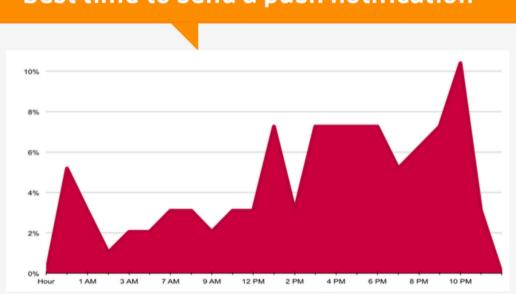
Depending on the Operating system, there are some differences that make, for instance, iOS more difficult to exploit as its apps require the user to grant permission for an app to send push notifications, while Android ones don't. That's why a good approach could consist in showing the value of opting in, for example with a customized welcome series upon first open, then let the user opt-in later. The typology of the apps matters too: while high-performing apps across all industries have opt-in rates above 50%, travel, business and charity apps lead with rates greater than 70%.

The effectiveness of push notifications, furthermore, seems to be a matter of fact: according to Appinstitute.com, indeed, push notifications have a 97% read rate, and 90% of them are read within three minutes of receipt. These are numbers the marketers of past dreamed of, and possibly the role of push notifications will become more and more relevant, as

publishers acquire more app users, build databases containing purchasing habits which can be the base for subsequent marketing campaigns⁸⁹.

An opportunity that could open up new ways of communication between brands and users emerges from the combination of location-based services and notifications: by taking into account the read rate shown above and the fact that 74% of smartphone owners claim they use GPS features of their phones, the possibility of creating push messages that are triggered when a users shows up in a specific area quickly takes place. This practice is called Geofencing: a virtual boundary around a certain area is defined and any time a user of a certain app crosses the line gets a notification. Since nine out of every ten people are going to read it within three minutes, that isn't enough time for them to get so far away that the message becomes irrelevant.

However, when planning the delivery of such messages one should be aware that the content has to be consistent with the time and the context the user is in, in order to make it meaningful: depending on the message one wants to convey to users certain times during the day will be more appropriate and others less appropriate; the overall picture portrayed by a Kahuna research shows that the highest-engagement moment for users is at 10 o'clock $p.m^{90}$.



Best time to send a push notification

Figure 34- Best times to send a push notification according to Kahuna (vertical axis represents the percentage of owners engaged with the app at the correspective time of the day)

⁸⁹ https://appinstitute.com/push-notification-marketing/

⁹⁰ https://iquii.com/2015/05/11/push-notification/

Also days matter. According to a Clevertap's study, made by analyzing over 100 million app launches and interactions, emerges that best days to send push notifications are the ones leading to the week-end, while the worst ones are Sunday and Monday, possibly depending on the fact that another working week is starting⁹¹.

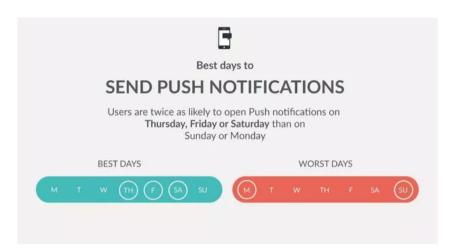


Figure 35-Best and worst days to send push notifications according to Clevertap

It is important also not to fall in the trap of treating push notification as an extension of email marketing and thus not to create a push strategy based on spamming broadcast notifications delivered unchanged to all the possible audience one can reach. Personalization and segmentation are the right words in this context; the first step for doing so is segmenting users based on their in-app behaviours or known information about them from the CRM: by adopting this technique, click rates increase to 8,6 percent for behaviour-based personalization and 13 percent for profile-based one, compared with the "send to everyone" average of 7,4 percent. The next level is segmenting based on both users profiles and behaviour, which yields an average click rate for such push notifications of 30,6%⁹².

This section concludes with a short list of benefits of push notification in a marketing strategy and case studies that show the effectiveness of past push notification strategies.

Boomtrain.com spotted some main benefits of adopting a successful push notification strategy, as follows⁹³:

• Higher app usage: since an average mobile user has up to 119 apps and interacts with over 93 websites on a daily basis, it is easy to see why so

 $^{^{91}\} https://www.quora.com/What-is-the-best-time-of-the-day-to-send-out-push-notifications-that-serve-as-reminder-to-use-a-business-app$

⁹² https://marketingland.com/5-must-push-notification-best-practices-mobile-marketers-172981

⁹³ https://boomtrain.com/6-compelling-reasons-marketers-use-mobile-push-notifications/

many apps are forgotten and deleted. Push notifications mitigate this issue by enabling app owners to provide relevant information, offers and news to users, without requiring them to actively engage with an app;

- **Higher conversion rates:** the same reasoning illustrated above for the click rates holds true for conversions too. By personalizing notifications based on behaviours and user profiles conversion rates are likely to increase;
- **Real time updates:** push notifications are fast to deploy, since the user receives them within seconds of a publisher hitting send or a trigger being tripped. In this perspective, they can be a useful tool when one wants to do a last minute push to drive customer engagement;
- Low barrier to entry: one of the greatest advantages is the ability to reengage with users without needing any sort of personal information from them. The user has provided that information through registration, so brands can bypass the need for logins before they can take action; this lowers the barriers to entry and also increases a user's comfort level as he hasn't had to share personal information.

Case study: Fastweb

As regards mobile advertising based on push notification, Waze, one of the most widespread apps for guiding people to their destination in their car travels, found a fertile ground. Fastweb, the major Italian telecommunications company, partnered with Waze in order to promote its newest offer in four cities (Rome, Naples, Genoa and Bari), with the goal of driving traffic to stores by leveraging the complementarity of waze ads formats to raise the awareness of the offer and to drive potential customers to stores, thanks to Zero-Speed Takeovers, Pins and Arrows, particular formats that combine push notification alerts and localisation of the position of each driver in the Waze map.

Even though the campaign execution was straightforward, the smart use of the different ad formats led to impressive results. The number of total navigations to the 19 advertised locations was multiplied by 4 during the Waze ads campaign.

This advertising presence led Fastweb to increase its navigations share by 8 percent points amongst telecommunications destinations in Italy⁹⁴.

⁹⁴ https://www.waze.com/brands/success/fastweb/

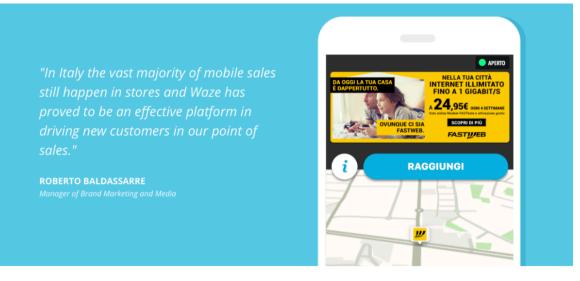


Figure 36- Example of Waze push notification ad together with statement from an Executive from Fastweb

Other case studies

A part from peculiar cases like Waze, there are not many examples of push notifications used for specific mobile advertising campaigns; they are rather being used in different purchasing phases, such as Mobile Service and Promotion, and the following examples go in this sense.

The first example is **JetBlue**, an airline that adopted push notifications to remind its customers when to check-in: basically flyers get reminders exactly 1 day before the departure. In this way, Jetblue offers high value, practical content that helps to improve the flying experience. This isn't going to result in any immediate sales, but JetBlue's efforts cause flyers to think positively about the brand, making them consider the airline the next time they go to book a flight⁹⁵.



Figure 37- Example of Jetblue's request for allowing its app to send notifications in an iOS environment

⁹⁵ https://blog.kissmetrics.com/push-notifications-to-boost-engagement/

Another example is **La Redoute**, an e-commerce retailer specialized in French-style fashion: in order to combat the problem of abandoned carts (people adding items to their carts, then leaving the store before finalizing the purchase) and retrieve lost customers, it started a push notification campaign where mobile app users would be contacted if they left the store with an item still in their cart. Each notification is highly personalized and links the user to his cart where he can complete the purchase. The interesting fact is that their push notification retargeting clickthrough rate was 2-3 times higher than on classic mobile ads. Another retailer which uses customer-focused push notifications to boost engagement is **PLNDR**; After determining what types of items users are engaging with, it sends specific daily deals that are virtually guaranteed to resonate with its customers. By including

multiple layers of personalization and narrowing down on its user's interests, PLNDR's push campaigns have resulted in a 4% purchase rate on mobile (though some of the brand's push messages have experienced more than a 20% engagement rate).

3.5 Audio Advertising

Audio advertising refers to the advertising activity performed in the digital audio environment, which can be defined as the consumption of audio content delivered by devices connected to the Internet.

Audio advertising is not something new, since it was performed on radios even before the Internet era; however, as several other areas, the coming of Internet and the birth of digital audio formats changed how audio advertising works. While a radio advertiser in the 1990s would have been able to advertise during shows that carried a significant portion of their desired audience, they were still advertising to plenty of people outside of their target demographics. By contrast, platforms like Spotify have log-in data that allow marketers to hone on in on specific groups of users based on their age, gender and listening habits. Not only does digital allow advertisers to know they're reaching the right people, but its reporting tools can help them understand exactly how many of those people actually listened to their ads and if they took action⁹⁶.

Podcasts are an emerging field of advertising too, where publishers are connecting brands to listeners by leveraging the relationships those listeners have built with podcast personalities. In fact, according to a recent study by The Interactive Advertising Bureau (IAB) and Edison

 $^{^{96} \} http://www.thedrum.com/industry insights/2017/03/09/why-audio-advertising-could-be-your-campaign-s-secret-weapon$

Research emerges that podcast listeners are more likely to take action in direct response to hearing an ad during their favourite podcast, with 45% visiting a website, 42% considering a new product or service and 37% gathering more information about the product.

Moreover, digital audio providers are beginning to allow marketers to access their inventory with the same programmatic buying tools they use to buy digital video and display. For Spotify, this means giving brands the chance to target users listening to individual playlists in almost real-time, allowing for extremely relevant advertising messages. For instance, a coffee shop can now target someone listening to their 'Acoustic Chill' playlist with an ad encouraging them to step out of the office for a coffee break.

Lastly, another topic that deserves to be taken into account is that because most consumers listen to audio on a mobile device, it's also possible to add location as one of the criteria for choosing an audience. Brands can use this information not only to reach consumers who would otherwise be unreachable, but also to drive outcomes that are location specific. For instance, an advert might push users to certain retail or food outlets in a given area. With the right partner, it's even possible to tailor the content of the advert in real time based on data signals such as the local weather, the time, and the specific demographic profile of the listener. This helps to drive brand engagement and maximise the effectiveness of the media⁹⁷.

According to a IAB Italy 2017 report, marketers are looking with more and more interest to the Digital Audio for some relevant reasons⁹⁸:

- Effective and multidevice reach: Digital audio allows to have several touchpoints as reaches users through all devices connected, such as smartphones, tablets, PC, MP3 readers, Smart TVs, Connected cars, Wi-fi speakers and the so-called Smart speakers (Amazon Echo, Homepod Apple and Google Home) which will be for sale in a while;
- Audio is ON when screens are OFF: Audio impressions don't need a screen to impact on users as they are not seeking for their exclusive visual attention; advertising messages can be enjoyed both when the screen is on or off, or even when the device is not provided with a screen, like Wi-fi speakers and Smart Speakers;

⁹⁷ https://www.xaxis.com/insights/audio-the-best-bargain-in-advertising/

⁹⁸ http://www.iab.it/wp-content/uploads/2017/10/IAB-ITALIA-LA-GUIDA-SUL-DIGITAL-AUDIO-ADVERTISING-2017-3.pdf

- Data driven planifications: Digital audio allows data for segmenting and targeting the audience to be exploited in order to optimize the planification. Different targeting technologies are available, such as Content targeting, Device targeting, Geo-targeting and Audience targeting (which uses demographic and behavioural data);
- **High engagement and user experience:** enjoying Digital audio contents is an individual experience, since users listen through earphones, and intimacy and a link with everyone's personal life experiences are created; in this context, ads are put in the contents' stream without interfering with the User Experience;
- Effective advertising format: audio ads are not interested by issues like viewability, ad fraud and adblocking, and they are not skippable, too.

