

## Ignoring the gut feel

# The emerging world of predictive analytics

With promotional dollars more precious than ever, smart marketers are always looking to refine their methodologies and increase their return on investment. In recent times, however, they may just have found their holy grail - **David McNickel** explores the rapidly evolving world of predictive analytics...

or many who studied marketing early in their careers, there's a timeless adage credited variously to Lord Lever, Henry Ford and John Wannamaker (and others), that goes something like this; "I know half the money I spend on advertising is wasted, I just don't know which half." While this attitude may have prevailed in the days before computers and sophisticated data analysis, today no marketer in their right mind can afford to blow half their promotional

dollars - and nor should they - as the technology and expertise are readily available to relegate guesswork to the trash can of bad ideas. What's relatively new about data analysis, though, is outcome orientation. Whereas number crunching has typically had an 'historic' focus - providing answers to rearward facing 'what happened' type questions - today's marketers are looking forward, asking 'what's going to happen next', and getting answers they can bank on. Predictive analytics has arrived and is being used by organisations large and small.

Some recent examples include;

- **Hire A Hubby** originally had a 'one size fits all' flat fee approach to selling its franchises. No matter the neighbourhood, the franchise fee was the same. But when the

company began using demographic & census data to determine franchise value - and geo-location to determine franchise boundaries - it was able to offer high value franchises at a higher cost to the franchisee - but also guarantee higher returns.

- Weight Watchers Australia identified the location of its member meetings as being critical in the decision process of prospective clients in joining the organisation or not. Hold them too far away and people wouldn't join. With 1500 meetings a week and constant membership churn Weight Watchers turned to locational intelligence to plan optimum meeting sites around the country and maximised its membership potential.
- In the UK the **Royal Shakespeare theatre company** analysed its audience's addresses, shows attended and ticket prices paid to develop a marketing plan that boosted signups to its membership program by 40 per cent and average attendance by more than 70 per cent.
- The US Internal Revenue Service uses predictive analytics to detect tax evasion. When a return doesn't stack up in terms of its average models the filer is selected for auditing.

-At Pitney Bowes Asia Pacific, solutions group GM Chris Lowther says analytics tools can deliver useable intelli-

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gence across a broad range of entities. "Pretty much any organisation that has an interest in relatively large populations of customers can benefit," he says. "In the commercial space, it's basically anyone in the business to consumer world. We do a lot of work with franchises and retailers, financial service institutions, telcos - all of which have a geographic interest in where their customers and prospects might be and how they might find them. Then there's a lot of public sector & government organisations which have the responsibility for provision of services into their communities - so there's a very broad range of applications."

The decision to seek out an analytical solution can be triggered in a number of ways. For example an organisation may have hit a wall when it comes to understanding disappointing results or is embarking on an ambitious growth strategy and wants to define its objectives and resource allocation based on real-world analytics rather than gut feel.

"Businesses need to plan what they want to achieve," says Lowther, "uncovering opportunities and converting those into business objectives. One of the things businesses need to cover off in preparation is to fundamentally understand how their business works right now - from a core processes perspective - and then understand what

data the business needs to support those core processes." Identifying where that data is and what condition it's in is fundamental to preparation he says. "From there they can identify gaps in their knowledge of customers that will enable them to improve their overall business performance." Once data gaps are revealed, businesses (in conjunction with their analytics partner) can decide where to source additional data from (census information or list brokers for example) and then how to combine that new data with their existing data sets to enable informed decision making. Predictive solutions can be delivered on a case by case basis if businesses are only looking for occasional one-off insights, says Lowther, or for organisations adopting analytics as an integrated part of their business planning there are now a range of software solutions that can be implemented and managed internally.

