

Forget influentials, herd-like copying is how brands spread

Dr Alex Bentley and **Mark Earls** argue that spread marketing is a pull, not a push, random phenomenon and requires lots of fires to be lit to start a trend

RATHER THAN FOCUS on the motivations of individual consumers – the ‘needs’ that classical marketing approaches encourage us to identify and satisfy – more and more marketers are turning their attention to how ideas, opinions and behaviour spread through populations.

To explore this new territory, many of us use a heady brew of old diffusion models from the 1920s and newer network and information theory (as for example, articulated in the bestselling *Tipping Point* (1)). Until recently, though, few of us have really checked whether this mix reflects contemporary behavioural science or even how things really spread through populations.

Here we outline an alternative model of how things spread: one rooted in the contemporary behavioural sciences and which we have already successfully applied in practice. It is remarkably simple, useful in describing the spread of all kinds of behaviours, and rooted in our species’ scientifically demonstrated social – or ‘Herd’ nature.

If this model is correct, the most important implication is that ‘spread’ is largely a pull, rather than a push, phenomenon; and marketing’s prime challenge is to learn how to help the mechanism work to spread the ideas that we and our clients are interested in: to make marketing something populations do with our work, rather than something we do to them.

A new kind of question, a new kind of marketing

Marketing is little more than half a century old. For most of that time, it has been concerned with identifying, understanding and satisfying the needs of consumers. Over the years, the tools of the trade changed, but the focus has remained the same: why do people do what they do?

Until recently, that is. In the last decade, more and more of us have started to turn our attention to how rather than why: how do things spread?

This shift can be seen as a natural response to being repeatedly surprised: surprised by sudden and unforeseen changes in market behaviour (for example, the rapid rise and fall of consumer



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brands such as the brightly coloured Crocs shoes or the emergence of popular artists such as Arctic Monkeys) or, the overnight emergence of markets where none existed before (for example, the rapid growth of new technology usage – text messaging in the UK grew from zero to 5bn/mth in a decade). We have been surprised by the explosion of peer-to-peer computing, both the commercial sites and the social media sites – like Facebook, MySpace, Flickr, YouTube, Twitter and so on – by mobile telephony and SMS and, of course, by the blogosphere.

Fittingly, we are also interested in spread because that’s what everyone else is interested in. Indeed, we are as much ‘part of the herd’ as those we seek to influence.

A heady brew of old and new

Getting to grips with the ‘spread question’ has proven a real challenge. Few of our traditional marketing tools or maps offer much help. But that hasn’t held us back: many marketers and researchers have pieced together a patchwork quilt of explanations from various sources: old diffusion theories from epidemiology of the 1920s and 1930s, woven together with newer ideas from information and network theory (most popularly in Gladwell’s *Tipping Point*). Old ideas such as contagion and virality (i.e. that behaviour and opinions spread like diseases) slot in

with newer ones such as network hubs and spokes (i.e. the so-called ‘influentials hypothesis’ that some individuals dominate the flow of ideas through a population through their superior social connections).

This heady brew of the novel and the familiar has fuelled an unprecedented explosion of innovation in marketing. For example, in less than five years, the Word of Mouth Marketing Association (WoMMA) has standardised and productised WoM into a coherent process that can be taught to individuals and companies seeking to enhance the spread of their ideas. Similarly, new kinds of research businesses have emerged, measuring new things in new ways; Keller Fay, Buzzmetrics, Technorati, Spring and Brainjuicer have sprouted overnight in this fertile soil. And just as all research now is ‘robust’ (2), everything in marketing must be ‘viral’ and/or ‘sticky’.

The ideas are becoming ubiquitous: hardly a meeting of big-wigs passes without a wig volunteering one of them. The ideas also seem plausible, as they fit neatly into our comfortable old mass-media models. Perhaps a little too neatly, some think: is ‘peer recommendation’ the new persuasion? Are ‘social networks’ the new TV networks for broadcasting messages at audiences? Does this perhaps explain their extraordinarily rapid adoption? ▶

These ideas seem – at first glance anyway – to be practical and useful: they give us stuff to do in the confusion of Web 2.0. But is this cluster of ideas – this heady brew – the latest word on how things spread? Popularity, plausibility and utility do not equal truth. Quite a different picture is emerging from behavioural science – from those who study mass behaviour without having a stake in changing it.

A new model

So how do things spread? As it turns out, we seem to have got things back-to-front with the patchwork of ideas we've been using up until now. So in the next section we go back to the basic principles of how ideas, opinions and behaviours spread in human populations, from prehistoric hamlets to today's busy, crowded cities. (see Box 1).

Copying is almost everything

The simple truth is that humans, being first and foremost social creatures, rather than independent agents, rely on copying to learn and to negotiate the rich and sophisticated social reality they inhabit. Copying is our species' number one learning and adaptive strategy.