In this context, digital audio advertising formats that can be used by marketers are basically five, which are the followings:

- 1. **Recorded spot:** they can be placed individually or together with others in a single cluster and typically encompass a clickable item on the screen called companion banner. They can be "dynamically" placed in the simulcast of the FM content, in purely digital musical streams and in podcasts, and can assume the pre-roll (at the beginning of the listening experience), the midroll (during the listening experience) or the post-roll (at the end of the listening experience) form;
- 2. **Native ads:** used very often in podcasts, these ads are read by the announcer who promotes in first person the service/product; the duration is irregular and the message can be already included in the content or placed dynamically as pre-roll, mid-roll or post-roll;
- Branded channel/playlists: some publishers offer channels or playlists which can be personalized for the benefit of an advertiser, by including the audio packaging and the visual elements related to the campaign;
- 4. **Branded podcasts:** spoken audio content developed in order to tell a story which is coherent with a brand's values without the need of explicitly quote the brand itself;
- 5. **Interactive audio ads:** some platforms offer an integration with a technology that allows users to respond to an ad by simply speaking through

the microphone of the smartphone and activating a specific call to action which puts in direct contact advertisers and consumers.

As regards KPIs for measuring the effectiveness of the advertising strategies, Audio advertising campaigns can be evaluated based on the fruition mode and the formats used.

Tracking by impression

Refers to the advertising messages delivered in the streaming environment. The delivery of such ads can be traced thanks to audio tagging, in particular:

• Listen through rate: allows measuring the percentage of listening from users subject to a digital audio creativity. The formula used for computing it is:

$$LTR = \frac{Impressions \ at \ 100\% \ exposure}{Total \ impressions}$$

- Average active sessions: allows to measure the number of sessions in which the duration is at least 1 minute, thus excluding all fortuitous interactions;
- **Click-through:** classic metric which measures the ratio between clicks on banners and delivered impressions; in digital audio context this metric can be defined only for campaign which contemplate a companion banner.

Tracking by Download

Refers to contents delivered through download, like podcasts. In this case, tracking is only possible when the audio player sends to the broadcaster information regarding the effective behaviour of user; the app iOS Apple Podcast, which accounts in a relevant way in the podcasts environment, doesn't enable this function. However, in the meanwhile the industry is developing new standards that allow to analize servers'registers according to agreed metrics for a better attribution.

Tracking by results

It is possible to actually track how digital audio campaigns performed based on the different types of format:

• Native ads: for these messages, read by the program's announcer, who becomes an actual endorser of the brand, a purchase advice is given to

listeners which can be traced thanks to a code and allows to measure the effectiveness of the activity;

- Interactive audio ads: answers given by the audience to solicitations are easily traced by using some technologies, the same ones that allow the listeners to vocally respond or interact using their microphone;
- **Companion banner:** when a banner is displayed on the screen together with a digital audio message, both the distribution platform and the advertiser are able to count interactions through the CTR.

Case study: Lane Bryant with Pandora Internet Radio

A successful witness of the effectiveness of audio ads come from the campaign developed by Pandora, a leading on-line radio service operating in US, for helping the brand Lane Bryant, the most recognized name in clothing and accessories for sizes 14 to 28. Lane Bryant came to Pandora wanting to drive foot traffic into stores across the nation during the holiday season. In order to achieve its goals, the brand needed to ensure it was optimizing its media campaign to only reach the most qualified listeners with relevant messaging, and employ a media mix strategy that would break through the holiday clutter.

The campaign encompassed a multi-faceted approach with targeting at the forefront: Pandora created a custom audience segment comprised of Lane Bryant's core demographic to ensure the campaign was optimized to reach only those most qualified; to amplify the message, then, it employed a mobile first strategy to ensure it was reaching busy, on-the-go demographic; finally, both display and audio creative were employed to ensure the message was resonating with consumers.

Results proved to be satisfying, as Pandora was able to drive a 17% lift in store traffic, outpacing retail benchmark of $7\%^{99}$.

Case study: MightyHive and Doubleclick

MightyHive is a programmatic solutions partner that serves forward-thinking marketers and agencies on the path to programmatic self-sufficiency.

MightyHive wanted to design a custom programmatic strategy for a CPG brand who was looking to increase brand awareness and store visits. The client's site was not designed to make purchases on the site, so the goal was to drive traffic to a new geo location tool within

⁹⁹ http://pandoraforbrands.com/example/pandora-drives-17-lift-in-store-traffic-for-lane-bryant-through-precision-targeting-and-mobile-first-media-strategy/

their website and encourage consumers to interact with the tool to find their nearest store location.

A key challenge for the brand was being able to reach their younger group of users who was often on the move listening to their mobile phones, but weren't always engaging with the actual device, which made it harder to serve this group with standard display and video ads.

When the DoubleClick team shared the opportunity to beta test audio ads on Google Play Music through DoubleClick Bid Manager, MightyHive saw this as an innovative way to reach the niche audiences they wanted to engage for their client's CPG brand.

The solution was found in leveraging Bid Manager to access audio ads on Google Play Music, which is natively built into all Android devices.

This strategy enabled them to reach users when they're not available on desktop or mobile web since audio is often playing in the background and doesn't require the user to be engaged with the device itself.

MightyHive's strategy enabled them to uncover new audiences for their client and led to relevant results: more than 7,5 million impressions, indeed, were delivered, which brought more than 7.500 clicks and implied over 95% ad completion rate. Moreover, this campaign drove a 0,11% CTR, which is 1.2x higher than the average display CTR of $0,05\%^{100}$.

3.6 Chatbots

Chatbots, as explained by NBC, are "simple artificial intelligence systems that you interact with via text. Those interactions can be straightforward, like asking a bot to give you a weather report, or more complex, like having one troubleshoot a problem with your Internet service." Think of it like an automatic conversation machine that can talk to people in a relatively human-like way about limited subjects¹⁰¹.

Social media and messaging apps have given way to the rise and popularity of chatbots. Facebook's properties and WeChat, a popular consumer technology platform in China, have been leading the way.

The rise of messaging apps is actually so strong that for the first time the third quarter of 2015 saw an higher number of messaging's apps users than social networks' ones.

¹⁰⁰ https://www.doubleclickbygoogle.com/articles/audio-ads-testing/

¹⁰¹ https://www.scripted.com/content-marketing/chatbot-marketing



Figure 38- Social networks'adopters vs messaging apps'developers

This trend has to be taken into account because it represents a paradigm shift, and by better analizing the phenomenon emerges that the segment of Millenials and the so-called "Generation Z" are the main cause of this, as they are true digital natives who engage with technology and advertising in a different way than previous generations.

This need for marketers to approach advertising in a different way has led to the birth and the diffusion, among other formats, of chatbots.

According to Chatbotsmagazine.com, in order to embrace the new rules of the game in Conversational Marketing, marketers have to consider three main drivers¹⁰²:

• One-to-one vs one-to-many: for the first time in advertising/marketing history, brands have the opportunity to reach consumers on a personal level, at a pace of play that they (consumers) dictate. In a conversational world, marketers can no longer rely on the "yell & sell" approach and hope for the best. They need to "chat & listen". More than ever, brands must create value to earn the right to talk. Whereas with traditional media, they could simply pay for that right, messaging is not a medium you can buy. It's a medium you can only be invited to. But the prize is a direct access and a one-on-one relationship;

¹⁰² https://chatbotsmagazine.com/conversational-marketing-a-new-paradigm-for-brands-218a3755fff5

- Small data vs Big data: one-to-one communication gives personal insights and specificity and, for the first time, it creates the perfect platform to sequence messages in a natural, contextual, human way. The aggregate of all these conversational insights suddenly becomes much more valuable than before because it's much more structured. There is now the possibility to break it down into units and sub-units of data (conversations, phrases or words) that marketers can comprehend and execute on;
- Always on vs always perfect: The rise of the "real and raw" thanks to live apps like Periscope or Snapchat stands as the new social currency Millennials and Generation Z teens live by being always on and keeping it real becomes therefore much more important for a brand than being picture or pixel perfect. Chatbots and conversational apps naturally give brands this "always on" advantage as they give customers a 24/7 access to a brand in a private space. The experience might not be perfect at first but it will always be authentic. Every conversation is logged in so one is able to keep tracking, iterating and improving the quality of the bot/app over time.

There are some numbers, moreover, which highlight the effectiveness this tool is having for advertisers. Indeed, comparing Chatbots against mailing lists emerges that the formers have a CTR of 15% to 60% (according a guide from Octane AI and considering chatbots using Facebook Messenger as app), far better scores than the latter ones, which usually are considered as successful if they reach 5%.

Thus, it makes sense to wonder about the reasons chatbots are so effective and click rates are so high.

According to Chatbotsmagazine.com, there are three main explanations for such results¹⁰³:

- Chatbots users are more engaged: especially among younger users, email is not something that widespread; direct messages, instead, are immediately read;
- 2. Chatbot followers have opted in for real: on Messenger, Facebook has strict rules, on what a bot can send to whom under what conditions. Most important, a Messenger user must interact with a bot before the bot can send him a message, whether by clicking the "get started" button or sending a

¹⁰³ https://chatbotsmagazine.com/what-if-your-mailing-list-had-a-60-clickthrough-rate-3c7791250d61

message to the bot. So, in a sense, they are chosen by users, whereas even earnestly targeted mailing lists tend to be padded with recipients unwittingly subscribed while making a purchase, or who were added to a database without being asked. The result is that a much larger fraction of people who receive a message from a chatbot might actually be interested in what it has to say.

3. The medium hasn't been overrun yet: by using words of Chris Mortimer, Interscope digital marketing chief "Right now, a Facebook Messenger inbox is what an email inbox was before spammers got to it", meaning that it won't last. As more and more brands will adopt chatbots, Facebook will surely adapt its rules, to guard Messenger from becoming the next big thing people block. But as chatbots continue to multiply, those high click rates will inevitably slow down.

The technology is still in its early stage, and many companies are slowly discovering the benefits and opportunities provided by chatbots with beta experimentations; there are actually a limited number of firms which already have jumped on the bandwagon. Also on consumers'side this concept still sounds stranger to the majority: For now, chatbots largely appeal to tech-savvy consumers already using Facebook's Messenger, Kik or other platforms to chat with friends, but the audience is expected to grow as those types of communication tools catch on.

However, numbers point out that chatbots are gaining momentum, especially on Facebook Messenger, which after introducing its Messenger bot platform in the spring of 2016 with 33 000 bots, has now some 100 000 active bots using the service to talk to customers.

A research from Forrester showed 5% of companies worldwide said they were using chatbots regularly in 2016; 20% were piloting them; and 32% were planning to use or test them in 2017. Success rates are mixed as some companies struggle to define a bot's purpose, set goals that are too ambitious for the technology that's available, or launch them before they're ready.¹⁰⁴

"The development of artificial intelligence will make the chatbots more advanced and truly smart," said Forrester Senior Analyst Xiaofeng Wang, who's based in Singapore. "However, AI is still in its childhood. Companies need to understand the limitation of chatbots today and leverage the existing capabilities to deliver customer and business value."

¹⁰⁴ http://adage.com/article/digital/marketers-betting-bots/309767/

Today's chatbots can quickly dispense Q&A type of answers, such as the nearest location of a store or the price of an item online. It is reasonable to expect that at least five years or longer will pass before chatbots will be able to handle complex and lengthy interactions, like consulting on products such as life insurance.

Indeed, some experimentation ended up in complete failure, the loudest one being Tay, the Microsoft's chatbot which was killed off after it had learned racist speech through interactions with internet trolls; however, it has to be taken into account that Microsoft's chatbots, as machine-learning experiments in AI, are a different breed than the preprogrammed bots brands are using.

