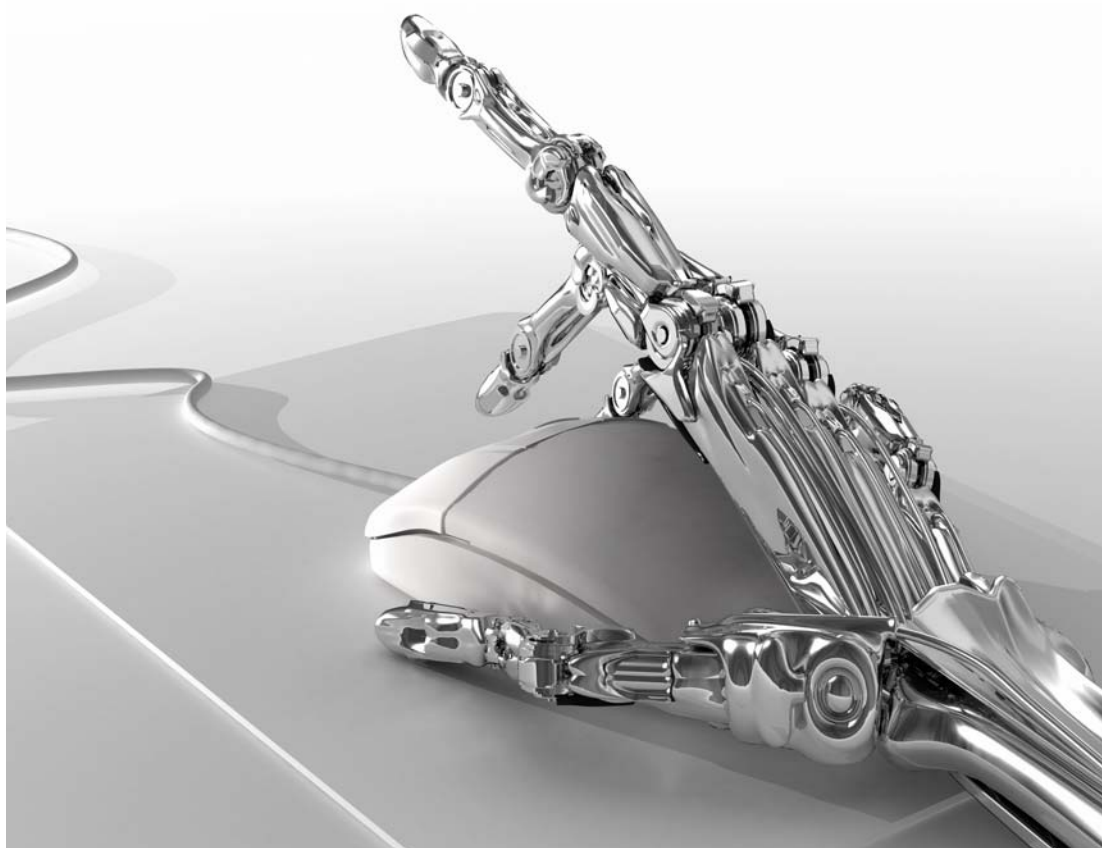


shape the  
agenda

Brave new world:

Technology and marketing



# Summary

**New market space can be created by technology-enabled systems which will, for the first time, enable one-to-one marketing that really works – while still remaining profitable.**

Marketing has been transformed by technology over the past decade and we stand on the threshold of advances that once belonged in the realms of science fiction. New technologies have enabled companies to connect with more customers, respond more quickly and effectively to customer needs, and become more solutions oriented. The benefits in terms of increased competitive advantage and convenience, ease of use and lower prices for customers are evident everywhere – recent findings show that 77% of marketers agree that technology has, on the whole, made marketing a more effective discipline.<sup>1</sup> The future is no less exciting, with advances in neuromarketing and nanotechnology opening up many possibilities.

However, ever-encroaching advances in technology make marketing less of a human art. Much of what used to require human input can now be automated. Are we doomed to a future that will contain robot marketers, putting large numbers of people out of work? With marketing appearing to be increasingly dehumanised, is it time for the march of technology to be reined in?

In fact, those very technologies that appear to be making marketing more inhuman can enable a more personal touch. Intelligent platforms that screen out unwanted targeting and focus on real customer value are about to become prevalent in the marketplace. The price and complexity of these systems are coming down considerably – meaning that SMEs and B2B companies can take advantage of them when attempting to achieve competitive advantage over larger rivals.

Secondly, the future applications of technology will lead to huge improvements in customer service. True personalisation and wider customer experiences can be created by intelligent learning applications. The consequence, rather than mass redundancy of marketers and the blind automation of services, will be a clearer focus on customer satisfaction. New market space can be created by technology-enabled systems which will, for the first time, enable one-to-one marketing that really works – while still remaining profitable.

