

# A BASIC GUIDE TO MOBILE DATA

**What advertisers should know for  
successful mobile marketing**



## INTRODUCTION

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In recent years smartphones have become our everyday companions, whether searching for information, wanting to be entertained, staying in contact with family and friends, or sharing everyday activities with the world. With this increased usage of mobile phones a new field has emerged for the marketing industry - Mobile Data, meaning data generated by all these phones. But what exactly is this mobile data, and how can advertisers get access to data that meets quality and privacy standards?

This guide aims to explain the most important terminologies, sources and insights of which advertisers should be aware to manage successful mobile marketing campaigns. It was created by the “Mobile Data Quality” Lab of MMA Germany.

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## SPOTLIGHT ON MOBILE FACTS & FIGURES

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**MOBILE IS BIG AND GROWING:** There are over 5 billion unique mobile users in the world today. <sup>[1]</sup>

**THE CENTRE OF DIGITAL EVERYDAY LIFE:** 88% of all mobile users in Germany tap into their smartphones many times a day. It's the first and last thing many people do each day. <sup>[2]</sup>

**ALWAYS ON:** People spend more time using mobile devices, which in Germany is an average of more than 2 hours per day. <sup>[3]</sup>

**USERS ARE WILLING TO SPEND MORE MONEY:** 194 billion applications were downloaded worldwide in 2018 generating with sales of over 100 billion USD. <sup>[4]</sup> Experts estimate a further rise to 156 billion USD until 2023. <sup>[5]</sup>

**SUCCESSFUL ADVERTISING IN THE BLINK OF AN EYE:**

It takes a human brain about 400 milliseconds to recognize and emotionally react to an Ad seen on a mobile device. <sup>[6]</sup> In comparison, an equally deep perception of an Ad running on a desktop computer requires 2 to 3 seconds. <sup>[7]</sup>

**MOBILE ADVERTISING AS A GLOBAL DRIVER OF GROWTH:** Experts predict that the mobile sector's share of all digital advertising will account for 82% and contain 51% total of the global advertising budget until 2023. <sup>[8]</sup>

[1] <https://datareportal.com/reports/digital-2019-global-digital-overview>

[2] [https://www.gujmedia.de/fileadmin/Media-Research/Mobile-Studien/mobile\\_studie\\_360\\_grad\\_2019.pdf](https://www.gujmedia.de/fileadmin/Media-Research/Mobile-Studien/mobile_studie_360_grad_2019.pdf)

[3] [https://s3.amazonaws.com/files.appannie.com/reports/1901\\_State\\_of\\_Mobile\\_Main\\_EN.pdf](https://s3.amazonaws.com/files.appannie.com/reports/1901_State_of_Mobile_Main_EN.pdf)

[4] [https://s3.amazonaws.com/files.appannie.com/reports/1901\\_State\\_of\\_Mobile\\_Main\\_EN.pdf](https://s3.amazonaws.com/files.appannie.com/reports/1901_State_of_Mobile_Main_EN.pdf)

[5] <https://sensortower.com/blog/sensor-tower-app-market-forecast-2023>

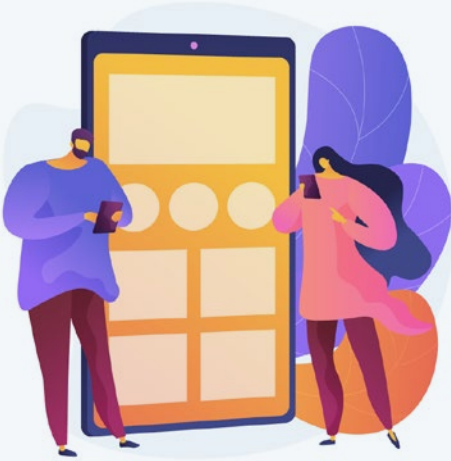
[6] <https://www.mmaglobal.com/documents/blink-heartbeat>

[7] <https://www.adzine.de/2019/03/vorteil-mobile-werbewirkung-nach-unter-einer-sekunde/>

[8] <https://www.adzine.de/2019/06/mobile-werbung-als-globaler-wachstumstreiber-in-unruhigen-zeiten/>

## DIGITAL IDENTIFIERS: HOW TO ADDRESS A SMARTPHONE USER

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### THE MAIN 5 IDENTIFIERS ARE:

1. Mobile Phone Number (known as an MSISDN)
2. Mobile Advertising ID (MAID used by Apps)
3. Cookies (used by browsers)
4. Login data, with ID and password
5. Email Address (increasingly used on phones)

## SPOTLIGHT ON GDPR

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The usage of data from EU citizens falls under the General Data Privacy Regulations (GDPR). Advertisers have to ensure that both their own processing of data as well as the vendors' processing is compliant with all applicable regulations. The following definitions aim to give advertisers simple guidelines but do not constitute legal advice.