Let's conclude this section by pointing out the advantages Chatbots can have in a mobile marketing strategy¹⁰⁵:

- Beating app fatigue: people are so tired of trying new apps that they just stick with a few that satisfy their needs. In this situation, chatbots get out of the ordinary and help removing boringness from the relationship between brand and consumer;
- Effective analysis: chatbots are able to learn from previous interactions. This characteristic offers a lot of benefits, from the improved communication with users to the amount of data gathered for predictive analysis;
- **Personalization:** since users appreciate tools tailored for their needs, personalized approach is one of the benefits offered by the technology based on the AI. They help customers whether they need to purchase a certain product: knowing users' preferences is part of chatbots'job;
- Deeper conversations with users: individuals can't be in many places at the same time when several users require attention. Chatbots are able to do so, thus not only they can help customers but can also obtain results like convincing users to make in-app purchases or even to build a long lasting connections with them;

¹⁰⁵ https://appsamurai.com/why-to-use-chatbots-in-your-mobile-marketing-strategy/

Case study: Tommy Hilfiger

When relating chatbots with mobile advertising, there are examples who witness that also in this environment the format is gaining momentum.

Teads, the company which invented the video outstream format and first video advertising marketplace in the world, is also the first company which integrated a chatbot inside an outstream video ad, developing a technology that has recently been adopted by Tommy Hilfiger.

The purpose was to extend the brand's reach beyond Facebook Messenger: basically, the bot is activated by clicking on a call to action superimposed on the video creativity, which encourages the user to interact. It is a dynamic call to action, which changes according to the moment of the day; the bot allows consumers to explore the new collection of the brand and the requested sizes, and acts as a facilitator by asking questions about customer's preferences and sizes. In order to finalize the purchase, then, it sends them to the official brand's website¹⁰⁶.

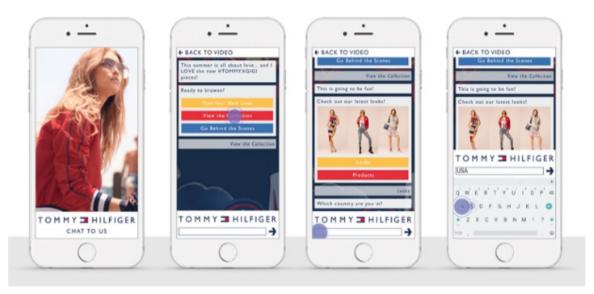


Figure 39- Example of application of chatbot in a Tommy Hilfiger campaign

Case study: MSC Crociere

Another example developed in Italy and then in UK is MSC Crociere, which integrated a chatbot inside an outstream video in order to create e new and more effective link with consumers. The aim was to gather contact data in order to being able to interact directly with customers.

The chatbot was created and developed by Hej!, a creative agency specialized in development of technologies based on AI, and integrated by Teads; Msc Crociere adopted a

¹⁰⁶ http://www.engage.it/tecnologia/teads-il-chatbot-integrato-allinterno-di-un-annunciodiveo/113518#WY87JcvvWCZzbWFB.97

multiscreen strategy, choosing both inRead Landscape and inRead Vertical natively located in premium editorial content in order not to interrupt the user experience¹⁰⁷.

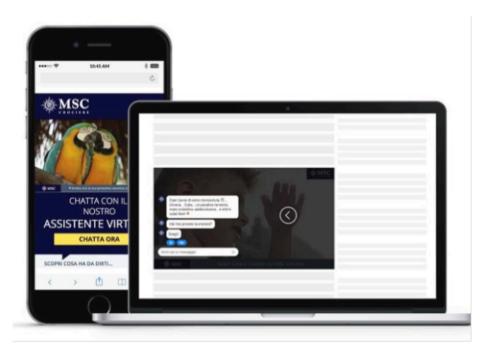


Figure 40- MSC Crociere's chatbot campaign

Case study: Patròn Tequila

Patrón Tequila, the spirits brand co-founded by billionaire John Paul DeJoria, boosted consumer response to social media advertising with a Twitter campaign featuring a "Bot-Tender" chatbot that suggested ways to mix cocktails. Actually 67% of chatbot conversations happened on Twitter, which is used to saying its users have a "discovery mindset" and are accustomed to engaging with brands, making the "Bot-Tender" an ideal chatbot spin-off on the social platform. The chatbot engaged users with summer cocktail recommendations tailored to preferences and social occasion, such as a pool party or cookout.

Patrón's success reflects the brand's use of several key strategies. The brand created multiple creatives based on different flavours and moods to grab attention and then had four calls to action so that users could personalize the experience. Patrón was able to drive on-going engagement because conversations live in Direct Messages, meaning

 $^{^{107}}$ http://www.engage.it/tecnologia/msc-crociere-teads-primo-chatbot-italiano-integrato-video-outstream/121211#ogTpAwzJuUEGR034.97

users could return to their favourite recipes or find new ones re-engaging with the chatbot in their inbox.

The best-performing direct message card ad triggered a 2.6% clickthrough rate, while the number of recipes served by the chatbot exceeded Patrón's goal by more than 2x.

Moreover, Patrón observed that 39% of recipes served in direct messages led to website views that gave consumers more in-depth content about the premium tequila brand. The launch of the Bot-Tender chatbot and direct message card led to an 11,000% increase in direct messages on Twitter this year compared with 2016¹⁰⁸.

3.7 Ads with augmented reality

Augmented reality is the integration of digital information with the user's environment in real time. Unlike virtual reality, which creates a totally artificial environment, augmented reality uses the existing environment and overlays new information on top of it; AR applications for smartphones typically include global positioning system (GPS) to pinpoint the user's location and its compass to detect device orientation¹⁰⁹.

This technology has become mainstream recently thanks to the Pokemon Go phenomenon, the mobile game which exploited Augmented Reality that had a huge success worldwide, but it's not only about games. As it allows inserting digital contents in physical context explorable through smartphones' cameras, companies are slowly thinking about advertising creativities based on this format that, according to many experts, will represent a breakthrough innovation in advertising in the years to come.



Figure 41- Pokemon Go is the most famous game which exploit augmented reality through mobile devices

¹⁰⁸ https://www.mobilemarketer.com/news/patrons-bot-tender-drove-39-clickthrough-rate-fromtwitter/512155/

109 http://whatis.techtarget.com/definition/augmented-reality-AR

Of course, at the moment being the usage of Augmented Reality among marketers is still in early stages, as can for instance confirm the survey of US agency executives by Vibrant Media, which showed that more than three-quarters of respondents said they haven't purchased AR ads for their clients. This was the case even though the survey found plenty of enthusiasm for both Virtual Reality and Augmented Reality. Vibrant indeed asked the executives which digital marketing channels consumers find compelling. For the most part, VR and AR ads were noted as "very compelling" marketing channels, cited by close to half of respondents

The main obstacle to overcome for those marketers to commit advertising dollars to AR is the size and the knowledge of audience; indeed, just 8% of internet users polled in August 2017 by YuMe said they used Augmented reality, while only 25% of the respondents were even aware of the concept of AR^{110} .

However, most of the people agree on the fact that AR has the capability to make the advertising more attractive. Augmented reality ads are immersive, which means they help marketers create a certain emotional connection with customers. Unlike images or banners, for example, AR ads are interactive and lifelike: consumers can see and even interact with them. Interacting with AR ads, consumers feel like they're playing an engaging video game. This builds an emotional connection with customers, encouraging them to make purchases. Moreover, an emotional connection is a great tool for increasing brand awareness. People better recall brands they have positive associations with, so AR ads are perfect not only for promoting sales, but also for building a company's reputation. Besides this, another feature that AR has and can be exploited by brands is the possibility to create virtual try-ons, meaning that potential customers will be able to virtually try different products in order to find the ones that fit better and finalize the purchase. Industries like fashion, jewellery and watches will be interested in this possibility, as it can represent an effective way to boost sales¹¹¹.

Some people actually are convinced about the fact that AR will change how the mobile advertising industry will work in the future; by quoting Digitaloperative blog, for instance, augmented reality will impact on the industry in several ways¹¹²:

1. **Providing a personalized user experience:** as Boston Consulting Group reports¹¹³, companies that personalize the customer journey achieve 6% to

¹¹⁰ https://www.emarketer.com/Article/AR-VR-Ads-Compelling-Enough/1015468

¹¹¹ https://www.upwork.com/hiring/for-clients/how-augmented-reality-makes-advertising-interactive/

¹¹² https://www.digitaloperative.com/blog/2017/augmented-reality

10% sales increase; in this direction, AR is the way to achieve such result, since it makes possible for brands to create a more intimate connection with their customers than conventional marketing strategies do;

- 2. Engaging customers through an interactive advertising approach: Augmented reality can give traditional print and billboard ads a boost in customer engagement by adding an element of interactivity. Just by aiming a smartphone camera at a newspaper or magazine ad, poster or billboard, people can use AR to enjoy a real-time 3D multimedia experience. Aside from making ads more appealing and interesting, this AR feature can also help a brand's target customers learn more about the benefits of using your product. With AR, one can overlay supplemental information on the screen when it's viewed on a mobile device.
- 3. **Geo-targeted marketing:** Augmented reality can help potential customers near a brand's location to find it and visit the store. Apps like Nokia Lumia city Lens, for instance, are able to provide suggestions on nearby restaurants, banks, and shops to users of Lumia phones. People can just open the app and aim their smartphone camera at buildings to find information about the different establishments in the area.

Case study: Lacoste

The first example comes from Engine Creative, which developed the Lacoste Augmented reality campaign with the mission to 'bringing colour to life'. Users just had to scan the image whenever they saw the campaign's special Lacoste icon to try on the different shoes while interacting with extra branded content. The campaign used Image Recognition and Augmented Reality to bring an interactive product-viewing experience to over 15,000 users.¹¹⁴

Case study: Heinz Ketchup

A very interesting example comes from the campaign developed by the Heinz brand, which involved the usage of image-recognition AR apps on Apple and Android smartphones and tablets in collaboration with Blippar, with the aim of promoting Tomato Ketchup as a cooking ingredient in a number of different recipes. Basically, users could hover their phone

¹¹³ https://www.bcg.com/publications/2017/retail-marketing-sales-profiting-personalization.aspx

¹¹⁴ https://www.enginecreative.co.uk/portfolio/lacoste-lcst-augmented-reality-retail-campaign/

over a brand packaging label to unlock a secret recipe book. Users could then download these recipes which used Ketchup as the "secret ingredient" via the app or the Heinz Facebook page. The campaign allowed users to have an innovative experience, as the app is easy to use and inspires consumers to use tomato ketchup in new ways, resulting in being effective in engaging customers and strengthening their relationship with Heinz.

Results were rather satisfying for the brand too: it boosted Heinz's digital marketing as it added another channel consumers could use to interact with the brand, and generated over 570.000 blips with 170.000 unique users blipping Heinz packaging around three times each.¹¹⁵



Figure 42- Heinz AR campaign example

Case study: Jaguar Land Rover

For the launch of the new Range Rover Velar, Land Rover aimed to increase pre-orders of the new vehicle as the primary KPI of the AR campaign the brand developed and delivered in collaboration with Blippar. With pre-orders for the Velar requiring a \$1,000 down payment, this objective was complicated because there wasn't a vehicle available for consumers to experience.

In order to accomplish such goal, leveraging new technology was crucial to providing consumers with a tangible behind-the-wheel experience; thus, Land Rover built an augmented reality test drive that was scaled out with its programmatic partners using an audience-first, data-driven distribution strategy to ensure it was reaching the right audience for Land Rover. Users were exposed to a mobile banner with a call to action to take such test drive; upon clicking it, the phone screen was transformed into a first-person virtual view

 $^{^{115}} http://www.digitaltrainingacademy.com/casestudies/2014/10/heinz_tomato_ketchup_augmented_reality_recipe_book.php$

from inside the Velar vehicle. The AR ad unit showed a detailed view of the car's interior, allowing users to explore it without having to go into a dealership but giving them the same test-drive experience to encourage pre-orders.

The experience required no headsets or the download of an app to run.

Furthermore, mobile was a core component of the campaign, as the peculiarities of the device itself make it more effective to run an AR ad on it, since you can tilt and move the device in every direction.

Results were rewarding and encouraging, as the Velar augmented test drive beated benchmarks with an average of 42 seconds of dwell time, and ultimately earned a 41% engagement rate, together with the fact that pre-orders were on pace to achieve the goal.¹¹⁶



Figure 43- Example of Velar's augmented reality test drive

3.8 Banner lockscreen

This format refers to some new technologies that are being developed to create value for advertisers and publishers in an innovative way, such as placing targeted ads as the user unlocks the phone (receiving a reward like virtual credits, promotions or loyalty points) and other strategies which exploit moment or spaces in the relationship between user and smartphone in order to advertise in the more targeted way possible.