# ONE

## The future lies this way

**Some see marketing as being in danger of becoming an exact science that treats people as little more than biological machines. As a result, the human touch is becoming more and more irrelevant, especially for large companies.**

Many decisions or research which used to require human input can now be made by programs. Segmentation and customer retention strategies can be worked out by algorithms. Systems that can number-crunch and make their own decisions have been used in areas such as car insurance, home mortgages and to conclude whether someone qualifies for insurance benefits.

Similarly, there are advanced programs that can assess whether or not to grant a bank loan, and how much that loan should be, by comparing the data that the customer supplies with vast quantities of statistical data on record. The program can then give an instant yes or no answer and even come up with its own sum. Increasingly, this kind of automated response is being used by internet-only loan and insurance companies (usually specially created brands owned by a more well-known parent company).

Such programs and algorithms have created immense value for low-cost airlines, such as SouthWest Airlines in the US and easyJet in the UK, to create new business models based on yield optimisation. These can monitor prices available online and update them several times a day to ensure that, by the date of departure, the plane travels at optimum capacity. The most sophisticated systems, according to a recent article in MIT Sloan Management Review, can even factor in considerations, such as lifetime customer value and purchase history, into the prices they offer — in other words, decisions that would previously, but no longer, require a human managerial process.<sup>ii</sup>

The problem with these advances in technology is that they risk making marketing less human at the very point when customers are crying out for more personal service. Some see marketing as being in danger of becoming an exact science that treats people as little more than biological machines. As a result, the human touch is becoming more and more irrelevant, especially for large companies.

## TWO

# Human and superhuman

**"As the world becomes ever-smaller with the almost global perpetuation of the Internet, the world dances to technology's tune, not the other way round."**

The impact of this on marketers is potentially severe. Will marketing be pushed to the creative end of the profession — advertising, PR and communications? Will the knowledge workers of today go the same way as the industrial workforces of the 19th Century? Richard Sennett, Bemis Professor of Social Sciences at Massachusetts Institute of Technology believes that "Skills extinction is a durable feature of technological advance." For Sennett, "As the world becomes ever-smaller with the almost global perpetuation of the Internet, the world dances to technology's tune, not the other way round."<sup>iii</sup>

Given time, technology could eventually make all the decisions that marketers would make, with very few senior exceptions. "The education system turns out large numbers of graduates who will not find work in the jobs for which they trained," says Sennett. "More people will lose work to those in other countries who work for less; still others will find that as they age, their experience matters ever less."<sup>iv</sup>

Early chess programs used strictly logical strategic processes and, as a result, tended to be beaten by human players. But when the programs started to imitate human behaviour, they began to win against Grandmasters. It's not stretching the imagination too much to

suggest that, within a few year's time, this technology could be applied to marketing systems as well. At the point when machines can 'think', they will be able to assess customer data, correctly distil likes, dislikes and opinions from the information, and create a psychological profile for customers (a 'transactional analysis') that can then be used in a program.

### **Technology enables**

- **Competitive advantage**
- **New market space**
- **Greater efficiencies**

### **But the drawbacks are...**

- **Lack of personal attention**
- **Intrusion and ethical concerns**
- **Potential of human redundancy**
- **Erosion of imagination and creativity**

**The challenge for marketers in the 21st Century is to consolidate the two faces of technology: to use it to offer increased benefits for customers without eroding the traditional values of human contact and personalised approaches.**

**Every company has the opportunity to be a winner or loser with technology – the trick is distinguishing between controlling the technology, and allowing it to control you.**

This can be used to make bespoke strategy and communications that could not only replace human marketers but may well be more effective than them. Even complaints can be dealt with automatically, but the responses will be so sophisticated that customers will not realise they are communicating with a machine. Just as with the chess program, at the point when the customer cannot tell that he or she is communicating with a robot, companies will begin to wonder whether they need expensive, emotional people who require comfort and pensions at all.

Technology used to be the servant of marketers; now the positions are looking perilously close to being reversed. Is it only a matter of time before technology makes the human element of marketing obsolete?

"Only if the people using the systems concerned allow it to," says Cathy Ace of Simon Fraser University, British Columbia, and Marketing Consultant.<sup>v</sup> Every company has the opportunity to

be a winner or loser with technology – the trick is distinguishing between controlling the technology, and allowing it to control you.

This is knowing the difference between lazy marketing – allowing systems to automate decisions, send mass communications and decide what the customer wants by using algorithms – and employing technology to complement human interaction.

#### **THE TECHNOLOGICAL MASTERCLASS**

- **Create customer quality by using technology to make marketing more personalised**
- **Free up time from mundane tasks that can be automated, to enable employees to spend more time on better customer service**
- **Know the difference between real relationships and pseudo-relationships**
- **Know when to use technology and when to use human contact**

# THREE Keeping it personal

**"The marketer who wants to leverage their business opportunity will identify places throughout their product and service mix where technology can improve their business performance and enhance their customer offering..."**

There are two key ways in which technology can be managed to avoid the dystopic scenario of human redundancy and lazy, dehumanised marketing.