By contrast, independent thinking, as Nobel Laureate Daniel Kahnemann has suggested, is to humans as swimming is to cats: we can do it if we really have to, but ... So it is with behaviour: it is not that independently generated actions are impossible, just much rarer than we think.

Of course, it often seems otherwise – our minds tell us a different story – but it is now generally agreed that without the

BOX 1

Key principles: How things spread

- ▶ Copying: human's number one learning strategy
- ▶ Pull, not push
- ▶ Social networks are fluid, not fixed
- ▶ Network structure mostly not 'Influentials-like'

Origins of copying

For decades, the rational choice assumption in marketing has been extreme (who really calculates all the possible costs and benefits of their everyday decisions (1)). More and more, it seems we are actually closer to the opposite extreme. We have limited predictive knowledge because what needs to be done next depends upon what everyone else is doing. In this kind of uncertain, changing situation, a solid shortcut strategy is to copy what other people are doing. It's less risky, and why not just take advantage of what others have worked out already? Copying also ensures group inclusion, and is likewise instinctive among our primate cousins. In fact, imitation can itself be considered 'rational', as a neurologically based, adaptive ability that has evolved in us to imitate complex behaviour (2, 3, 4, 5).

Copying in groups can seem goal-directed as with, for example, flocking birds (or even pedestrians) who mainly copy their neighbours' actions, with just a very small proportion of goal-directed individuals among them (6, 7). In the same way, people 'flock' to download certain songs (8), with only a few independent actors unwittingly infusing a coherent direction among the copying majority. Crucially, these few independent individuals are not special – they could be anybody. It's not their identity that matters – they are replaceable – it's their consistency of direction that, through copying among the rest, leads the flock to go in one direction.

1. P Ormerod: *Butterfly Economics*. Faber & Faber, London, 1998.
2. G Gergely, H Bekkering and I Kiraly: *Nature* 415: 755, 2002.
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4. O Tchernichovski and J Wallman: *Nature* 451: 249–250, 2008.
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6. ID Couzin, J Krause, NR Franks, and SA Levin: *Nature* 433, 513–516, 2005.
7. AJW Ward, DJT Sumpter, LD Couzin, PJB Hart and J Krause: *Proceedings of the National Academy of Sciences USA*, 105: 6948–6953, 2008.
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copying mechanism our species would be much less successful than it is.

One recent letter to *New Scientist* suggested that we change 'our name from Homo sapiens, "wise man" to Homo mimicus, "mimicking man",' adding that 'our compulsive copying encodes collective knowledge into our society, and it is really our society that possesses humanity's "intelligence"'. In other words, copying is what creates the cultures and trends for us to spot.

Pull not push

Copying among a population with frequent interactions creates a pull mechanism by which things – visible behaviours, opinions, skills, fashions and so on – spread through populations. This is the opposite to conventional marketing wisdom, where 'influence' is a 'push' idea, in being about what we do to people,

rather than them choosing to do themselves, without us.

Our own agendas as marketers in spreading our own things leads us to imagine that spread is a 'push' phenomenon. But, as far back as we have evidence, ideas and behaviour have spread without anyone in particular 'pushing' them – for example, as farming spread across Neolithic Europe, the crossbow swept across prehistoric North America, and tractors spread across mid-century Illinois (3). We all know how hard it is to make audiences do what you want them to do: 'compliance' – taking your medicine regularly, in the right dosage, and to the end of the prescription – is a big challenge for pharmaceutical marketers. This is generally true of marketing, change management, and even social policy – we're just not very good at changing mass behaviour. Period.

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Two kinds of copying

We are able to distinguish two extremes in the type of copying that can occur – random versus directed copying.

► Random copying is a continual process. For example, walking down London streets you unconsciously register other people’s fashions and brands, and later seek those things as if they were your own idea.

► Directed copying is somewhat more conscious, or at least tractable: you adopt the habits of your parents (for example, politics, laundry soap, trusted mortgage company), or copy certain friends, and so on. This is not, however, the same as the influentials hypothesis, because most often it is a category, like parents, close friends, ‘experts’, and so on, who are copied. So we see the case of the single, magic influential as only an exceptional case of the broader phenomenon of directed copying.

Of course, there is a spectrum between random and directed copying and a large variety among individuals. Nonetheless, at the population level, we can search for

the characteristic signature of the type of copying that predominates. Random and directed copying leave different signatures, particularly in patterns of turnover in what constitutes the most popular behaviours.

Under random copying, for things that are roughly of the same inherent appeal, the only thing that matters is popularity, which begets more popularity by being everywhere we look when we copy. The direction of random copying is quite unpredictable over the long term. One example is online searching (see Figure 1), where internet users copy ideas from innumerable sources, from all over the world, and from all sorts of people.