The first example of such concept is represented by Unlockd, an Australian company founded in 2014 whose main focus is the "unlock" moment, the most engaged point in the mobile journey; the start-up based its vision on the strong conviction that that moment was an under used real estate, combined with proof that user were ready to be rewarded for viewing ads and content.

¹¹⁶ http://www.mmaglobal.com/case-study-hub/case_studies/view/46376

The functioning of the Unlockd concept is made of 6 steps, highlighted in the following picture¹¹⁷:



Figure 44- How Unlockd works

- 1. Sign up: consumer opts in and downloads the free, white label app;
- 2. Choose interest: select interests to ensure relevant ads appear when they unlock;
- 3. Unlock phone: user unlocks phone as they normally would each day;
- 4. View ads: they see targeted ads, offers or curated content each time;
- 5. **Earn more:** they can earn more rewards by viewing videos, downloading third-party apps, taking surveys or other in-app activities;
- 6. Everyone benefits: users get rewarded with value in the form of credits, minutes, data, content or loyalty points.

Unlockd has signed partnerships with players like: Tesco Mobile, one of Britain's largest mobile providers; Sprint Telecom in US and Lebara Mobile in Australia. Among the rewards offered to consumers who watch ads, they are given the opportunity to sign up a new Tesco Mobile Xtras app, which is run on Unlockd's platform, and lets them save £3 off their monthly bills¹¹⁸.

Moreover, according to Forbes¹¹⁹ the appeal of the startup extends beyond just discounts and rewards; it indeed states that by curating ad content specific to individual users, Unlockd utilizes the psychology of behavioural targeted advertising, meaning that when consumers

¹¹⁷ https://unlockd.com

 $^{^{118}\} http://www.afr.com/technology/murdochbacked-unlockd-signs-major-uk-deal-with-tesco-mobile-20160608-gpewaq$

 $^{^{119}\} https://www.forbes.com/sites/nguyenjames/2017/07/05/this-australian-startup-rewards-users-for-unlocking-their-phone/\#54e8737cc564$

are shown ad perceived to be individually tailored based on their behaviour, they are inclined to resonate more pertinently with its content; at a subconscious level, consumers view the content as a reflection of themselves, which encourages a greater interest in the content being advertised.

It seems that consumers and advertisers find the company's business model valuable, as Unlockd's revenues are consistently growing and more and more partnerships with mobile providers and brands are being signed; in the last quarter of 2017, company's revenue grew 28%, with December its best month ever, up 53% on 2016^{120} .

A similar concept was brought about by Umewin, a mobile ad and corporate social responsibility company, that rewards users for viewing targeted ads at determined time frames. The difference with respect to Unlockd is the focus the company puts on charity. Indeed, 80% of revenues is donated to leading charitable causes¹²¹. In practice, users download the Umewin app, which starts delivering advertising content every time the consumer unlocks his smartphone; then, Umewin distributes the corresponding amount of money to the user as a reward; it is up to the user himself, thus, to redistribute the amount of money gained by putting it whether for recharging the telephone credit, for purchasing a gift card or for charity purposes. The model empowers advertisers to reach willing audiences, while allowing the end consumer to change the world an ad at a time.

Among the innovations introduced by Umewin, the company's creative team developed a new format, sized 1080x1920, which acts as the wallpaper of the smartphone and lasts 15 minutes, being then changed with another one^{122} .

More and more companies are leveraging on this business model: besides the two aforementioned, also Pig.gi provides a similar solution, even if the functioning is slightly different. In the Pig.gi case, indeed, advertising contents are displayed every time the smartphone's owner looks at his wallpaper; then the user is free to decide whether learning more about the content (by sweeping left) or ignoring it (by sweeping right). Even here, users accumulate Pig.gi coins, which can be converted in gifts¹²³.

 ¹²⁰ http://www.afr.com/technology/revenues-put-unlockd-among-australias-hottest-startups-20180126-h0oqoc
 ¹²¹ http://www.mobyaffiliates.com/blog/umewin-partners-with-prodea-to-provide-mobile-ad-solution-for-a-good-cause/
 ¹²² http://www.mobyaffiliates.com/blog/umewin-partners-with-prodea-to-provide-mobile-ad-solution-for-a-good-cause/

¹²³ https://pig.gi

Last example is the Deutsch company MyLockscreen, which acts in a similar way. Here, users can actually increase their user level, which leads to more earning per ads visualized¹²⁴.



Do you want to earn more?

If you want to increase your earnings per ad simply increase your user level:

Level 1 = 0.1 cent per ad Level 2 = 0.2 cent per ad Level 3 = 0.3 cent per ad Level 4 = 0.4 cent per ad and so on.

Figure 45- My lockscreen users'levels

However, given the astonishing growth of some of them (Unlockd), it makes sense to assume that this new format can represent a new stream companies can exploit in the upcoming future.

¹²⁴ https://www.mylockscreen.de/en/

Chapter 4

Methodology of research supporting empirical analysis

In previous chapters it was made an analysis of the literature aimed at identifying main evolutions and trends in mobile advertising market with a specific focus on innovative formats that are continuously being developed in order to overcome the critical issues in which traditional mobile advertising formats are involved.

It is thus sequential trying to investigate on the relevance such modifications and new trends bring with them in the industry, in particular in the italian environment.

This chapter explains the methodology adopted to undertake such analysis, by defining objectives and tools used.

4.1 Objectives and subject of analysis

Through the analysis of literature, principal features related to Mobile Advertising market were illustrated, by analizing the current context, growth perspectives, the different typologies of formats available and the evolution such formats are performing in order to remain competitive and attractive to customers'eyes, trying to portrait a picture of how the future of formats will look like; in particular, the focus was on the issues of banner blindness and the Coalition for Better Ads and how the industry will react, by developing new creativities that are less and less intrusive and flow in a flawless way in the stream of contents in a webpage.

The aim of the empirical analysis is to verify the consistency, in particular in the italian context, of trends and topics emerged from literature's research, through a relevant series of interviews performed among different actors in the mobile advertising market.

The specific objective of this piece of thesis thus was to provide a general view of the situation of the Mobile Advertising market, starting from the diffusion of mobile devices

worldwide and some relevant highlights that depict the dimension and the potential of such market; after that, a concise description of the more traditional formats already adopted by most players in the industry was performed, leading then to the analysis of the principal trends in terms of innovative formats which possibly will have a relevant role in the years to come. Hence, the subjects studied in deep during interviews were studies of companies in Mobile Advertising market operating in Italy with the aim of understanding their business model and whether they perceive trends found by literature review and how they approach them.

4.2 Tools of analysis

In order to have clear in mind the state of art and principal evolutions that are being undertaken in the italian Mobile Advertising market, interviews on some important players in the industry ecosystem were performed, in the form of telephonic interviews: Such interviews, combined with the literature review, allow to get a pretty concise and precise picture of the italian context.

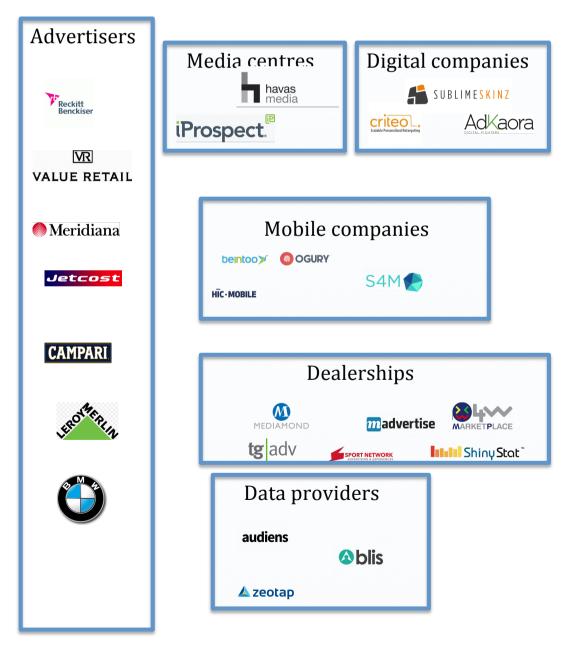
4.2.1 Sample of analysis

Interviews undertaken aimed at covering and representing all types of players in the Mobile Advertising environment. Here the actors involved are listed, but before that, a short description of the roles different players have in the mobile advertising ecosystem is provided.

In particular, we can recognize the following categories:

- Advertisers/ brands: companies which plan advertising initiatives, they lie on the demand side, as they invest for purchasing advertising content and usually have a dedicated budget for digital;
- Media centres: they gather demand from advertisers and convey it to the market, thus finding sellers which can satisfy clients'requests. They actually several tasks: the elaboration of a communication strategy, the media mix planning, the purchasing of advertising spaces, the budget management and the reporting activities related to the state of the campaign;
- **Dealerships:** players undertaking the activity of selling advertising spaces on behalf of publishers as a consequence of an externalization of such activity. They manage those spaces and sell them on the market, being rewarded based on the revenues generated from such sales;

- Data providers: companies whose business gravitates around offering data to the other players of the ecosystem who need them, by selling them third-party data. Some actors have partnerships with companies like Telcos, allowing to access to a relevant amount of data to be sold;
- Mobile companies: actors involved in providing technology and solutions for creating effective campaigns in mobile environment, their role is to deliver effective solutions and tools focused on mobile devices that help marketers, often thanks to proprietary technologies and know-how;
- **Digital companies:** in a similar way to mobile companies, they also work in nonmobile environment, managing also desktop solutions and helping brands and advertisers in delivering cross-device campaigns.



4.2.2 Structure of interviews

The structure was conceived to better allow the reader to understand the business reality interviewed.

With this in mind, each interview was thus organized and performed:

- Corporate profile: a short story of the company with a focus on the most significant events in recent firm's history;
- Services offered: the core business of the company is shortly listed, describing the industry to which the firm belongs and particular products or services, if there are any;
- **Placement in the mobile advertising landscape:** the role of the company in the value chain of mobile advertising industry is highlighted;
- Trends and issues emerged: in this sections are explained the main reasonings of the company about topics such as initiatives related to innovative formats, management of attribution models' issues and external data purchase and adoption. In particular, from the innovative formats point of view 360 Videos, Chatbots and Augmented Reality ads took a leading role, while as regards attribution models the issues related to better attribute users' conversion in order to give mobile devices the right importance in the purchase process of consumers emerged. Lastly, it was investigated the utilisation of data when planning campaigns and which kind of data among the available are usually purchased and used;
- Future scenarios and barriers that prevent an even higher growth of Mobile Advertising: in this sections companies were asked about the plans for the incoming year, how do they perceive the industry and the direction it is following, and the barriers that still exist and have to be overcome.

4.2.3 Track of interviews

Here, the principal topics of discussion faced during telephonic interviews with players belonging to the industry are listed.

• Corporate profile

- Core Competence and structure of the Digital offer
- Organisational structure
- Geographical markets in which the firm operates
- Positioning in the Mobile Advertising environment and relationships with other players
 - Relationships with other players in the industry, customers and suppliers
 - Observations about the evolution of the industry

• Strategies regarding Mobile activities and new trends inspection

- Characteristics of the offer
- Objectives of Mobile channel
- Innovate capability of the offer
 - (a) New formats
 - (b) Attribution models
 - (c) Data utilisation for planning
- Dedicated resources for Mobile and Digital channels
- Results achieved in Mobile scope
- Competences developed and to be acquired in order to operate successfully in the industry

• Future perspectives

- Planned strategies about Mobile
- Trend of development within the industry
- Barriers to overcome

Chapter 5

Result of the empirical analysis in italian market

This chapter presents the main findings of the interviews to italian companies both on the supply and the demand side. In order to provide a more precise view of the Mobile Advertising environment, all the information and insights gathered during interviews have been divided according to both the side (demand vs supply) of the companies involved and the key issues explored.