Firstly, by using technology to create personalised space. Honda, for example, is developing interactive platforms where car buyers can speak to advisers without travelling to a showroom. By recognising a significant stumbling block in car purchases — that many customers don't like visiting showrooms because they feel pressured to purchase, or are wary of salespeople — Honda has created a 'virtual showroom' where the customer can speak to a technician, have different colour models demonstrated to them, and 'test-drive' the vehicle. While there is no substitute for seeing and test-driving the actual car, Honda's virtual showroom enables customers to become familiar with the product without obligation. In addition, it is more likely that a customer who has visited the electronic showroom, and who isn't loyal to a particular make of car, will eventually choose Honda.

Launchcast is a music service from Yahoo! that enables listeners to customise a radio station so that it plays the kind of music they want to hear.

Chris Dadd, Head of Products at Win plc, outlines how a bespoke radio channel can be created: "After a few months of use it hardly ever plays a track you don't like. If you hear a Marillion track and you say you like it, it plays other music it guesses you'll like too, such as Pink Floyd. Each time, you can tell the radio station you like it or dislike it. You can also say, I like the artist but I don't like the track, and it won't play that track again."<sup>vi</sup>

Launchcast succeeds in the fundamental goal of one-to-one marketing — discovering what an individual customer wants, and providing an exact match to that particular customer, without unsustainable cost to the provider. The service adapts as you rate your preferences and succeeds at being truly interactive.

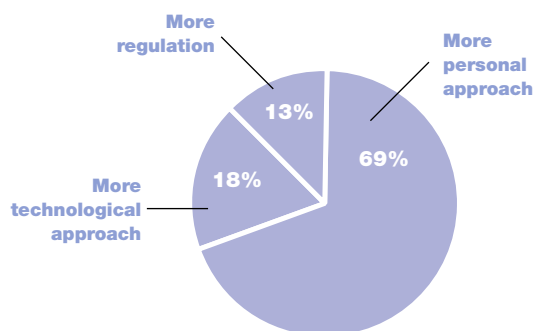
For Cathy Ace, "The marketer who wants to leverage their business opportunity will identify places throughout their product *and* service mix where technology can improve their business performance and enhance their customer offering. But, what they deliver to the customer because of the use of technology must still be what the customer desires — or else we're back to the bad old days of non-marketing driven business."<sup>vii</sup>

# FOUR

## The human factor

**Honda and Yahoo! Music are developing personal relationships enabled by technology, where trust and shared human values are not 'dehumanised' but, instead, are enhanced by the technology's intelligent learning abilities.**

Sixty-nine per cent of marketers believe that, in the near future, a more personalised approach, rather than a more technological one, will have a significant impact on marketing. In the survey this statistic appeared in, it is the younger generation (ie the more technologically aware) that is most keen to see marketing become more personal than it is at present.<sup>viii</sup> Honda and Yahoo! Music are developing personal relationships enabled by technology, where trust and shared human values are not 'dehumanised' but, instead, are enhanced by the technology's intelligent learning abilities.



**FIGURE 1:**  
**'Which one of the following possible approaches do you believe will have the most significant overall impact on the future of marketing?'**

(Source: CIM Marketing Trends Survey, April 2006)

The second area where marketing will be significantly altered by new technologies will be in freeing up time to increase customer service. Rather than seeing technological advances as putting people out of work, as Richard Sennett does, a different view emerges:

one where companies can re-invigorate customer service by using regained time. The technology is employed to do the tedious or time-consuming work that previously filled up much of an employee's day, such as extracting information from data and making mechanical decisions. This leaves employees free to complement the technology by giving more human attention to customers.

Ian Armstrong, Manager of Customer Communications at Honda (UK) Cars, points out how this is the second benefit of the virtual car showroom outlined above. "Customers can book test drives online, or by using our interactive TV service. This takes traffic away from the call centre, or the dealership itself, which allows them to spend more time on improving service."<sup>ix</sup>

It's easy to see how this type of technology could be applied to various industries. The engaged call centre, or the infuriating 'you will now hear a series of options' system that customers hate so much, could soon be a thing of the past. Chris Dadd concurs with this: "SMS is saving the AA tens of thousands of pounds each month by automatically sending an update to stranded roadside customers. The message tells them when the AA is only 15 minutes away — removing the update call from the customer, whilst leaving them happy."<sup>x</sup>

# FIVE

## This time we get it right

**Humans, not robots, will prevail in the future by complementing human skills with technology in order to create real customer value.**

To ensure the personal benefits emerge from technology, rather than technology eroding customer benefits and allowing lazy marketing to prevail, a level of technological education must be added to each marketer's training. As was explored in our paper *A Tale of Two Disciplines*, marketing is both a creative and a scientific discipline. While this is a stimulating and dynamic junction, it can be an uncomfortable straddling of two different mindsets. Key to furthering marketers' grasp of technology is the need to distinguish between 'human skills' (empathy with customers, traditional face-to-face research, etc) and 'technological skills' — and to delineate where and when it is appropriate for the very different approaches to be used.

