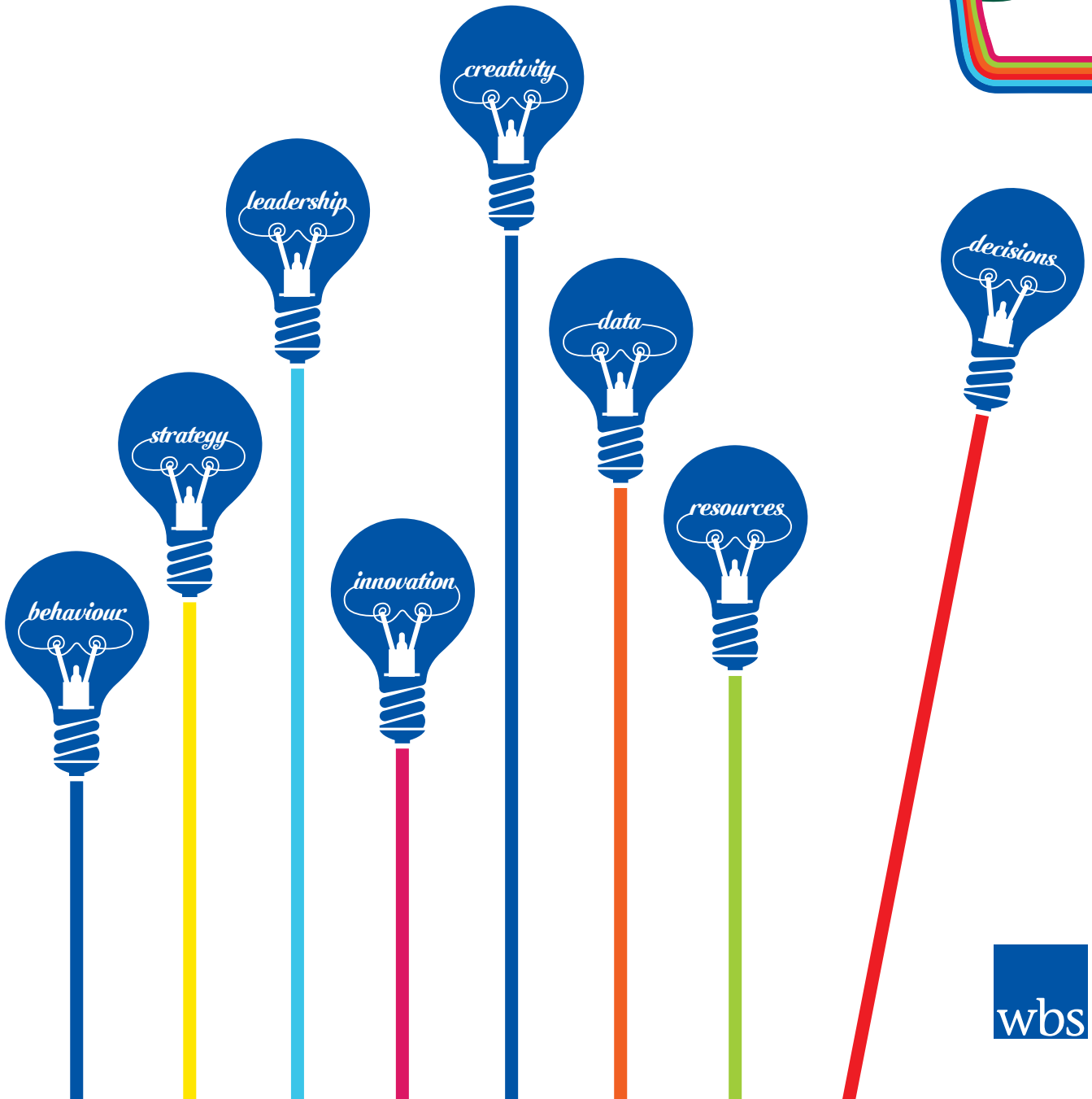


# core

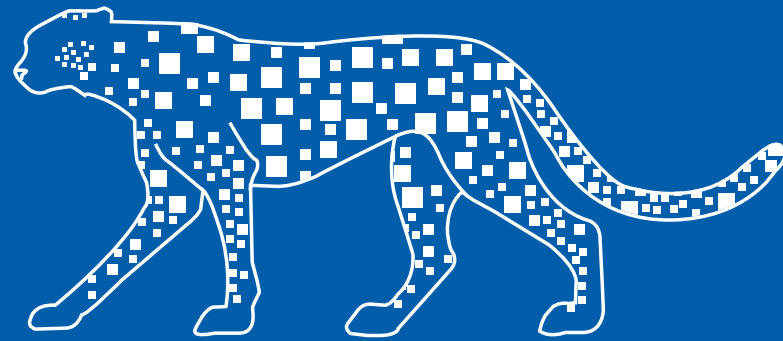
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To survive and thrive, you need to be ahead of the pack. Warwick Business School will equip you to be just that. At WBS we believe that leadership relies on a firm understanding of human behaviour and creativity. It's what gives our MBAs the edge, in a highly competitive world.

