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Getting personal with Big Data

Will Lebens & Chris Mair suggest how 'Data-Driven Experiences' can help organisations with large volumes of geospatial data use it to best advantage

There are only so many times we can be told how big Big Data actually is before our eyes glaze over and we lose the ability to truly make sense of the avalanche of fact and figures. So here's just one statistic: it is estimated that, by 2020, 1.7 Megabytes of new information will be created every second for every human being on the planet.¹ For many, the challenge will be to understand, quantify and utilise that data in a way that is meaningful while having genuine utility.

Without geospatial context, the ability to act on data intelligence can be limiting. Luckily, with the ubiquity of smart mobile devices, we can now integrate multiple information sources with real-time geospatial data about the individual. It offers organisations a huge opportunity to increase performance.

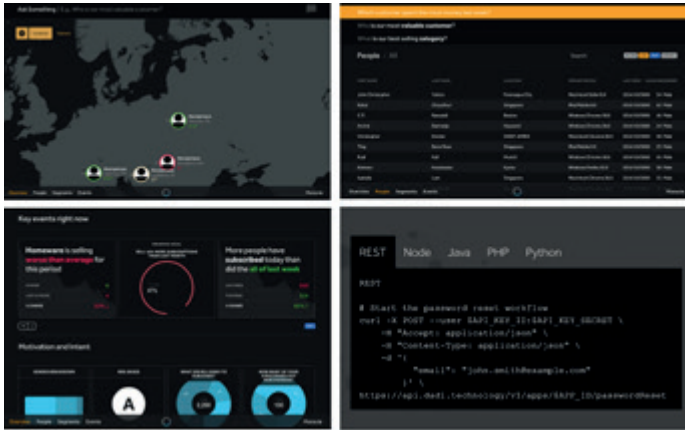
The prerequisites

So, how do we do this? In short, by creating tailored moments for an individual on the basis of his or her known preferences and propensities, combined with their precise location in real time. We think of these moments - those where we can combine multiple data points with geospatial intelligence - as 'Data-Driven Experiences'.

Such an approach has been utilised by London-based DADI as the cornerstone of its DADI+ Relationship Infrastructure platform ... one that puts the individual at the heart of a business, product or service. All well and good, but to make engaging data-driven experiences we need an explicit understanding of two core components: individual identity and the relationship between data and content.

1. Individual identity

The identity of an individual is complicated, not least because it is continuously evolving. The first distinction to make is between active and passive identities. Active identities are those that we control - profiles and posts on Facebook, tweets, professional networking sites, blogs, Instagram feeds etc. Passive identities, on the other hand, are created about us by others - photographs and comments linking to our social profiles; information compiled by online aggregators, and personal information written without our consent. As a result, a vast amount of data needs to be ranked and categorised for it to make sense. Our taxonomy identifies five key layers that increase with depth and complexity: core values, actions, affinity, beliefs, and values.



The DADI+ platform provides an end-to-end understanding of customers, from first contact to fully-qualified, socially-linked records. Built for developers, it can be deployed in minutes, requiring just a few lines of code to customise user profiles, authenticate users, manage groups, hook up social sign-on, and start tracking events

The deeper one is able understand the make-up of an individual's identity, the stronger is the potential relationship being built with that individual. Data-driven experiences can only happen when properly supported by an effective relationship infrastructure ... one that provides an accurate definition of identity, and maps data into the user record from the right sources at the right time.

2. Data:content relationship

The second core component in creating data-driven experiences is to ensure parity between content and data. This relationship is fundamentally misunderstood by many organisations who believe that they perform segregated roles within their business - content is typically aligned to editorial, while data is primarily used for marketing.

Erecting these barriers hinders the ability to take effective action on the back of the data insights being gathered. By re-platforming to place, data and content are on an equal footing, it is possible to extract greater value from content, improve the performance of marketing, create new revenue streams and, ultimately, form closer relationships with each customer.

Reaping the benefits

When identity is understood, and the platform is in place to create parity between content and data, organisations can facilitate geo-spatial data-driven experiences in a number of ways:

1. They can deliver more relevant content that delivers better performance

Smartphones improve every year. Savvy organisations will be aware of this and develop interesting content ideas that leverage factors such as geolocation, motion and ambient noise to make their content more relevant and, thus, more appealing to users. Provided the building blocks are in place, organisations with large volumes of geospatial data are able to leverage that data to deliver content to an audience that is more relevant to a particular moment and, thus, performs better.

For one DADI customer, Haymarket Group title *WhatCar?*, aligning geospatial data with demographic and purchasing data helps it reach individuals who have a higher propensity to be interested and, therefore, more likely to spend time engaging with the content and ultimately converting. Across DADI's customer base, this type of data-driven content performs, on average, 40% better than its non data-driven equivalent.

As well as delivering more relevant content, geospatial data confers the ability to enhance the quality of content published to mobile devices. A great example of this is the collaboration between Spotify and Uber. On a recent trip to Miami, we were impressed by Spotify's Miami playlist that synced with the Uber we'd ordered to get us into the Miami mindset.



The sales assistant toolkit employed by US fashion retailer Nordstrom takes data feeds from multiple sources and tracks customer in-store movements using iBeacons. Photo: Nordstrom Inc.

The challenge for organisations is to understand where their brand sits in the context of their customers' lives, and to map out suitable data-driven experiences to hit them with the right content at the right time.

2. They can enhance real-world experiences

One of the most appropriate instances of where organisations can use geospatial data to benefit both themselves and their customers is the retail environment. Retail continues to suffer from economic pressures including the shift to ecommerce. But by enhancing the physical environment retailers can compete by offering an improved shopping experience. There are many ways that this can be achieved, but one involves personalising the in-store shopping experience with real-time customer data.

One of the slickest examples of this is to be found in the sales assistant toolkit employed by Nordstrom. Here, the US fashion retailer takes data feeds from its ecommerce, social and mobile databases and matches them with customers' in-store movements that are tracked by iBeacons. Having this additional information at its fingertips with a real-time data visualisation interface, has helped boost conversion rates, customer satisfaction, and the average sale value. The critical factor here is the way this information is used. The onus is on staff to use the information appropriately, i.e., to provide genuine utility to shoppers.

Conclusion

There are countless ways organisations can benefit both internally and externally through properly leveraging geospatial data. But to obtain maximum utility they must invest in technologies that can both identify individuals accurately and give parity to content and data in real-time.

1. *Big Data: 20 Mind-Boggling Facts Everyone Must Read* by Bernard Marr, Forbes Magazine. 30 Sep 2015

Will Lebens and Chris Mair are co-founders of DADI whose Relationship Infrastructure platform is employed, among others, by LVMH, Bauer, Monocle, Haymarket and Virgin. For more information visit www.dadi.co



Aligning geospatial with demographic and purchasing data helps *What Car?* Magazine target individuals who have a higher propensity to be interested in, and engage with its content. Photo: Haymarket Group