Directed copying often results in more steady, potentially predictable, change. Beer habits, for example we acquire strongly from our friends (4) and perhaps even our parents, and, in any case, changes take place over a long, generational timescale. The change is smooth and directional because the direction of copying is consistent (see Figure 2).

Networks and spread

The ‘social network’ is marketing communications’ favourite new idea, the ideal replacement for declining TV networks. Social networks are often envisaged as fixed patterns of dots and lines, with the most connected dots (influentials) seen effectively as the new TV broadcast towers. Of course, it would be nice – and much easier for us – if human networks were rigid and fixed, like the wires in a circuit (or a ‘series of tubes’ as one senior US senator described the Internet); we want to send our messages and ideas down them. Unfortunately, human society is a shifting soup of interactions: think about all folk you’ve interacted with for the past couple of days; most can count hundreds of different interactions – passing conversations on the train, at work, though multiple media. As Bernard Cova (5), Duncan Watts (6) and others have written, each of us pops in and out of different overlapping and shifting social networks. Just as soon as we have mapped a particular manifestation of a social network at time *t* (for example, emails, social web pages, mobile phones), the map has already changed – ask a young person to recount her my/face/space/book topics of the day. In most cases, there never was a fixed network at all, especially when we speak of the more intractable, yet most important interactions, face-to-face. ►

FIGURE 1

Signature distributions

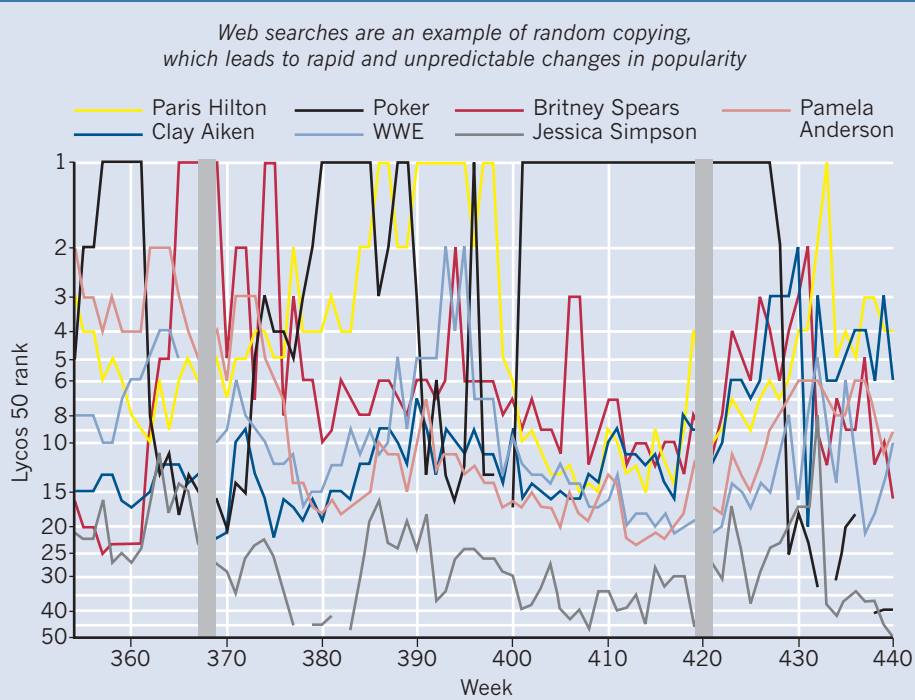
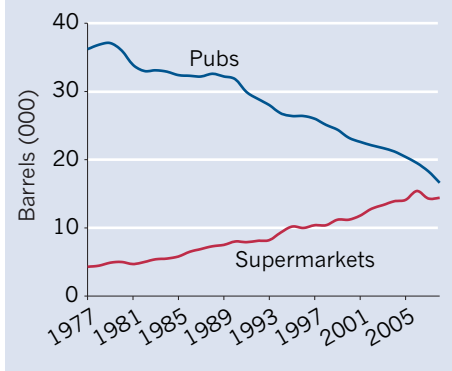


FIGURE 2

Beer sales

The effect of directed copying is nicely exemplified by the long, smooth change in beer drinking habits in the UK



That is not to say that it is impossible to understand the underlying structures of networks, which can be characterised categorically, rather than exactly, as Paul Ormerod (7) practises at Volterra Consulting. Knowing the kind of network reveals the type of landscape across which behaviour spreads, even where an exact map is impossible. And gives you a much better chance of shaping the spread of a particular kind of behaviour.