In particular, information were clustered according to the following topics:

- Trends foreseen
- Formats
- Data
- Programmatic adoption (for supply side companies)
- Industries which invest more in Mobile Advertising (for supply side companies)
- Barriers

5.1 Supply side

5.1.1 Formats

The general situation sees an overall growth of investments on mobile advertising across the industry, according to different creatives and formats. Companies indeed are focusing at first on traditional formats, which once were conceived to be delivered on desktop and then adjusted for the delivery on mobile screens; the struggle here is to better distinguish between desktop creatives and mobile ones, or at least to decline in an optimal way formats born for desktop, by avoiding to merely reproduce the same ads on both the screens, together with the realisation of creatives that did not exist on mobile channel.

Videos, for instance, are the main tool companies are leveraging on, as the audience is more and more used to access to video contents in their online experience: with traditional instream videos, too, the effort is aimed to not employing the same ad built for television or desktop (for instance, the traditional TV ad for Automotive companies) on mobile, but rather to adapt it to better fit the features and characteristics of such channel, whether by reducing the length of the ad or reshaping it to better fit the screen.

Most of the players quoted native format as one of the most effective when it comes to mobile environment, even more performing than in desktop ones: usually they are videos or pictures together with text which camouflage themselves among contents and don't worsen the user experience.

Companies are more and more experimenting also new formats in order to improve the engagement of users, even if most of them are still in test phase, with limited investments; Videos lead the charge in this sense, with many innovations such as 360 videos, which in some cases are put inside standard banners which expand and show the video content, even if in most cases experimentations occur in Facebook and Google properties; furthermore, they can result in being quite hard to implement, since they have to be conceived and declined with an ad hoc mindset, while many companies just adapt the typical desktop ad to fit mobile screens without the "mobile first" logic.

Some sectors seem to better match with the features of 360 videos, like travel or automotive.

The same reasoning can be applied to vertical videos, which are being developed and tested and in some cases proved to carry with them better performances with respect to standard videos.

An interesting example in Italy is the so-called snack-ad on Snapchat, which is basically a vertical video that interrupts the story and lasts 10 seconds, plus involving a successive call to action.

Generally speaking, both 360 and vertical videos are deemed very interesting formats and most of the players are convinced they can represent effective tools in the future: at the moment being, they still imply some issues related to the fact that they have to be conceived as ad hoc mobile formats, bringing with them the amount of dedicated efforts in terms of

design and realization costs and of coordination problems within internal teams of companies working on them.

Augmented Reality (AR) is another stream that is seen with high interest. It is interesting tough to notice that according to many companies on the supply side, the success of ads that rely on this promising technology depends on the availability and the easiness of tools able to read AR formats. At the moment being, indeed, one has to download a specific app in order to be able to read and explore AR content, but if, for instance, in the future OS owners will start to have built-in solutions without the need for a dedicated app, possibly the technology will spread more and at a faster pace. And it seems that Apple is moving towards this direction.

What prevents today companies to invest in AR are cost- benefits trade-offs, because today it is still costly to access this technology, suppliers of such formats ask for much money, and unless one has specific experimentations that involve AR in mind, this translates in a too high barrier.

However, many players interviewed agree on the fact that it is possibly a matter of time, for the engagement level of such solutions is so high and promising: it is just necessary to wait until the costs to access the media decline sensibly.

Few evidences emerged as regards chatbots, which are seen by many players as good experimentations, nice and innovative, but really hard to implement and to be effective as an advertising vehicle. Formats that rely on geo-localization, instead, are already utilised not only in test campaigns, but in real cases which exploit the drive-to-store effect.

Other formats that have been listed by a lesser amount of players on the supply side include campaigns where KPIs are different from traditional ones, like the number of shares on Whatsapp: an example was a campaign where a coupon could be shared to other people in order to get more rewards. The focus was not to impact negatively on the user experience, thus users had to do so on a voluntary basis in order to create a better engagement level.

Such KPIs are able to capture the effective ability of the ad in creating engagement such that users perform a certain action; the measuration takes place by monitoring the "Share" button on the ad, with a high number of shares meaning an increase in brand awareness. Possible benefits include the larger reach of users due to shares on social media and the potential higher number on clicks to the brand's website.

Another interesting formats that is gaining momentum is the push notification; they are being employed because they possess characteristics that many players find useful: the most relevant ones consist in the fact that they are related to contents user read, can be integrated with data such as geo-local ones, thus creating a notification that is only sent when a user passes within a certain area and they are not intrusive and don't slow down the navigation. Those reasons, together with the fact that app owners usually have far more data about users than cookies, lead to high click rates and retention rate. Moreover, the time span within push notifications are usually read (few minutes or even seconds) makes them attractive for a drive to store campaign too.

5.1.2 Data

The interest around the data is more and more a trending topic, there is an enormous curiosity, since everybody started to perceive the potential data can offer, being personal, having in some cases higher certification characteristics than cookies and allowing to have more possibilities in data-driven planning, both in mobile-only and in cross-device perspective.

Still, often occurs that the potential is recognized but how to exploit it is unclear, there are not many practical cases one can learn from and advertisers have to figure out how it works by themselves; moreover, in Italy there are not many platforms with a lot of data available, so the fact that one has to rely on more than one Dmp increases complexity of the process for clients.

Furthermore, another interesting fact interviews highlighted is that companies are more and more shifting from gathering lots of data to being more careful and selecting data which have a certain level of quality, in order to better build profilation of users; advertisers in some cases tend not to acknowledge the value added those high-quality data bring with them and are not willing to pay higher prices for such data, but the general trend goes towards clever plannings and data-driven campaigns that usually lead to better results than traditional ones.

Another important issue is related to the fact that one has to distinguish between data in-app and browsing: in an App environment it is possible to gather a lot of information which are then associated to an ID that differently from cookies is not eliminated after a while, persists for long time, and this allows more precise analysis and clustering activities.

This actually implies a privacy issue, and the new European regulations which will apply in May 2018 goes in this direction: it is still unclear how this will impact on mobile data world but it is for sure an issue players are looking with interest, especially the ones which collected a huge amount of second-party data that are trying to figure out how to face the changing regulations.

As regards which typologies of data are more requested by companies, players on the supply side agree and identified the principal ones.

Among available data, *socio-demographic* ones play a relevant role, for several reasons: first, many companies plan from a TV point of view, especially on the Video side, and one of the first objectives is not to disperse the advertising investment by delivering out-of-target impressions; then, are used for creating home targets and give the possibility to be certificated and used in campaigns post-evaluation estimations.

Besides socio-demographic data, a common approach among supply players involves the exploitation of the peculiarities mobile devices offer: in this sense, *geo-local* data allow to rely on one of the main features of smartphone, specifically the possibility to reach the user in the place where he is, trying to define "micro-moments", the right moment and place to convey the advertising message.

In this direction goes the utilisation of geo-local data for peculiar types of campaigns, such as the drive-to-store campaigns, able to reach users with ad-hoc promotions and stimulate users to visit physical stores, and this applies not only to customers or prospects in the surroundings, but even to users who used to frequent that store and in the moment of the delivery of the campaigns aren't close to the stores or who are next to competitors' stores.

There are DSPs which are able to divide the Italian territory in 100m² squares and to put inside such squares all information belonging to Istat, motorization or land register, which are shown to clients in order to show which level of detail can be reached.

Another category of data that is gaining momentum are the *geo-behavioural data*. Usually whom to reach in a campaign is defined, but not anymore in terms of age and gender, rather in terms of interests and contents and webpages visited. In this perspective, geo-behavioural data fit well with Go to store campaigns because allow to analize what is happened before the campaign in terms of visits to stores.

Brands are more and more interested in the Go to Store approach, meaning the strategies undertaken to convince potential customers to go to stores and events; by exploiting GPS technology, one can create samples of users which are then exposed to a campaign: after that, one can measure the effectiveness of the ad by checking the relative frequency with which users belonging to the samples go to the store promoted with respect to the others.

Data related to interest, like the ones listed above, but also related to which apps are installed in users'devices; or the expanding topic of analytics in-store, which include solutions that map the behaviour of users connected to a store's Wi-fi network in order to get insight about how customers behave inside stores (for instance, in front of which shelves do they stop for longer time, in supermarkets) and acquire new first-party data.

5.1.3 Programmatic adoption

As regards programmatic, it sees an increase of investments that rely on it, but rather than being an exclusive Mobile phenomenon, it proceeds in a parallel way both on Desktop and Mobile: in Italy programmatic is seen as something that enables to optimize costs in a crossdevice logic.

Players on the supply side witnessed that programmatic is nowadays an essential element for most Brands and represents integrant part of planning; how to decline and harmonize it with live campaigns depends, there are actors who go in parallel with different strategies adopting both live and programmatic approaches and others who undertake a full programmatic campaign.

5.1.4 Industries which invest more in Mobile Advertising

Last year saw a relevant growth of the retail industry and in particular of the GDO, since the interest towards geo-localized campaigns and the Go to store planning is rising among such players; this involves also the use of geo-local data for monitoring and delivering messages within the stores and not only outside; in terms of formats, retailers are interested above all in video, which is then declined in different categories.

An industry which has started to undertake investments and possibly is more interested in Mobile Advertising than last years is Fashion, which was almost completely external to such marketing and promotion channel but in 2017 approached it, even if the size of investments is not comparable to the other industries which rely a lot more on Mobile ads.

Besides this, traditional industries such as Telcos, Automotive and Finance maintain their importance and are consistently growing, especially when it comes to Native and Display campaigns.

In terms of objectives of campaigns, all players interviewed reported that the highest percentage of companies'investments are put in branding campaigns, since the performance side is still seen as less effective than its counterpart on desktop; however, there are specific performance strategies, for instance based on the Cost per Install, and in general the sensation is that this component is growing too. It actually depends also on the format used: campaigns that rely on videos are more likely to have a brand awareness purpose than display ones, with industries like Fashion and Luxury that heavily aim in this direction.

This topic is particularly relevant at a Global level rather than at the Italian one. It consists basically in some fraudulent practices, from selling impressions generated by non-human traffic to pretending that spaces on low-quality websites are premium positionings, with the consequent costs, to the acquisition of spaces in non-compliant websites, to even more subtitle activities like selling multiple ads on a website for a given spot, where all the ads are placed there and generate impressions when people view the page, but since the ads are stacked only the top one is visible.

The common consequence is that advertisers start to lose confidence towards purchasing ad spaces.

In Italy this phenomenon is less perceived since the majority of actors who buy from Facebook and Google are not that aware about where their ads actually are put, together with the fact that many players equipped themselves with Fraud Detection systems.

Worldwide, clients complained about the fact that Google purchased spaces on noncomplaint websites and the OTT had to resume them.

5.1.5 Trends foreseen

As regards new trends that are starting to show up in 2018 and that companies foresee to be relevant, one relevant issue regards data and their availability. It emerged, indeed, that players belonging to supply side are worried about data quality, which can prevent advertisers to invest more money on the digital channel: this is caused by the fact that currently there are plenty of data that can be purchased, but most of them have poor quality. However, many companies agree that in 2018 the shift towards the "buying users" rather than "buying traffic" mindset will keep going, and the sensation is that there is more attention and a higher demand for data when it comes to planning.

Besides this, another big thing that companies need to focus on is creating and promoting formats that flow in a natural way on mobile and respect the user experience, exalting at the same time the features of mobile devices: the approach is changing, from recreating and adapting for mobile formats that are originally conceived to be delivered in Television or PC to the need for new formats which fully exploit the media, such as, for instance, geolocalised campaigns which are based on "micro-moments" meaning the right users at the right time in the right place, and the possibility to understand users and their preferences based on the places they usually frequent: this possibility is given only by mobile. This implies also the possibility of a new paradigm in terms of targetization and profilation, based on users behaviour and specific locations that allow to portrait a digital identikit of the user.

Formats, moreover, need to adapt to the new standards that the Coalition of Better ads defined as intrusive ones, already starting to block them in its browser Chrome from 15th of February 2018. The consequence is that creators will have to focus on formats that aren't intrusive and don't interrupt the user experience, not only because such formats are less and less effective but also because there is the real possibility that some of those will be banned by Google. This trend sets a threshold on the freedom to develop new formats and defines rules to be followed.