#### **Implementation and ROI**

So what's a likely timeframe for the implementation of a predictive analytics solution? Whereas installing a new ERP, CRM or telephony system can often take months and in some cases years, Lowther says analytics solutions can take a fraction of the time in comparison. "It can be very much quicker than that," he says. "Perhaps as quick as a

matter of weeks depending on the scope of the project." A good case in point he says is a recent project to help a large Australian retailer decide on the best locations to position new stores. "From broadly discussing an idea of what they wanted to do to engagement was a couple of weeks - and then it was a services project which took 20 working days at which point we presented our recommendations." In terms of return on investment Lowther says predictive analytics delivers one of the quickest returns of any technology solution. "We've had customers say that the acquisition of this tool has paid for itself within a week," he says, "or we have other customers say the original purchase of services was paid for by the returns from their first campaign." Overall Lowther says organisations should expect to double their effectiveness and points to a recent example of an Australian market research company hired by a major bank to conduct face-to-face surveys. Prior to engaging Pitney Bowes the researchers were achieving seven to eight interviews a day he says. "But after applying a geospatial analytics solution they were able to plan the visits of their agents - taking into account travel times, geography & density of population targets and double that to more than 15 a day."



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**Campbell Brown,** *GrabOne* 

#### **Geospatial explained**

For an industry that is trying to simplify its message to clients, the predictive analytics sector is occasionally burdened with complicated sounding terminology for what are actually quite basic concepts. Although it sounds like a cross between brain surgery & intergalactic navigation, geospatial analytics, for example, isn't a complicated idea at all. "Geospatial basically means information about location," says Lowther, "it's as simple as that." And almost all businesses have already gathered geospatial data on their customers or prospects, he says, probably without realising its value. "In the business world around 80 per cent of customer information contains a geospatial element. It could be an address, a postcode, or even a country but at whatever level you've usually collected some way of identifying where a person or an asset is. Identifying where people and things actually are in the physical world - that's geospatial." Applied to decision making, the application of geospatial techniques enables organisations to apply the appropriate resource to different scenarios. Crisis response in government is a good example he says. "In Australia many city councils use geospatial solutions as the basis of an emergency management system. An earthquake, a bushfire or a chemical spill all have a geo-locational >>>

#### **GETTING STARTED**

Before they can create a new future based on predictive analytics, however, businesses need to make a start. Technology is certainly part of the solution, but like any other business solution, technology is only an enabler and what's more important is to understand that analytics is a process - one that any organisation can adopt. Asked to summarize an effective approach, the experts recommend the following steps.

#### 1) KNOW YOUR BUSINESS AND DEFINE YOUR GOALS

Be clear on the business objectives for any analytics project. Are you trying to identify your most profitable customers, the best location for a new store - or potential markets for a new productor service? Keeping your analytics projects focused and specific is the key to effective outcomes.

#### 2) KNOW YOUR DATA

Every organisation collects data on its customers and even a start-up company can source useable data from a range of public and private sources. Analytics partners can assist in cleaning data, defining data gaps and recommending the best data sources for achieving the business objectives identified in step 1.

#### 3) START MODELLING

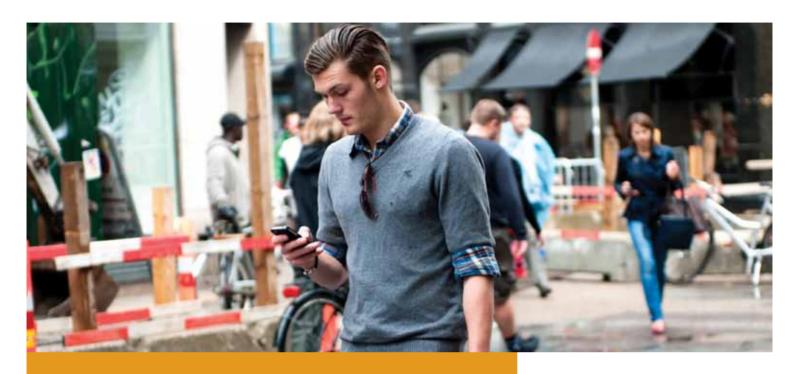
With objectives defined and data sets organised it's time to star modelling for the insights your business requires. You may wish to develop an internal analytics resource, or work on an ad-hoc project by project basis, but whichever option you choose, experience tells at this stage, so engage an expert and go to work.

#### 4) DEPLOY & EVALUATE

With predictive recommendations in hand, deploy your resources and test your strategies. Evaluate your success against your objectives and tweak your modelling accordingly — remembering that analytics isn't a 'set and forget' solution, it's an ongoing process.