Social networks: the law of the few

A prevalent misunderstanding is that all social networks are hub-and-spoke in form, known as 'scale free' in the network literature. Gladwell (8) calls this 'the Law of the Few'; Berry and Keller (9) see these hubs as 'Influentials'; Fournier, Dowd and Sosnik (10) call them 'Navigators'. The idea refers to special individuals in every population who 'tell the rest of us what to do, buy ... etc' (11).

What most data show, however, is behaviour spreading through ordinary folk rather than 'broadcast' by special individuals. Real, face-to-face friendships, for example, are not scale-free (12). If we view the influentials phenomenon as a special case of directed copying, then usually it is we who decide to copy an individual, creating their perceived influence in the process.

In this view, anyone can start an information cascade, which can start anywhere (13). But this can be hard to accept, as we naturally gravitate towards post hoc explanations: such as 'an idea spread because of its spreadability', or 'a person sparked an avalanche of change because (s)he was influential'. This may be true, but, as with lottery winners, cigarette butts (that start forest fires) and black swans (14) – post hoc explanation does not equal prediction.

Advantages of this new model

This new model is, first and foremost, useful: it explains why certain things spread rapidly and unpredictably (e.g. fashions spread through random copying) and other things stay the same for generation after generation (e.g. US charitable giving habits copied from one generation to the next). It awakes us from our fascination with 'influence' and 'persuasion' of all sorts, and suggests a futility of 'making' people do a particular thing with marketing (the weakness of 'push'), rather than go with what they are already doing.

This new model is theoretically well grounded: it reflects behavioural and cognitive science, how we think and behave, and how our brains are constructed.

The new model is more efficient: with very little information, we can describe complex phenomena. We don't need reams of survey data or gigabytes of yesterday's social network interactions (which people have moved on from by now anyway).

The new model is directional: it refocuses us back on practical, marketing invention, rather superfluous theory, but this time with a map that reflects how things spread.

How do things spread? Implications for marketing

Pull not push: stop thinking about marketing as something you do to people and start thinking about what you can do to help the natural pull mechanism work better. Tactics include visibility, participation, and so on.

Understand the tides and landscape through which pull is operating before you decide on what you're going to do.

Light lots of fires: cascades built on copying introduce an element of unpredictability. So best to reduce risk by lighting lots of fires and seeing which one(s) take(s).

Implications

The implications of this model are significant: indeed, they point to nothing less than an inversion of marketing and what it does in the world. Let's consider them one by one.

Pull not push

Rather than (pointlessly) trying to impose our own agenda, to get folk to do what we want, marketing can encourage the natural pull mechanisms that spread ideas and behaviour. Marketing becomes a pull-facilitator function rather than a push one.

Pull tactics

Some tactics that catalyse the copying process are as follows.

- ▶ Amazon: every product page has 16 features that send what you think and what you do to other folk, and vice versa.
- ▶ Magners cider: gave British drinkers something visible to do with its distinctive serving suggestions (with pint glass half-full of ice and pint bottle beside it).
- ▶ Apple iPod: made the earpieces white to bake the visibility into its product.
- ▶ Nike: Run London campaign helped runners train together, share running times and progress with each other.

Understanding the tides

A soup of social interaction underlies any population's behaviour. With that comes both accidental and deliberate novelty, some of which spreads. Tides come and go, behaviours and ideas are constantly sloshing around. So you have two choices as a marketer: either you can ignore the tides (as now) or you can try to understand what you are dealing with and work with the dynamics. There are established – though not yet widely used – tools and approaches for doing this.

Understanding the landscape

Although it is rarely possible to map a social network exactly (since it is constantly changing), its general form can often be characterised. Is it a tightly clustered network, for example, or a highly hierarchical one? Paul Ormerod's quantitative methodology (15) is a great place to start: imagine how the Home Office might change its recent strategy against binge drinking, had it known that binge drinking tends to spread through tightly clustered social networks, rather than random networks, or based on rational, independent decisions.

Lighting lots of fires

The final challenge to marketing orthodoxy is this: if things spread as we have described, it is fundamentally unpredictable which of the many competing ideas will take off next. As Watts and Hasker (16) suggest, place lots of bets to give yourself the best chance of starting a full forest fire – start lots of fires in lots of promising places. This challenges not only marketing practice, but our very idea of what strategy is. There is no longer one grand unified strategy, but lots of related strategies, one of which we hope takes off.

Conclusion

Shoehorning old ideas and practices into a model of how things spread today may seem plausible, and certainly is popular, but it is unlikely to be an accurate description of how things do actually spread.

Indeed, if the spread of spread marketing tells us anything, it is that things work very differently from how this cluster of older ideas suggests. A much bigger and more exciting rethinking of marketing is under way for those who want to harness what the behavioural sciences are revealing. So why not join in? Lots of folk you know already are – or will be very soon! ■

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