An NIQ Company

GfK Demographics

Germany

Applications

The key application of the Demographics dataset is the identification and differentiation of your target groups according to age, income, family type and residential surroundings for the purpose of better reaching your core customer group.

Below are some of the main sales and marketing applications of the Demographics dataset:

- **Target group quantification**

Determine your market potential in a given region. You can find out the precise size of your target group by filtering all households that fit your selected criteria.

- **Target group localization**

Determine the exact location of your target group. The Demographics dataset reveals the postcodes, municipalities and even street segments with the greatest share of your target groups and therefore the greatest sales potential.

- **Address enrichment**

Get the most from your address data. You can better target your marketing and sales activities by enhancing your customer address data with the Demographics dataset.

- **Regional market analysis**

Concentrate your efforts where they are most likely to bear fruit. Focus on regions with above-average chances of success for more lucrative expansions.

- **Advertising and media planning**

Boost your responses and minimize wasted resources by distributing your mailings, prospectuses or samples in regions with above-average concentrations of your target group.

© GfK

Basis of calculation

Calculating data on households and family type

A comprehensive address database and a GfK-devised "household model" comprise the basis for our household data for municipalities, postcodes and street segments. Additionally, the most granular level of household reference data is taken into account - e.g., for large cities, this would be the official municipal household numbers for statistical boroughs, districts or something comparable. The results of the latest census and the annual microcensus are additionally taken into account to determine the family-type profile of the population. The microcensus is a polling carried out by the official bureau of statistics that involves contacting 1% of Germany's representative households on a yearly basis for the purpose of generating a socio-demographic profile of the population.

Additional private data sources (address data) are consulted to provide household profiles that include information on the type of resident, such as singles, families with children, immigrant families, etc.

These various indicators are determined through the use of multi-variable statistical methods, including, among others, factor and regression analyses.

Identifying income brackets

Various sources are also used to determine this information. The income brackets are based on official statistics such as sample surveys on income and expenditures, income tax statistics. Furthermore, GfK's own calculations of GfK Purchasing Power are used. Private data sources are also taken into account in the calculation of the income brackets, such as addresses of key economic decision-makers or title-holders (academic degrees).

Establishing age of the household head

GfK determines the age of household heads by carrying out a first-name analysis, the results of which are used to deduce the birth year of the people in question. This method also takes into account regional differences in the distribution of first names according to generational groups.

These results are then refined and cross-checked using official statistics.

Determining residential building type

Information on the residential building type in a given area is provided by consulting data contained in the Point Plus® database as well as the corresponding official statistics.

Residential building types are determined via an iterative process carried out on the basis of localized buildings in GfK GeoMarketing's microgeographic database Point Plus® as well as official statistics on residential building types. Additionally, approximately 2.7 million addresses of commercial entities in addition to comprehensive data on at least 30 million households are taken into account. The data that GfK GeoMarketing delivers is significantly more detailed than that provided by the official bureau of statistics. Our data is cross-checked against official sources insofar as the latter's level of detail permits.

GfK calculates and publishes household data in absolute values, as this is necessary in order to be able to aggregate the information for client-specific regional levels, e.g., catchment areas, sales territories, etc.

© GfK

Microgeography I

with Point Plus® & the Demographic dataset

Applications of microgeographic data

The goal of microgeography is to use a combination of comprehensive data sources on various regional levels – from individual buildings and clusters of buildings (cells) to municipalities and districts – in order to obtain valuable information at the most detailed level possible. This approach makes use of the fact that "similar" individuals and households tend to be clustered together in the same residential areas. Microgeography has a diverse range of applications.

Some of these include:

- calculating potential for various products and services
- performing scoring analyses (customer acquisition/retention, etc.)
- analyzing catchment areas, planning locations, optimizing branch networks
- enriching data warehouses through the incorporation of external market data
- filtering addresses for direct marketing

In conjunction with GfK GeoMarketing's other products – e.g., geodata (such as geographic coordinates or vector-based road network maps) or a corresponding geomarketing software application - a geomarketing approach provides a user-friendly and powerful way of extracting valuable insights from a microgeographic database to support a wide range of location-based applications. Point Plus® is GfK GeoMarketing's microgeographic database, while the Demographics dataset corresponds to the descriptive information on residential surroundings contained in Point Plus®.

Structure of Point Plus®

Point Plus® illustrates the distribution of all German households. These households can be related to one another on a wide variety of regional levels. Every address consists of a house number, street, municipality and postcode. These details are supplemented with information on associated municipalities as well as, where applicable, the corresponding city area to which they belong. The most detailed level in Point Plus® consists of entries on buildings. This data is not displayed or publicized, but rather simply serves as a basis for creating the various usage levels.

The most detailed usage level in Point Plus® is the street segment. According to the specifications of our partner company, TomTom, a street segment is defined as the continuous section of a given street from one intersection to the next. If a given street segment traverses a postal, neighborhood or municipal boundary, it is subdivided into two parts. All of the street segments belonging to a particular city area are included on the so-called street level. This means that especially long streets are also broken into multiple units in the street-level view. An example of this is Nuremberg's Fürther Straße, which traverses six neighborhoods even though it is encompassed by the same postcode. Any changes to the structure of a given street are also reflected at this usage level.

The overarching macro-level consists of two components: a postal component that contains the postcode data, including 1- and 2-digit postcodes, as well as an administrative component that contains data on municipalities, districts, counties and federal states.