So where to from here for predictive analytics? At Pitney Bowes, Lowther, perhaps somewhat predictably, says the technology and potential productivity gains are available now, inexpensive and here for the asking. "These solutions are easy to use and very affordable," he says. "It certainly won't hurt for businesses to have a look because the results that are achievable and the rapid return on investment means the business opportunities are within the grasp of pretty much any organisation that chooses to take it on."

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impact, so using geospatial analysis allows councils to quickly know who is affected, and in asset terms what is affected in a particular area. They then clearly understand what the implications are of different types of emergencies and can mobilise an appropriate response."

#### **Churn analytics to stop loss**

For most businesses, though, a crisis is nothing as dramatic as a bushfire - but the results of things like poor customer retention can be no less destructive. All marketers agree that it costs many times more to acquire a new customer than it does to retain an existing one. Despite this, however, most businesses are clueless as to why their customers have left and which ones are going to leave next. Predictive analytics can be illuminating in this regard says Datamine managing director Mike Parsons. "We're not talking about stopping the people who have left," he says, "because they're gone already. But we can analyse their [historic] behaviour and look at the triggers, the things that happened that caused them to leave. Then we model that and apply it to the remaining customer base and can say 'based on that modelling, these are the people who are likely to churn if you don't do something about it'," says

This insight then allows management to allocate resources more efficiently. For example, if a com-

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66 You will be able to redeem your coupons, earn your Flybuy points and pay for your purchase via near-field communication - all with a single tap of your phone. That's the future. 99

Francisco Cordero, InMobi

pany only has the capacity to make a courtesy call to 10 per cent of its customers, then ensuring that 10 per cent includes the customers identified as most likely to leave will be much more effective at reducing churn than any other metric for deciding who to call. The key here is relevancy. A call made to a client who is happy with your company is essentially wasted effort, but if that call arrives when a customer has some pressing issue with your business – suddenly its relevant, and the relationship will likely be saved.

#### **Stay relevant**

This concept of relevancy also applies to the goods and services you're supplying. At 'daily deals' website GrabOne, marketing manager Campbell Brown says creating offers with increased customer 'relevancy' has become critically important for boosting the success of advertiser's campaigns. Brown describes GrabOne "as a local commerce platform" where a range of businesses (often small to medium enterprises) offer deals on products and services to their local community and beyond. Building customer rapport and repeat business is important to organisations like this, he says, and GrabOne is keenly focused on predictive analytics as a tool to grow the business. Interestingly, the predictive aspect of GrabOne's relevancy initiatives is not solely based on customer purchase history.

"What we do is based on broader user behaviour," says Brown. "So we bought 75 million email clicks from our email provider ExactTarget. We can see what our users were clicking on - what they were interested in. We then match that with what they've been liking on Facebook, their purchase history and demographics. We pull it all into line with an algorithm that has a weighting for each data stream and that shows us what they might have a higher propensity towards purchasing. When you reach a certain level of deals you do have to be presenting people with the most relevant deals to them," he says.

While the bulk of GrabOne's current customer interactions are still occurring via the internet, Brown says transactions via mobile are increasing at a phenomenal pace. "About nine months ago," he says, "our mobile transactions made up 1.5 per cent of total monthly transactions whereas now they make up anything from 14 to 18 per cent. We're working really hard to capture that first mobile purchase."

And why is mobile so important? Because it allows customer targeting by both geographic region and by device says mobile marketing experts InMobi's general manager Francisco Cordero. "Think about telcos, he says. "If Telecom wants to buy up all the mobile advertising inventory on Vodafone handsets they can. Or if Vodafone

wants to use the phone as a CRM tool to cross sell their own customers they can advertise only to Vodafone customers." Rather than randomly placing mobile advertisements with all smartphone users, marketers can narrow their targeting specifically. Device ID technology permits Nokia to run mobile ads only on Samsung handsets, for example, or app developers to advertise only on handsets running a chosen operating system. At Vodafone, m-Commerce manager Bridget Gallen says location based services can already deliver relevant retailer coupons direct to the handsets of phone users looking for deals in their immediate vicinity - and adoption of this type of marketing will only increase as smartphones become more m-Commerce capable. "You will be able to redeem your coupons. earn your Flybuy points and pay for your purchase via near-field communication - all with a single tap of your phone. That's the future."



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