**PERSONAL DATA:** GDPR defines that all device identifiers are considered personal data. This includes Advertising IDs within Apps as well as Cookies within browsers and location data in general.

**CONSENT MANAGEMENT:** Processing personal data requires a solid legal basis e.g. explicit consent of a user or, in some cases, the legitimate interest of data processing.

**USER RIGHTS:** GDPR introduces new rights for consumers, including the right to erasure, to data portability and the right to access. Platforms have to be built and designed with privacy in mind.

For more information see the adsquare GDPR whitepaper:  
<https://www.adsquare.com/resources/whitepaper-gdpr/>

## THE MOST IMPORTANT TYPES OF MOBILE DATA

There are several main categories that are most used within data-driven advertising, and especially for targeting.

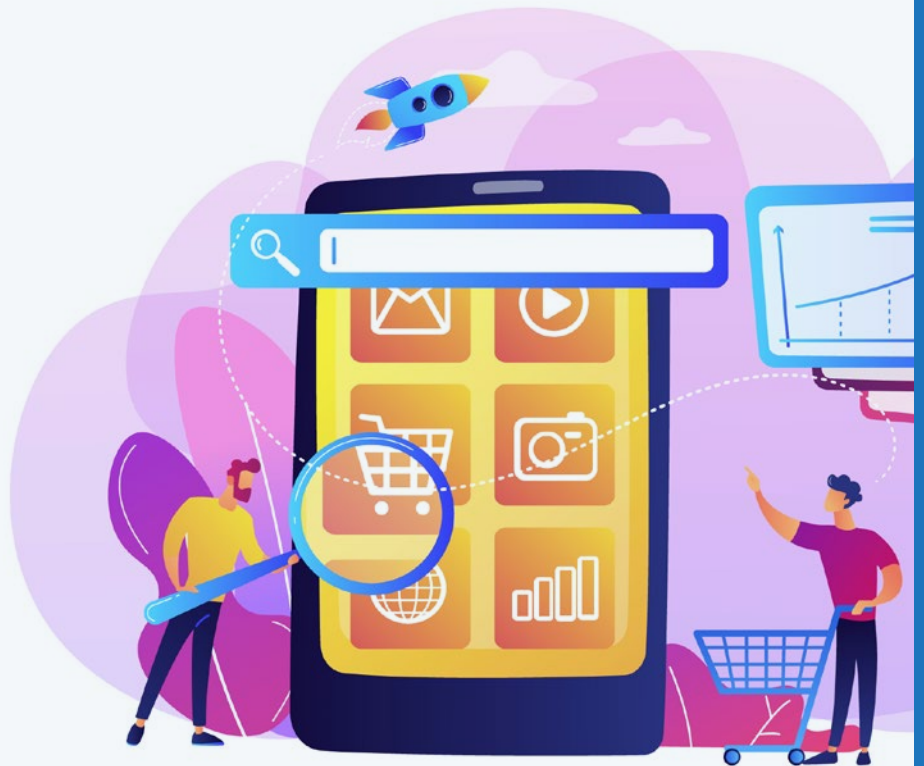
### **DEMOGRAPHIC DATA:**

Age, gender, place of residence, income, education and marital status are demographic information and the foundation of most targeting. This data can come from the user or can be deduced from more general statistics, e.g. living area or smartphone usage.

**INTERESTS DATA:** Concerns consumer's interests and what they are most engaged with. This can include products, events, organizations, places, or types of Apps the consumer uses. Interests categories for example include football fans, dog lovers, etc.

**INTENT DATA:** Result from the actions or the context of a consumer from which a purchase intent can be indicated. There are several 'intent-stages' that are dependent on the consumers position in the sales funnel. Examples of such data sources are product searches, price comparisons, past purchases, and products being placed in a basket.

**BEHAVIOURAL DATA:** This include characteristics based on a certain type of consumer behaviour and consumer interactions with a company - be it via websites, Apps, advertising content or call centres. Public information shared on social media or following an artist or playlist are also crucial sources for behavioural data.