Another interesting hot topic emerged as a trend companies are foreseeing is the issue of attribution. There are two main streams in this sense: the first one regards the cross-device attribution, meaning the role mobile plays in a conversion finalized on desktop channel but

heavily influenced by advertising campaigns delivered on mobile devices; the struggle here is to design solutions able to track users when they "jump" from mobile to desktop for the purchase; the secondo ne consists in the online-offline attribution, meaning the contribution mobile provides in acting as a "bridge" by pushing users towards the physical store. Thus, rather than traditional last-click models, the focus is on the creation of new multi-touch models which allow to better define what actually works in order to make marketers more aware and willing to effectively invest their budget. Such models, furthermore, are being developed with clear in mind the goal of including the possibility to optimize in-flight with predictive attribution tools.

Players interviewed agree on the importance the trend of attribution represents, since precise attribution models:

- allow to keep track of users from a device to another, enabling a deeper understanding of the role mobile has in the purchasing process (for instance, the Last Click model doesn't recognize any value to mobile for a user exposed to a mobile campaign who eventually purchases on desktop, whereas by using attribution models a share of the campaign's budget is attributed to mobile);
- allow to verify the effectiveness of campaigns, in situations where users see ads on mobile and thank to geolocalization one is able to understand whether they actually go to the physical store and how long did they stay there.

Understanding the importance of mobile even when it doesn't lead to direct conversion will represent for sure a driver for the growth of investments on such channel.

5.1.6 Barriers

The principal barriers to overcome underlined in the interviews can be synthesized as follows:

• Formats: the fact that the space available on mobile devices is less than desktop leads to lower levels of freedom when designing formats and, above all, implies the issue of the invasiveness of formats. Solutions that can be

considered impactful and engaging on desktop can result in being intrusive and ruining the user experience in a website, for example by slowing down the loading of pages or hiding the editorial content. This brings with itself the Adblocking issue, which seems to assume a very limited dimension in the Italian context but is gaining importance worldwide.

This topic represents a problem that limits the involvement of players towards mobile but it actually can represent an opportunity too, since can lead to the design and creation of formats which are conceived to live exclusively on mobile, thus being innovative, fresh and involving for the audience. Thus, the issue can be overcome thanks to a mindest's shift from creators of formats and players who should approach mobile creativities in a different way than desktop ones;

- Acknowledgement of Mobile potential: in the Italian environment players are not perfectly aware of what Mobile can offer. The players in the market which adopt the Mobile-only or the Mobile-first logic try to evangelize around, but since they are the minority, the mindset of merging mobile with desktop in a cross-device strategy, where mobile is just a complement in planning, still holds;
- Certifications: the majority of investments are headed towards mobile browsing rather than in-app, where actually users spend most of their time. The reason consists in the difficulty to cope with the main problem related to the in-app environment, which is the lack of official certifications, which are instead available in the web browsing context.

Last year more and more players signed partnerships with companies whose core business is to track in-app traffic (Moat, Integral Ad Science), but since defined and univocal standards have not been determined, results of a campaign measured by different actors are different. The same problem persists for post-evaluations too, which have not performed further steps. The key here can consist in a higher degree of standardization of measurement approaches which will lead to more clever plannings from advertisers and more bargaining power in negotiations on the supply side;

• Creativity approach: in the conversion funnel and in particular in the last steps a great number of variables have to coexist, and this represent a limitation for mobile, given for instance by the dimension of the screen or the number of fields one can see. This is particularly true in the Finance industry, which is a high-growth market that invests in Mobile Advertising and sees difficulties in completing the last steps of the funnel by mobile: players interviewed suggest that this last passage (the conversion) should be made more fluid to be performed on mobile.

• Attribution models: the issue of attributing to mobile the right role and value it has in the conversion process of users is particularly relevant; at the moment being, no adequate models which allow to track the activity of a mobile campaign and to link it with the subsequent desktop activity users perform have been built, and this leads to a big loss of information about lead generation.

Currently only big players like Facebook and Google, thanks to their huge availability of data which allow them to apply deterministic models, offer solutions that are appreciated by most brands; statistic methods, which are often offered by other players, result in being not enough accurate, implying the risk that the mobile contribution is seen low and not relevant only because of the impossibility to obtain a precise matching between the mobile user and the one who has completed the conversion on desktop.

• Fake traffic and Ad Fraud: This topic is particularly relevant at a Global level rather than at the Italian one. It consists basically in some fraudulent practices, from selling impressions generated by non-human traffic to pretending that spaces on low-quality websites are premium positionings, with the consequent costs, to the acquisition of spaces in non-compliant websites, to even more subtile activities like selling multiple ads on a website for a given spot, where all the ads are placed there and generate impressions when people view the page, but since the ads are stacked only the top one is visible.

The common consequence is that advertisers start to lose confidence towards purchasing ad spaces.

In Italy this phenomenon is less perceived since the majority of actors who buy from Facebook and Google are not that aware about where their ads actually are put, together with the fact that many players equipped themselves with Fraud Detection systems. Worldwide, clients complained about the fact that Google purchased spaces on non-complaint websites and the OTT had to resume them.

5.2 Demand side

5.2.1 Formats

The majority of brands approach mobile campaigns with a multi-platform strategy, meaning that usually the big distinction is made between digital and offline formats, the former ones being similar in terms of content and format used between desktop and mobile devices.

Thus, when planning digital advertising campaign, the ad is created and then adapted according to the device: the same ad could be cut and adapted to be better delivered on mobile, whereas on desktop it will be longer and customized for desktop fruition;

the "matrix" ad, however, is usually the same. The main reason for this approach could consist in the fact that many companies still don't conceive mobile channel as worth to build dedicated formats on, since in many cases they don't lead to high results in terms of conversions, whereas the creatives used for desktop usually perform good in that sense.

Though, there are cases in which brands build dedicated mobile campaigns, when willing to promote specific initiatives or to leverage on peculiarities of the device, such as geo-localized campaigns in order to activate the drive-to-store effect.

360 Videos, emerged from many interviews, are seen as beautiful and immersive formats, but at the same time not that effective in terms of performances: they are perceived as useful in terms of brand awareness rather than lead generation and performance in terms of clicks and conversions. Moreover, brands are concerned with the fact that 360 videos are particularly expensive in terms of data consumption and this can lead users to run out of Gigas thus frustrating the efforts made.

Chatbots are considered generally interesting concepts, but are perceived more helpful in terms of customer care and after-sale services rather than being effective advertising tools; that's why most of the companies haven't joined the bandwagon of chatbots and are reluctant to do so.

Besides this, companies are growing their presence on social networks by creating contents and running beta campaigns with innovative formats, but the base must be solid. The problem with new formats like 360 videos, chatbots and vertical videos is that they don't ensure higher performances, even because at the moment being few experimentations were made by the majority of companies, while some less innovative but dedicated ones like rich media usually achieve good results and are adopted largely by brands.

However, there are still companies which usually take traditional television ads, cut and edit them in order to be run on mobile devices, without focusing on ad-hoc solutions in terms of formats. This is particularly true as regards ads on Youtube, which usually sees the same spots that are broadcasted on television.

5.2.2 Data

This topic sees many companies asking for different typologies of data to be crossed and mixed in order to create segments, rather than focusing on specific types of data.

The effort is thus aimed at creating profiles which result from the matching of data and are closer to the target brands are trying to reach.

So, for each product, an associated profile of a potentially interested user is created: for instance a young man, with a strong taste for aesthetic and recently graduated fits well with a certain typology of car; this leads to the purchase of a mix of data that allow to construct the profile.

However, some categories of data are more used than others, generally in specific campaigns which exploit their peculiarities: geo-local data, for instance, are usually involved in drive-to store campaigns, allowing ads to indicate to users the nearest brand's store. This strategy can be employed in search campaigns too, with insertions pointing out the location of the closest point of sale.

Another application of geo-local data is the proximity marketing approach, which can find fertile ground on industries like great distribution and large department store, since addresses people within a defined area.

Some companies actually opt for a different approach: they rely on users which have been on their websites for prospecting purposes and create "look-alike" profiles, which are then addressed by advertising campaigns; or they simply base their targeting on Facebook, which is asked to provide users'profile that can be potentially interested in the products offered by the brand.

Moreover, some brands are pushing towards the creation of a proprietary Dmp deriving from merging data already available in Crm with third-party data purchased by sellers, while some others have already managed to build their own platform and are undertaking projects for defining cluster targets per each product type, resulting in a profiling on the reference profiles of the targets within the Dmp.

5.2.3 Trends foreseen

Companies on the demand side pointed out some different logics that they foresee the industry will follow in the incoming year.

There is a widespread belief that before undertaking new experimentations with new formats and engaging creativities the industry will make significant efforts towards the resolution of some problems which at the moment being are slowing down the development of Mobile Advertising, such, for instance, the issues of viewability and in-target, since viewability is a metric that suffers from a lack of standardization, with different players stating that an ad is viewable according to evaluations that are not homogeneous among them. The in-target issue refers to the fact that it often occurs that when one measures the effects of a certain campaign there are still many impressions that are delivered to targets that should not be involved in the campaign, since are not of interest for the advertiser.

Furthermore, brands are more and more concerned with the Brand safety, also considering what has occurred in 2017 with an Over the Top delivering ad contents in non-compliant websites; not only the Web is more and more crowded but it is more and more full of contents that potentially can affect brands, their value and reputations.

Some brands are instead focusing on Amazon, by applying on the search side similar reasoning than the ones they apply with Google Search, but recognizing the different behaviour people have on Amazon with respect to Google.

Not many companies have started to rely on the Amazon channel but the ones who recently tried it saw significant results with increase in sales which led to increasing the investment dedicated;

moreover, there are particular events like the Black Friday by Amazon that led to impressive results for companies who joined the bandwagon. In general, the trend for 2018 consists in the fact that the overall digital share of investments is growing, but the one headed to Amazon is more than proportionally growing, meaning that more and more brands are acknowledging the potential it can represent in the near future.

As regards specifically the app environment, a growing trend consists in saving offline data in order to be able to use apps even when one is offline: Google Maps started last year by enabling the download of maps to be used offline, but this phenomenon is now taking place in many applications, since this possibility is seen by brands as the actual element that can differentiate an app from a mobile website. Companies owning an app are convinced that this trend will give new life to apps that recently ended up being inactive on users'phones, as experimentation confirm the value users attach to this opportunity.

Last but not least, brands pointed out their interest for mobile as a solution for covering the last mile, meaning understanding whether the user actually goes in the brand's store after being exposed to a mobile campaign. The interest is twofold, including not only the strategy to undertake, but also how to analize effects with tools able to give deeper insights with respect to impressions, clicks and time spent on a page.

5.2.4 Barriers

There are some issues that were pointing out and emerged during interviews: the first one is related to the lack of qualitative formats with respect to other channels. The fact is that at the moment being there are many innovative formats which are beautiful but underperforming, and this limits investments on mobile. Companies agrees on the fact that when new effective formats will born, mobile channel will become the most important marketing mean as audience and traffic is constantly shifting towards that direction.

For now, brands invest on mobile campaigns with a brand-awareness aim, in which such channel is useful and performing, and prefer to reserve performance campaigns (aimed at conversions) for other channels, such as desktop.

The second issue regards the percentage of fraudulent clicks and fake traffic that go on brands' websites, which are still difficult to identify and lead to huge loss of investments: the problem will persist until a reliable solution is designed, that will allow to have a boost of trust towards investing on mobile.

Besides those problems, the issue of viewability measuration, meaning the lack of standardization in the supply, is perceived, together with the in-target case: still, many players when measuring effects of campaigns record impressions delivered out of the theoric target of interest.

Chapter 6

Conclusions

This last chapter derives some final considerations about the main themes explored in these work of thesis, in order to spot, where present, concordances and/or discrepancies between what emerged from the analysis of literature and the interviews to actors operating in the italian ecosystem.

Mobile advertising market, as highlighted by findings showed in previous chapters, proved to be a consistently growing industry:

the diffusion of mobile devices and the shift of audience towards mobile contribute to the growth of investments, both at global and at italian level; the number of innovations as regards formats is high and many player continuously try to innovate, especially if one looks internationally.

In this section the focus is specifically dedicated to formats considered innovative, like chatbots, 360 videos, augmented reality ads and all the types studied in previous chapters, focusing in particular on the italian situation when it comes to this topic.

