

# Crossed lines

*Paul Skeldon, Mobile Editor, InternetRetailing investigates the issues around marketing to shoppers via their mobile phones.*



**M**OBILE HAS long been vaunted as the ideal, personal, instant and inspirational marketing device. It is with the user when they are doing pretty much everything – even using the toilet and when they are in bed – let alone when they are out shopping or at home watching TV.

That was the theory. In practice, mobile has become just one of many channels through which consumers engage with brands and retailers and this has seen the retail business model not fragment into channels, but has seen it become a multichannel affair.

While mobile leads the charge and is often likened to the ‘glue’ that holds all these channels together, the challenge for marketing now is to do it across these channels and, more importantly, track it and the resultant

behaviour it induces across all these channels and devices.

All the devices that consumers use – on average five, according to research in 2014 by Digitas – generate a wealth of data about the user and the context and location of where they are being used and why: this after all is the era of big data. But all this data is of limited value if you don’t know what to do with it.

PCs offer a vast amount of data through cookies – but they still don’t tell you who is actually using what is often a family or household-wide device. Mobile devices give even more information, down to where the device is being used and, through the unique MSISDN – or the phone’s number – who owns the phone.

Each of these traditional tracking and attribution models has its advantages – and

some drawbacks – but what none of them do is talk to each other. So, how do you track users across devices?

There are now two schools of thought that drive cross-channel marketing and analysis: to be probabilistic or deterministic, that is the question.

#### PROBABILISTIC MATCHING

The basic idea of probabilistic matching is that you can use algorithms to try and spot patterns and work out who is using what device and gain some understanding of who people are on their different devices and match them together that way. This kind of approach doesn't necessarily know that, say, I am the same person that looked online at Argos's website for storage boxes then bought them on my mobile on Amazon – ironically while in Argos – but they will know that the two things are connected so that I am suitable for some kind of marketing related to storage boxes (or Argos).

Probabilistic matching of devices – and behaviour – is thus a prediction of matches (and non-matches) in device use and the assumption that they are being used by the same kind of person.

This can be taken further to offer a deeper insight into whether the match is the same person or not by looking at other data – from cookies and MSISDNs and so on – which can then yield some greater degree of personalisation, but it is not foolproof.

#### DETERMINISTIC MATCHING

Which brings us to deterministic matching. This is the only way to truly match devices and users and create a single view of the customer but requires one vital – and hard to achieve – step: the customer has to log in.

This is how the likes of Google and Facebook make their money: they get the user to log in with a unique ID and so they know who is on which device, doing what, when and where.

This 'walled garden' approach offers a very accurate view of users as it can track them on sites and apps for a specific brand and know what they are doing at those properties at any given moment. It also lets the brand or its agency build up a view of what that consumer does over time.

While it is the most accurate way of tracking what a consumer is doing, it can offer something of a narrow view of the consumer. Sure, it can show you what someone is doing on your site and apps,

but it doesn't give a broader picture of that consumer and the context within which they are looking at your services.

If we go back to the example of me buying from Amazon while standing in Argos: Argos knows I was looking for storage boxes on its site earlier that day. It has no idea me and my phone were in its shop and that I then went to Amazon. Alone, deterministic tracking is not enough.

#### A BIT OF BOTH


The other way to do it is to do a bit of probabilistic and deterministic matching, as well as some deep data mining, to create a cross-referenced view of who is doing what on which device.

Increasingly, this is also taking into account wifi usage and location data and other purchasing history – the probabilistic view – as well as log ins to sites and apps – the deterministic view – that is then referenced against other data in data mines. All a bit Big Brother, if you ask me, but it is increasingly the only way that brands and retailers have to track long term, cross device behaviour and market to it accordingly.

In the US, there are a growing number of companies that are trying to make it more accurate, with companies such as 4Info that takes data from all sorts of sources about consumers and cross references it. It claims that it can link 95% of mobile users to their address and their other devices this way.

Is all this legal? Well, yes, but tracking what people do and selling to them based on it – especially when you are also using data of their interaction with brands other than yours – is a creepy thought. Apple's decision to let ad-blocking apps appear on the App Store and integrate with their devices shows that even the tech sector is unsure as to how, and if, they should be doing more to protect consumers from tracking and advertising.

The general consensus is that consumers should be allowed to opt in to mobile marketing – and the inherent tracking – if they want to be marketed to in this way. A straw poll among my friends indicates that they just don't want to be marketed to at all and that there is a growing backlash against websites, brands and devices seemingly making choices for them.

So, while there is still a growing need to 'see' the customer across devices to improve the customer experience, doing it and using it for marketing is not necessarily the way forward. 

To be  
probabilistic or  
deterministic,  
that is the  
question?