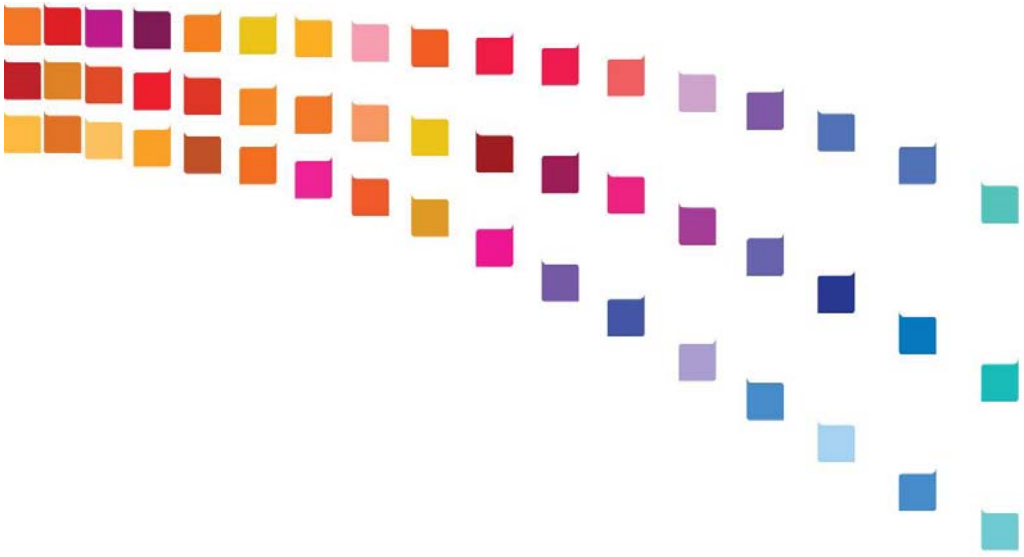
FAQs: Linking location and digital data



FAQs: Linking location and digital data

What is location data?

Location data in this context is data about consumers, individually or in aggregate, that can be linked to a geographical location. Examples would include demographic, socio-economic and lifestyle characteristics or purchasing behaviour relating to postcodes, store catchments or shopping centres. Such data is often used for customer insight, branch network analysis, store forecasting, drive time analysis and footfall analysis.

In the past 10 years a new method of collecting and distributing location data has emerged, based around IP addresses. Each internet-connected device is given an IP address, and these are broadly tied to location. However in the UK at least, it is not possible to derive a very accurate location from the IP address on its own due to the nature of how the UK's telephone infrastructure has evolved. (It is a little easier in the US.) But things are improving as some commercial companies offer services for generating more accurate locations based on increasing volumes of data collected from consumers where both IP address and postal address are captured.

What is digital data?

Digital data includes a broad range of data sets created or captured via digital devices. Digital data can be captured at both aggregate level and at individual level. Data types can include (but is not limited to) the following:

- Email address
- IP address
- Browsing behaviour (aggregate or customer level)
- User ID
- Product purchase data
- Device type (e.g. mobile, PC, tablet, other)
- Referral data (where an individual or group of individuals came from)
- URL & domain data
- Frequency of activity
- Sentiment
- Connections, friends, fans, followers
- Check-in data
- Campaign history data
- Search data
- Location based offers
- Radio Frequency ID / Near field communications (NFC) / Bluetooth / Wifi network data

How can digital data & location data be linked?

Digital and location data can be linked at both aggregate and customer level. There are three broad ways in which digital and location data can be linked:

- Via IP
- Via Customer ID
- Via user volunteered 'check in' data

At an aggregate level, they can be linked via IP or a series of (cleaned and optimised) IPs which relate to a series of postcodes. This can enable the attribution of certain digital behaviours to a location.

More commonly digital and location data is linked via some form of customer identifier, which could include email address, name and address, social ID, mobile number, etc. The customer identifier can then be linked to name and address or to a particular store address, and the behaviour then attributed.

Another way in which location data can be linked to digital data is by a user/customer volunteering their location, for example by 'checking in'. This is most commonly done via mobile devices, and can include specific functionality/applications for the customer volunteering their location, but can also be undertaken via a range of techniques, including barcode scanning, QR (quick response code) readers and unique urls. The customer data can then be matched to postcode-based demographic data or in the example of a retail store, to product sales or turnover data.

What value can be gained from linking digital and location data?

Linking digital and location data can drive significant value in the following areas:

- Attribution for marketing effectiveness/optimisation
- Attribution for sales/in store promotion
- Optimisation of branch/store portfolio and online activities
- Improved targeting and localisation of offers (e.g. daily deals etc)
- Improved customer insight

What are the issues and considerations when linking digital and location data?

Linking digital and location data is not an easy or precise science. A number of major factors should be considered when attempting any such activities including:

- Permission and privacy: What do your terms and conditions allow you to track, store and use?
- Method of linking: Which mechanism of linking is most appropriate, and accurate for your organisational need?
- Data cleanliness/accuracy: Digital data is large, complex and voluminous – determining what is actually valuable, in what frequency and timeliness and the subsequent cleaning is often a significant task
- Required frequency: The tools, technologies and processes required vary greatly depending on whether the linking exercise is an ad-hoc project versus a real time feed, as well as business importance.