Technology can free up time and make decisions for you but, at the same time, good old-fashioned human connections are still needed — and always will be. Vodafone, for instance, still uses traditional market research in assessing whether its campaigns are successful or not and for making connections between advert recall and actual sales. While technology has its place, Vodafone wants to find out why customers churn, and that can only be done by face-to-face contact.

The pace of technological change is now outstripping the legal frameworks that are in place to keep up with it. Fifty-six per cent of marketers agree that the ways in which technologies help marketing to obtain and store customer information are moving ahead of the ethical and moral dilemmas that they create.<sup>x</sup> With this increased use of technology comes increased responsibility. A clear understanding of how technology fits into responsible marketing is a requirement that makes up part of each new marketer's training. This will enable marketers to distinguish between pseudo-relationships and true ones.

We may need fewer marketers in the future thanks to time-saving technologies, but this will not necessarily lead to mass redundancies. Humans, not robots, will prevail in the future by complementing human skills with technology in order to create real customer value. Very different to the apparition of technology for technology's sake, this will instead take us to the ideal goal of viable one-to-one relationships that have buy-in and approval from the customer, and rid marketing of the perception that it is intrusive and unwanted.

# SIX Neuromarketing

**Isolating the part of the brain that responds to brands clearly has a powerful attraction to marketers trying to discover the elusive secret of why some brands inspire 'loyalty beyond reason', to use Kevin Roberts' phrase, and others become 'brand failures'**

Neuromarketing has yet to make a significant impact on marketing practice but contains much latent power. The technique uses technologies such as fMRI (functional magnetic resonance imaging) to analyse neuron responses in the brain. By studying how the brain responds to a particular product, marketers can infer why customers buy one product rather than another, and can generate insights into why some brands succeed and others don't. The technique can answer classic marketing conundrums that traditional market research has previously been unable to answer due to flaws that can arise in questionnaire/response techniques, and the fact that respondents do not necessarily answer truthfully (or realise that they are not answering truthfully). Instead, neuromarketing promises to get to the very core of a response to a brand.

The technique came to prominence when it appeared to solve a famous marketing paradox: why do most people claim to prefer Coca-Cola when, in blind taste tests, Pepsi always comes out top? When a test group was recorded with fMRI as they drank one famous brand and then the other, neuroimaging scientists discovered that a region of the brain called the ventral putamen lit up most strongly when the consumer drank the beverage he or she preferred. This is an area of the brain associated with seeking reward and it shows that most people prefer Pepsi.

However, when people were told the brand name of what they were drinking, the part of the brain that was associated with higher cognitive processes showed

the most activity. Here, more people claimed to prefer Coke. The part of the brain that responds to brand recognition was stimulated by the knowledge that the drink was the 'Real Thing'.<sup>xii</sup>

So far, the technique has generated limited practical marketing insight. However, by locating which parts of the brain respond to which kind of stimuli, so the theory runs, marketers could discover what does, or doesn't, lead to brand preference and the apparently irrational choosing of one product over another. Isolating the part of the brain that responds to brands clearly has a powerful attraction to marketers trying to discover the elusive secret of why some brands inspire 'loyalty beyond reason', to use Kevin Roberts' phrase, and others become 'brand failures'.

The potential use of neuromarketing is similarly open to companies investing money in the technology without knowing what returns they might gain from it. For Cathy Ace, the buzz currently surrounding neuromarketing is of dubious value. "I think it is unlikely that we are seeing a consumer's true market response to anything when they are attached to an MRI scanner. But given that marketers will always be striving for an advantage in the marketplace, then maybe those organisations with big enough budgets will be able to keep using the leading edge of medical science to cut them a path through their competitors."<sup>xiii</sup> In other words, neuromarketing will be useful if it is controlled as a tool to gain insights, but companies should think very carefully before investing large sums of money in the technology.

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### Marketing Trends Survey

The latest Marketing Trends Survey (MTS) from The Chartered Institute of Marketing has revealed that the mood of Britain's marketers has improved over the past six months. They are more confident about the future of the economy, the prospects for their own business, and the growth of sales. MTS is produced by Ipsos MORI for The Chartered Institute of Marketing on a bi-annual basis. It is now available to purchase from the CIM Information and Library Service. A summary of the report is available to members at <http://www.cim.co.uk/MTS> or please contact 01628 427333 for further details. Price for members is £125 and non-members £200.

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