Videos stand in a more and more dominant position: this is also due to the fact that online content is shifting to video, from the enormous success Youtube has achieved to the high share of video content on Facebook over total content; it is relatively easy, in such situation, to rely on pre-roll, mid-roll or post roll ads, or even to test innovative formats.

Vertical videos are something international actors are more and more interested in, given also the fact that key players like Facebook and Snapchat are updating their contents based on this new trend; the issues in Italy are that not all the creative agencies make them available (but this is a problem that can be overcome in a relatively small amount of time) and it is necessary to conceive them as ad hoc content rather than re-adapting the traditional TV spot for mobile. Oustream videos can represent an effective tool for planning and delivering campaign based on video, thanks to the possibility to be inserted and delivered on most websites and not necessarily on video-player websites; they indeed enable to access new possibilities and new publishers rather than the most important video streaming services, making it possible to diversify the investment made on a campaign.

As regards 360 videos, there are some issues that prevent their diffusion among italian companies, being first of all the concern about the consumption of data a 360 video implies for the user. Moreover, it has to be considered that at a global level 360 videos are in their early stage too: Google itself has undertaken an experiment to see whether performances such format brings with itself can overcome those of traditional videos, and results were actually not clear: where interaction level and shares overperformed standard videos, there was not a clear winner when it comes to view-through rate and no clear evidences demonstrate that 360 videos can be better for generating conversion. Italian players share the same sensation, as many of them perceive it as a great tool for creating brand awareness and engagement, but not from a performance-based campaign point of view.

Similar reasonings can be applied to Augmented Reality: whilst being immersive and engaging, they result being hard to be implemented and no evidences about superior performances emerged. Augmented Reality ads are facing different issues, both internationally and globally: internationally speaking, there is an argument related to the awareness users have towards such technology; some researches found out that people still don't know this format really well and are not aware of the concept, so it becomes hard to plan a campaign based on Augmented Reality.

In Italy other issues involve the barrier related to costs for creating a dedicated AR ad, since developing it requires a great amount of resources which prevent many players to invest on it.

Some companies pointed out the lack of easiness of reading AR ads of many smartphones, which at the moment being need to download a specific app for interacting with them: the diffusion of technologies within Operating Systems capable of reading AR ads, together with the decline in the costs for implementing campaigns based on them, can lead in the future to a massive growth of investments dedicated, both worldwide and specifically in Italy.

Chatbots are another interest field of investigation: thanks to the possibility to interact in a tailored way with each customer, to learn from the past interactions and to advertise products based on each user's preferences they are perceived as powerful tools, capable of building a one-to-one relationship and collecting data about users'interests and habits, and furthermore reinforced by good results in terms of CTR they proved to imply with respect to means such as mailing lists, some companies already started to invest towards chatbots, at least internationally. On the other hand, if one looks closer within the italian environment, the perception among many players is that chatbots can become an effective tool for strengthening the relationship with customers and improving after-sale services rather than for delivering advertising messages.

This section describes in a qualitative way, for each format, the degree of interest they generate among advertisers and actors at global level, versus the degree of technological maturity each of them has reached at the moment being, based on the review of literature. Besides each point, comments about the specific italian situation, if different from the global one, are provided. A graph then shows in a visual way the interest and the technological maturity for each format at global level.

• Outstream videos are gaining momentum among advertisers worlwide since they encompass some benefits, such as the fact that they allow to expand the reach beyond video plyers, they are set to play when they are 100% in-view and they are natively put in the flow of editorial content, resulting compliant to the issues of intrusiveness of formats.

Teads, who invented them, is already working on variations of outstream videos for making them more attractive, but at the same time they are still offered by few players and adequate KPIs for them are lacking. *Degree of interest: medium/high; degree of maturity: low/medium.*

Italian situation: few of actors interviewed quoted them as something they are working on, even if videos in general are seen as the most interesting field of exploration, as the audience is more and more involved with video contents.

• Vertical videos are deemed interesting by many players, since they are considered more adequate than horizontal ones for mobile devices, they are not intrusive as users don't need to rotate their phones to watch them and big players like Snapchat and Instagram are focusing on them; many players are already testing and using such formats in their campaigns, even if its diffusion is not that widespread within the industry. *Degree of interest: high; degree of maturity: medium.*

Italian situation: vertical videos are deemed very interesting formats and most of the players are convinced they can represent effective tools in the future: at the moment being, they still imply some issues related to the fact that they have to be conceived as ad hoc mobile formats, bringing with them the amount of dedicated efforts in terms of design and realization costs and of coordination problems within internal teams of companies working on them. Some experimentations are already being performed however, such as the snack-ad on Snapchat, which are basically 10-seconds vertical videos that interrupt the story and involve a call to action.

• **360 videos** are in their early stages; however, the fact that players like Facebook are investing on them, making them available as accepted formats pushes a lot of interest towards them; furthermore, the Google Experiment showed in Chapter 3 leads to confidence and optimism about the performances this format can achieve, and this can generate a fast developement of 360 videos made by other players who, based on the successful OTT's test, will follow suit. *Degree of interest: medium/high; degree of maturity: low.*

Italian situation: they are considered interesting by most of the companies on the supply side, while advertisers are a bit concerned about the effectiveness of such format in terms of lead generation and conversion, even if they truly believe 360 videos can be very useful when it comes to engagement and earned actions like shares on social media. At the same time, from a technological standpoint, most advertisers and players on the supply side agree on the fact that 360 videos are burdensome in terms of resources needed for building them and of mindset necessary in order to conceive them, making them among the most difficult formats to adopt in a widespread way.

• Push notifications are a promising stream, since they possess characteristics that advertisers find useful and interesting: they don't interrupt online activity of users, they are usually read far more than traditional e-mails and they include the possibility of integration with geo-local data for Geofencing activities. At the same time they are still not conceived as a pure advertising mean, as many times they are employed in a Mobile Promotion and Service logic, in order to push towards app retentions, for instance. The result is that there are not many examples of push notifications used as the main tool of a mobile advertising campaign, since the demand on brands'side is currently lacking. Technologically speaking, there are no issues preventing their diffusion among players, and they are being constantly improved with the use of data, making them an already reliable tool. *Degree of interest: medium; degree of maturity: high.*

Italian situation: players in the italian environment share the overall global consideration about push notifications, adding that with the fact that app owners usually have far more data about users than cookies, they can lead to high click rates and retention rate. Moreover, the time span within push notifications are usually read (few minutes or even seconds) makes them attractive for a drive to store campaign too.

• Audio advertising is gaining importance thanks to the rise of platforms like Spotify and the diffusion of podcasts as means of information for users: at a global level, they are seen with interest because they do not need the user to actually look at the screen when the ad is playing, they create a sense of intimacy as they are perceived as personal and are not interested by issues like viewability, ad fraud and adblocking, and they are not skippable, too. *Degree of interest: low/medium; degree of maturity: high*

Italian situation: No evidences about a particular interest towards them emerged by interviews in the italian ecosystem.

• Chatbots are still in their early stage, both at the italian level and globally: many companies need to define for which purpose a chatbot could be useful, and many of them see chatbots as effective tools for customer relationship management and post-sale service rather than for advertising; at the moment being, there aren't a fair amount of relevant examples of chatbots used as main drivers for mobile campaigns, even if Facebook is focusing on them by introducing lots of bots in its Messenger application. The sensation is that this format is just born and is not mature both from the possible uses and from the technological development standpoint, but in few years chatbots will be likely to play a more relevant role in the industry, given also the shift towards the messaging Apps that Millenials and the Z Generations are carrying forward. *Degree of interest: low/medium; degree of maturity: low*

Italian situation: both on demand and supply side companies share the convinvtion that chatbots could be useful for other purposes than advertising, and the lack of relevant international examples reinforces the scepticism in this sense.

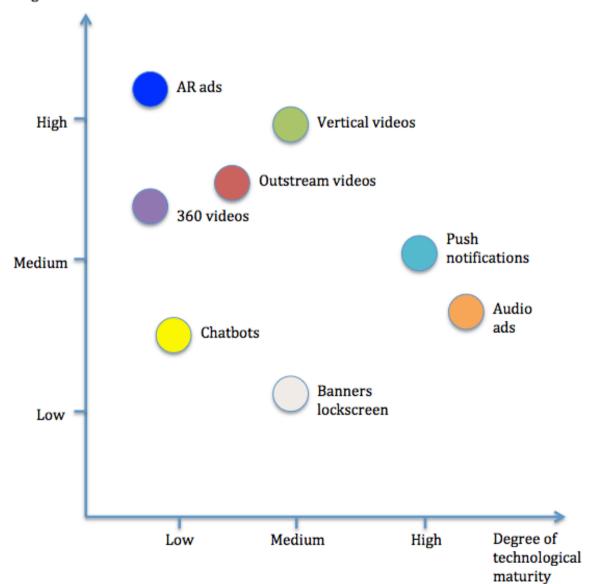
• Augmented reality ads lie in a peculiar position, since globally their degree of novelty, the level of engagement they imply and the effectiveness they could have for advertising are widespread recognized, to the point that many executives are convinced that AR ads will represent a breakthrough innovation that will change the advertising market in the next years; besides this huge level of interest, however, the technology is still in its beta phase, meaning that many experimentations are still needed. Indeed, even the audience knows a little about what actually are AR, as showed by the YuMe research: just 8% of internet users polled in August 2017 by YuMe said they used Augmented reality, while only 25% of the respondents were even aware of the concept of AR.

For now, dedicated apps are necessary to read AR messages, and brands are facing a too high costs-benefits trade-off, as developing AR format is still too much costly. Companies are waiting for the improvement on technology's side for joining the bandwagon, which is in any case seen as very promising. *Degree of interest: high; degree of maturity: low*

Italian situation: AR ads are maybe the most promising format in terms of engagement and italian companies are strongly interested, even if they share the same concerns about the costly implementation and the premature phase of the lifecycle of this solution.

• Banners lockscreen are maybe most recent innovation, to the point that literature hasn't provided articles and researches about the topic yet, and there are few companies that leverage this format as their business model; however, given the growth of some of them, like Unlockd, it seems that this new way to advertise can be deemed interesting for brands as the knowledge of it will get more widespread. At the moment being, few brands are even aware of the existence of banners lockscreen. As regards technology, it seems that no issues prevent the format from further diffusion. *Degree of interest: low/medium; degree of maturity: medium*

Italian situation: no players quoted banners lockscreen as something they are studying and are interested in.



Degree of interest

Figure 46 - Degree of interest vs degree of technological maturity of innovative formats

The sensation is that the italian mobile advertising market can grow even at a faster pace than at the moment being, just by removing barriers quoted by most of the players interviewed: some could be matter of time, an example being the process of "paradigm shift" some brands and creators need to achieve when designing mobile ads and campaigns, starting to conceive mobile as something unique and different from desktop and adopting the mobile-first approach: mobile should not be viewed as a complement for the overall digital campaign, but as a channel in which is worth to invest dedicated energies and concepts. However, this translates not only in ad hoc investments, but also in a choice of formats and creative effective for the mobile channel when planning multi-platform campaigns, since most of the visualizations of ads are currently occurring on mobile devices.

Some new formats could be actually able to help overcoming such barriers: 360 videos, for instance, allow to keep track of the interaction occurred between users and the ad, providing feedbacks about the degree of interest toward it and helping in better measuring the impact of a campaign, by yielding a new metric besides the traditional ones which are not always reliable; or, again, chatbots used as advertising tool could provide further information related to the number of users actually interacting with a chatbot put inside an ad, or even to the average lenght of the interaction in terms of time and messages sent and received.

Furthermore, many of the innovations in terms of formats are going in the direction of resulting not intrusive at all, struggling for overcoming the barrier related to the difficulty of delivered ads that are particularly effective in a desktop environment but turn to ruin the user experience in a mobile online activity: if one thinks about vertical videos, since they are conceived to be seen without rotating the device, they are less intrusive than their horizontal siblings, which would require users to tilt and rotate their smartphones; push notifications are born to deliver the same message a traditional format would do in all but an intrusive way, since they don't interrupt navigation and don't cover relavant content on websites.