## SPOTLIGHT LOCATION DATA

This is particularly valuable data and unique to mobile, as location gives information about real-world behaviour and can be a valid expression of their intent.

There are many types of location data, with the main distinctions being between accuracy and quantity:



**ACCURACY:** It is determined by the technologies used to produce the location. For accuracy the main source of location data that our industry uses is location provided by the phone. This location is derived generally from mashing together GPS, Wi-Fi and Cells signals. It can sometimes include a high GPS component for high accuracy (5-10 metres). But only under the right conditions where you can see and receive enough satellite signals. So it can be difficult to get GPS inside a shopping centre or between tall buildings. Much less accurate is the use of an IP address.



**QUANTITY:** It is determined by the location extraction technique such as whether foreground or background, App or bidstream data is used. For quantity there is a dependency on how the data is collected by phone, and how the SDK (software development kit) code embedded in the App operates to request location data.

- **FOREGROUND LOCATION DATA:** If the data can only be collected when a specific App is being used then this may limit the number of locations per day or per week.
- **BACKGROUND LOCATION DATA:** If data is collected in the background, even when the App is closed, more data points can be made available.
- **BIDSTREAM LOCATION DATA:** In programmatic advertising, the bidstream can include information about the users' location whilst seeing an Ad on a website or within an App. Each Ad request should contain information about the users' opt-in for data usage.

## WHERE DOES IT COME FROM?

There are several possibilities of collecting, processing and aggregation of mobile data. But one of the most basic pieces of information advertisers absolutely need to know is the relationship between consumer and collector along with the source of the data.

### A: THE RELATIONSHIP BETWEEN COLLECTOR AND CONSUMER

	FIRST PARTY DATA	SECOND PARTY DATA	THIRD PARTY DATA
	It's the information you collect directly from your audience or customers, for example through CRM, purchases, cookies, call centre or registration. It is a result of a direct relationship and communication with a consumer and can be handled in the context of the privacy policy.	It's someone else's first party data. You purchase second party data directly from the company that owns it. There is no middle man in such a transaction.	It's data that you buy from outside sources that are not the original collectors of that data. Instead, you buy it from data companies that pull it from various other platforms and websites where it was generated. It can also be statistical and aggregated data.
	Valuable and relevant data, direct control and independency from data provider	Can overcome scale limitations of first party data, expands the reach, increase and effectiveness of campaigns	Access to a huge amount of data
	Possible restrictions in scale and depths	Limited availability and control over quality and GDPR compliance	Lack of quality control. Used by others. Risk of non-compliance to GDPR

### B: DIFFERENT TYPES OF DATA SOURCES

**SELF-DECLARED AND DETERMINISTIC DATA:** Any personal information a user shares voluntarily by filling out a form, by subscriptions to a newsletter or the consent to use location data is self-declared data. It can contain demographics, interests and hobbies. The data is not accurate in all cases, as people may for example lie about their age. Data which is factually known is called deterministic data.

**PROBABILISTIC AND INFERRED DATA:** Probabilistic data is used when only anonymised profiles are available indicating that a consumer belongs to a particular demographic group or has certain preferences because of his search and buying behaviour. This data is based on probabilities, affecting the accuracy and reliability of the data. One advantage, however, is that you can access the entire user base and not just consented users who have provided specific data. As it is generated by a system and not explicitly provided by the user, it's also called inferred data.

## CHECKLIST MOBILE DATA

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There are no independent industry standards for measuring data, and many different ways of judging the quality. The following checklist supports advertisers to choose the best vendor for their campaigns:

- **SOURCE:** Can the vendor name and verify the source of their data?  
Is it their own data or from a third party?
- **PRIVACY:** Is the data processing GDPR compliant?  
Can the user's consent be verified?
- **ACTUALITY:** How fresh is the data?  
Does the vendor delete outdated profiles from the database?
- **COLLECTION METHOD:** Is the data self-declared, probabilistic or deterministic?
- **LOCATION PRECISION:** How precise is the location data?  
Is it location tracking, IP resolving or any other method?
- **LOCATION QUANTITY:** Does the vendor work with an SDK?  
Does it also collect data in the background?
- **VALIDATION:** Does the vendor provide any own or third-party data validation?
- **AVAILABILITY:** Is the data available to the market?  
Is data usage independent or coupled with specific media?





## MEMBERS MMA GERMANY



### MMA Germany

The Mobile Marketing Association's German Local Council strives to accelerate the transformation and innovation of mobile marketing and advertising, and the technologies that enable their advancement in Germany and globally.

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