Data basis: synergy of official and private data sources

Official statistics provide a comprehensive overview of the population that covers a wide range of factors. However, in most cases, this data is only offered at a broad regional level – for example, at the level of municipalities or even just districts and counties. More detailed data can often be obtained from private sources. This data is often more up-to-date, but is usually only available for certain regions and thus does not provide information at a nationwide level. Point Plus® consists of a combination of official and private sources in order to utilize the advantages of both.

© GfK

Microgeography II

with Point Plus® & the Demographic dataset

Data from private providers

Two types of private data are used in Point Plus®: first, the database draws on address data on at least 30 million households obtained from a range of suppliers. Various statistical methods are used to analyze these entries, which together comprise the basis of profiling the nation's private households. Secondly, the database draws on address data on approximately 2.7 million business addresses obtained from economic data suppliers. This information also includes entries on the associated company branch, number of employees, turnover, etc.

Compilation and comparison process

At first, the above described information exists in the form of addresses. The next step involves associating this data with actual houses. In order to achieve this, the address entries are made to conform to the official postal designations. For example, multiple addresses for the same street - such as “Fr. Schillerstraße” and “Schiller Straße” for “Friedrich Schiller Str” - are altered to comply with the official designation used by the postal service (in this case, “Friedrich Schiller Str”). However, not every address can be corrected in this manner. Particularly in the case of business addresses, approximately 5% of these addresses cannot be corrected, despite the continually improving quality of the postal addresses. These affected addresses are flagged for subsequent editing or, in some cases, discarded. In addition to conforming addresses to the official postal service designations, addresses are grouped according to the administrative regions to which they belong. In short, the addresses are made to correspond to the administrative status of a given region at a given time. Each address is associated with the municipality in which it is located on a particular stated date.

After this compilation process, the addresses can be associated with houses. This house-related data is supplemented with the geographic data outlined below so that it forms a solid foundation for creating all additional levels of usage. Data protection practices are stringently adhered to by structuring the database such that the included information can only be accessed or worked with on a usage level containing at least 5 households. This ensures that the collected information can never be linked to an individual, but rather only to an anonymous geographic area.

Data from official sources

Official data is obtained from various sources, including the Federal Bureau of Statistics as well as official bodies at the state and municipal levels. Comparability and uniformity are essential when it comes to microgeographic data. At this time, only the Federal Bureau of Statistics provides comprehensive, Germany-wide data of this nature, particularly with regard to the population projections at the municipal level, microcensus and income and consumer behavior samplings.

Missing information in the private-sector data is supplied or corrected by cross-referencing it with the official statistics for the municipal level and less detailed levels. This data correction process supplies missing information in privately sourced data with regard to building type, households, age of household heads, net income levels, family type and percentage of immigrant households. This ensures that the data in Point Plus® corresponds to the values contained in the official statistics for the municipal level as well as less detailed levels.

Statistics from official municipal bodies are incorporated in order to distinguish the various neighborhoods and urban areas that comprise large metropolitan areas. This is done for the postcode level and, to the extent possible, city regions and neighborhoods.

After these corrections have been carried out, the data is incorporated on all levels into the microgeographic database Point Plus®.

Data Structure

Regional identifiers (e.g., municipal identifiers, postcodes, etc.)

Regional designations (e.g., municipality name, postcode name, street name)

Inhabitants and households

Average household size

Household structure
- single-person households
- multiple-person households with children
- multiple-person households without children
- immigrant households

Income brackets (according to monthly net household income)
- up to under €1,100
- 1,100 to under €1,500
- 1,500 to under €2,000
- 2,000 to under €2,600
- 2,600 to under €4,000
- 4,000 to under €7,500
- 7,500 and higher

Age ranges (based on age of household head)
- under 30 years
- 30 to under 40 years
- 40 to under 50 years
- 50 to under 60 years
- 60 and older
- average age

Use of buildings
- number of residential buildings
- number of mixed-used buildings (commercial/private)
- number of commercial buildings

Type of residential building
- number of 1-2 family houses
- number of 3-6 family houses
- number of 7-19 family houses
- number of 20 and more family houses

(Entries are provided as absolute, percentage and index values.)

© GfK

Regional levels

The Demographics dataset is provided at a consistently high quality for all of Germany, from federal states, country's, municipalities and postcodes down to localities and city districts such as the country's street segments.

As such, the demographic data can be aggregated for specific areas of your choice, such as the catchment areas of your branch sites or your external sales force regions .

1

Administrative regions

- federal states
- counties
- urban/rural districts
- municipalities

2

Postal regions

- 1-digit postcodes
- 2-digit postcodes
- postal directing areas
- 5-digit postcodes

3

Microgeographic regions

- localities and city districts
- street segments

4

Client-specific regions

- sales regions
- catchment areas

© GfK

Time series comparisons

Our high-quality data allows you to make precise regional comparisons. However, we advise against using our data for time series comparisons, because our methodology has been refined and perfected numerous times over the course of the years. For example, changes often occur in the sources and statistical methods used to compile and calculate our data.

GfK GeoMarketing places great emphasis on providing data that represents regional differences as accurately as possible. This commitment to accuracy means that we are regularly adopting improved methods as well as newer and more detailed data sources. As a result, time series comparisons are not advisable, because they will not be comparing like with like.

Stated in a different way, if we were to place our primary emphasis on ensuring that clients can carry out meaningful time series comparisons, we'd have to ignore the discovery and emergence of improved methods and data sources. We feel strongly that this would be a mistake. Moreover, frequent changes to administrative boundaries make it difficult or impossible to carry out meaningful time series comparisons.

© GfK

Questions?

Contact us at any time.

Your Geomarketing team

+49 911 395 2600

geomarketing@gfk.com

www.gfk.com/geomarketing

More about our solutions:

PRODUCT CATALOG

WEBSHOP