At the same time, more "heavy" formats in terms of data consumption and overall effort for being properly enjoyed, such as 360 videos and AR ads, could result in affecting user experience and being not compliant to limitations imposed by the Coalition for Better Ads: the issue here lies in understanding whether such innovations will be able to generate enough interest among users to overcome the worsening of navigation: the sensation is that the degree of novelty of such formats, confirmed by the fact that many people still don't properly know what is the difference between AR and VR and there is still much uncertainty about those new technologies, will act as a boost for interest that will allow to overshadow the issue of intrusiveness, at least on users'perspective. Moreover, most of the other new formats can play a role in this sense, as they promise to be engaging and interesting and have all the characteristics to be perceived by users as not intrusive at all, being able to overcome the blocks imposed by the Coalition on the formats deemed least preferred by users.

Besides all the opportunities new formats imply, it is also worth noting an issue that links them all and represents a brake to investments: they all require ad hoc efforts in terms of mindset's shift, economic investments and human and technological resources.

Indeed, many companies still conceive advertising on mobile as complementary to desktop and don't invest on dedicated creatives; in order to realize such new formats, though, it is mandatory to conceive them to be exclusively distributed on mobile devices, leveraging on their peculiarities and features, since they result being mobile-only ads in most cases.

Most innovative technologies, moreover, are costly to build from a company's perspective: if one thinks about the effort needed for realising a single 360 video ad, with shots from different angulations to be merged together, or the amount of time and money an app for reading AR ads requires to be developed, it comes easy to understand how the diffusion of campaigns based on such technologies will be strongly affected by the reduction of implementation costs that likely will take place.

Data, in this context, can help overcoming the issue of efforts needed and unclear results of campaigns based of innovative formats: the growing availability of data, for instance geolocal or behavioural data, to be integrated with campaigns leads to the possibility to have more metrics and quantitative insights about the effectiveness of such campaigns, thus providing useful feedbacks to companies that will be better able to decide whether to dedicate resources to certain solutions or not

The so-called Over-The-Top, entities that concentrate most of the investments in the industry and are able to strongly have an impact on the industry's rules with their decisions (Facebook, Google are the most notable ones), will have a role too in deciding whether and at what pace such innovations will develop in the next future: besides being very powerful players within the market, they are usually among the first who undertake experimentations on innovative formats, with the consequence that other players usually decide whether to

invest or not in such new projects based on results of OTTs' experiences. So, it is reasonable to expect that the diffusion of most of the innovative ideas and formats will depend on the performances and results of OTTs' pioneering experimentations.

Facebook is currently already offering solutions that encompass innovative formats for interested advertisers, making available the use of a platform for 360 videos, allowing vertical video to be employed, offering carousel ads (an ad showing a sequence of images or videos in the space of a single box) and Canvas ads (ads that are instantly loaded and are optimized for mobile devices).

The trend, furthermore, seems to push innovations even further: according to Marco Grossi, Senior Manager Italy and Spain as regards Small and Medium Enterprises of Facebook, at the moment being there are over 100,000 bots active on a onthly basis on Facebook, and this number is going to increase in 2018; Virtual Reality will be used for shortening distances between people, making it the perfect empathic device of the future for the company. Moreover, by quoting the Executive: "360 video ads, live video ads, interstitial video ads on longer videos, Instagram Stories ads and Canvas format: everything points in the direction of more and more immersive and native formats, able to catch user's attention in few seconds and to involve him in a significative interaction with the ad"¹²⁵.

¹²⁵ http://www.ninjamarketing.it/2017/10/25/facebook-tutte-le-novita-2018-intervista-marco-grossi/

Bibliography

Reports and market researches

Mobile is driving most ad spending growth worldwide, Recode, 2017

Adv mobile, in Italia mercato da 875 milioni di euro, Engage, 2017

Mobile phone, smartphone usage varies globally, Emarketer, 2016

U.S. Smartphone Penetration Surpassed 80 Percent in 2016, Comscore, 2017

Nel mondo ci sono più schede SIM attive che persone, Lastampa, 2017

GSMA Mobility report 2016, GSMA, 2016

5g,la tecnologia del futuro, Telecomitalia.com, 2017

Ericson mobility report 2017, Ericson, 2017

Gartner Says Worldwide Sales of Smartphones Grew 9 Percent in First Quarter of 2017, Gartner, 2017

Digital in Italia 2018, Wearesocial, 2018

Smartphone in Italia: Android primo sistema operativo, iPhone 5s lo smartphone iOS più venduto, Iphoneitalia, 2017

La velocità di internet cresce, ma l'Italia arranca nella classifica mondiale della connettività, Lastampa, 2017

Mobile couponing: tutti i segreti svelati da nearIT, Nearit, 2016

Come corre il mobile payment in Italia, Businesspeople, 2017

Content Marketing: what are the unique characteristics of mobile?, Orteccommunications, 2014

Mobile Advertising Market by Format (Search, Native social, Display, Video, SMS), Category (Arts & entertainment, Hobbies & interests, Society, Science, Style & Fashion, and Technology) - Global Opportunity Analysis and Industry Forecast, 2014 – 2022, Alliedmarketresearch, 2017

Mobile is driving most ad spending growth worldwide, Recode, 2017

What Are the Advantages of Mobile Advertising?, Smallbusiness, 2018

What is earned, owned and paid media? The difference explained, Titangrowth, 2017

Come fare Direct Marketing: tecniche, strumenti ed esempi noti [mini-guida], Digitalcoach, 2017

Pubblicità online: cos'è il keyword advertising e come funziona, E-leva, 2013

Come funziona il Display Advertising, Semfly, 2015

In-app advertising vs mobile web advertising: Which is the better investment?, Clickz, 2017

What is a Banner Ad and How Does it Work?, Bannersnack, 2016

I Banner cosa sono e a cosa servono?, Consulenzaserviziweb, 2014

Cosa sono e come funzionano banner e pop-up pubblicitari, Artera, 2016

What is Rich Media, Knowonlineadvertising, 2015

What you need to know about mobile video advertising in 2017, Mobyaffiliates, 2017

Ad spending on mobile video will reach \$18 billion next year, surpassing desktop, Recode, 2017

What are the Different Video Ad Formats Available?, Pulpix, 2017

The native advertising playbook, IAB, 2013

Native advertising: cos'è e come sfruttare al massimo i contenuti native, Mediabuzz, 2017

Online classified ads: digital, dynamic, and still evolving, Mckinsey, 2015

Second screen e secondo schermo, Terminologiaetc, 2013

Social TV: aumenta l'impatto del "second screen" in Italia, Ninjamarketing, 2017

Quando uno schermo non basta: il fenomeno del Second Screen, 1&1, 2016

Il web marketing manager si occuperà anche di out-of-home, Programmatic-rtb, 2015,

Da oggi Chrome blocca le pubblicità invadenti, Ilpost, 2018

Cambia il mercato, cambiano i formati. I trend del Mobile Advertising per il 2018, Ninjamarketing, 2018

Outstream Video and the Future of Digital Advertising, Instapage, 2018

Outstream: the new wave of video advertising, Teads, 2016

Research: inRead outperforms pre-roll in Nielsen, Getmemedia, 2016

Teads Expands Video Offering with Launch of inRead 3D, Prneswire, 2017

Instream vs Outstream Video: What's Right for You?, Taptica, 2017

The Pros & Cons of Outstream Video Ads for Publishers, Geoedge, 2017

Research: Outstream Video Ads Viewed Longer and More Effective Than Instream, Videonuze, 2015

Case Study: In-Stream and Out-Stream Video for Mongrel Media, Clearpier, 2017

What you need to know about the vertical video trend, Acuityads, 2017

Breaking mobile video rule #1: shooting vertical video, Panopto, 2017

5 reasons your brand should be buying into vertical video, Kiip, 2016

Vertical Video Vs Horizontal Video: A Facebook Ads Case Study!, Animaker, 2017

Why You Should Embrace 360 Video Advertising Marketing Now, Videoremix, 2017

The 7 most creative uses of 360 video by brands, Hootsuite, 2017

Is 360 video worth it?, Thinkwithgoogle, 2016

Push notification: cosa sono, esempi e differenze tra iOS e Android, Iquii, 2015

When Push Comes to Shove: Push Notification Marketing, Appinstitute, 2016

5 must-do push notification best practices for mobile marketers, Marketingland, 2016

Why audio advertising could be your campaign's secret weapon, Thedrum, 2017

Audio: the best bargain in advertising, Xaxis, 2017

MightyHive leads the way with audio ads testing, Doubleclickbygoogle, 2017

Conversational Marketing: A New Paradigm for Brands, Chatbotsmagazine, 2016

What if Your Mailing List Had a 60% Click-Through Rate?, Chatbotsmagazine, 2017

Why marketers are betting on bots, Adage, 2017

Why To Use Chatbots In Your Mobile Marketing Strategy, Appsamurai, 2017

Teads, i chatbot dei brand arrivano nei video outstream, Engage, 2017

Msc Crociere e Teads lanciano il primo chatbot italiano integrato nei video outstream, Engage, 2017

Patrón's 'Bot-Tender' drove 39% clickthrough rate from Twitter, Mobilemarketer, 2017

Are AR and VR Ads Compelling Enough?, Emarketer, 2017

7 ways augmented reality is changing the Mobile Marketing industry, Digitaloperative, 2017

Profiting from personalization, BCG, 2017

Murdoch-backed Unlockd signs major British deal with Tesco Mobile, AFR, 2016

This Australian Startup Will Reward You For Simply Unlocking Your Phone, Forbes, 2017

Revenues put Unlockd among Australia's hottest start-ups, AFR, 2018

UMEWIN partners with Prodea to provide mobile ad solution for a good cause, Mobyaffiliates, 2016

Work of thesis consulted

" Mobile Advertising: analisi delle opportunità offerte dalla targettizzazione localizzata e alcuni casi di studio", 2014-2015, by Federico Colombo and Claudio Conti

Industry-related websites, blogs and newsletters

www.recode.it

www.engage.it

www.mmaglobal.com

www.emarketer.com

www.iphoneitalia.com

www.businesspeople.it

www.mmaglobal.co.uk

www.titangrowth.com

www.digitalcoach.it

www.e-leva.it

www.clickz.com

www.blog.bannersnack.com

www.blog.artera.it

www.knowonlineadvertising.com

www.mobyaffiliates.com

www.iab.com

www.nativeadvertising.it

www.mbaskool.com

www.mediabuzz.it

www.communicanimation.com

www.ninjamarketing.it

www.1&1.it

www.ilpost.it

www.instapage.com

www.getmemedia.com

www.blog.taptica.com

www.blog.geoedge.com

www.blog.animaker.com

www.talk-business.co.uk

www.blog.hootsuite.com

www.marketingland.com

https://blog.kissmetrics.com

www.thedrum.com www.chatbotsmagazine.com www.adage.com www.appsamurai.com www.mobilemarketer.com

Other websites

www.statista.com www.wearesocial.com www.osservatori.net www.investopedia.com www.glossariomarketing.it www.semfly.it www.gartner.com www.comscore.com www.mannixmarketing.com www.pulpix.com www.support.google.com www.teads.com www.okpedia.com www.nearit.com www.smallbusiness.chron.com www.mckinsey.com www.blog.terminologiaetc.it www.programatic-rtb.com www.betterads.org www.axelero.it www.prnewswire.com www.iq.videonuze.com www.panopto.com www.kiip.me www.acuityads.com www.celtra.com www.wikipedia.com

www.videoremix.io

www.thinkwithgoogle.com

www.urbanairship.com

www.iquii.com

www.quora.com

www.appinstitute.com

www.zetaglobal.com

www.xaxis.com

www.doubleclickbygoogle.com

www.scripted.com

www.whatis.techtarget.com

www.upwork.com

www.digitaloperative.com

www.bcg.com

www.enginecreative.co.uk

www.digitaltrainingacademy.com

www.afr.com

www.forbes.com

www.orteccommunications.com

www.telecomitalia.com

www.ericson.com

www.alliedmarketresearch.com

www.waze.com

www.pandoraforbrands.com

www.unlockd.com

www.umewin.com

https://pig.gi

https://www.mylockscreen.de/en/

www.lastampa.it

www.techpedia.com