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Warwick Business School: A leap ahead



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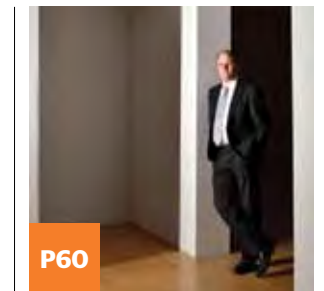
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# Introduction



"I hope that you will find plenty to read in our magazine, and we'd love you to visit our website [wbs.ac.uk](http://wbs.ac.uk) to watch films and find out more about our research and teaching."

The Dean of Warwick Business School, Professor Mark Taylor has outstanding credentials both in academia and in business. He was previously Managing Director at BlackRock, and prior to that worked for the International Monetary Fund and the Bank of England. He has been a Professor in International Finance at Warwick since 1999 and his research on exchange rates and international financial markets has been published extensively. He is the only professor at a British business school to be listed as a Highly Cited ISI Researcher, and is one of the most highly cited researchers in the world.

Where do – and where should – business leaders look for help and inspiration? First, they look at other businesses and leaders and how they are dealing with their own, often similar, challenges. In this first issue of Core we present profiles of leaders dealing with widely different issues.

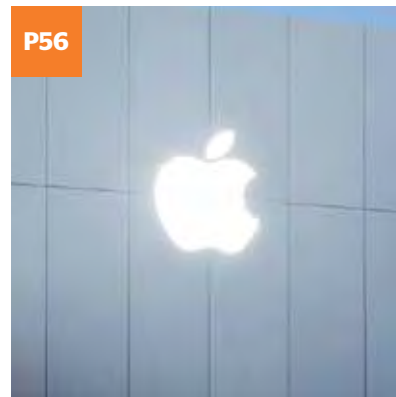
Paul Kehoe, CEO of Birmingham Airport, talks to Ashley Potter (*Ready for take-off*, page 42).

Elsewhere, Angela Fitzpatrick of the Reel Fish Company provides [entrepreneurial inspiration](#) in her story from bright idea to the supermarket shelves (*Canned tuna's Reel deal*, page 39).

We also have wisdom on the ground from our resident experts in [two of the world's great business cities](#). Niti Shah provides the inside-take on Mumbai (on page 48) while Sarah Zareian is our guide to London (page 50).



But leaders don't simply get inspiration from best practice. [Research](#), and the ideas and insights it generates, are vital sources of business inspiration. Having an impact on business is what Warwick Business School (WBS) is all about. Academics make sense



of [business reality and trends](#).

Söhnke Bartram does just that with the complex world of [derivatives](#) (*The wisdom of derivatives*, page 60). And Stephen Roper's research into mid-market companies sheds important light on one of the most frequently overlooked potential sources of [economic growth](#) (*Growing from the middle*, page 23).

Loizos Heracleous has been analysing one of the [world's greatest corporate success stories](#) of recent years: Apple. His conclusions shed new light on the company's remarkable achievements (*Quantum strategy at Apple Inc.*, page 56).

Our net is wide. Qing Wang provides new insights into the opportunities presented by [the rise of China](#) (*Understanding Chinese*, page 14); Gerry McGivern looks at healthcare in Kenya (*A lifeline for Kenyan babies*, page 54); David Elmes and Monica Giulietti provide [a fresh take on global energy](#) (*From Dallas with love*, page 16); and Kamel Mellahi gives a snappy introduction to the world of [nonmarket strategy](#) (*Feel the force*, page 20).



Deniz Ucbasaran and Andy Lockett (*Tuning up your leadership skills*, page 8) look at [leadership](#) through a new lens. Their research has looked at the leadership of legendary jazz band leaders from Duke Ellington to Miles Davis. Their ability to lead hugely talented groups of individuals offers practical lessons for modern leaders. Along a similar theme of [learning from the best](#), Dawn Eubanks' research sheds new light on the shared experiences and backgrounds of Nobel Prize winners (*How to win a Nobel Prize*, page 12).

[Creativity](#) is very close to our hearts. As Jonothan Neelands explains in his article, *Creativity Inc.* (page 28), creativity is not a diversion nor an indulgence, but key to business success. "Time and time again creativity unlocks and reconfigures the social and economic building blocks of a new era," he observes.

Also, core to our thinking is the exciting and fast developing field of [behavioural science](#). Nick Chater (*Big problems, small solutions*, page 36) offers insights into the UK government's Behavioural Insights Team,



the 'Nudge Unit'; Daniel Read looks at choice (*The choice is yours?*, page 18); while Ed Gardiner, WBS Behaviour Design Lead at the Design Council, shares a day in his diary (page 46).

The net is widening. Tobias Preis's groundbreaking big data research makes use of our [digital traces](#), the information contained in how we interact with the internet. *The digital treasure trove* is unlocked on page 64.

Finally, we know that time is short and so Haridimos Tsoukas provides his [essential reading list](#) (*Five books I love*, page 52) and Pietro Micheli identifies [Seven myths of performance management](#) (page 66).



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Credits

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# Tuning up your leadership skills

Pioneering jazz  
orchestra  
leader Edward  
Kennedy "Duke"  
Ellington

From Duke Ellington to Miles Davis, Art Blakey to Wayne Shorter, does jazz really offer lessons for today's leaders? Des Dearlove talks to [Deniz Ucbasaran](#) and [Andy Lockett](#)



Since management guru Peter Drucker compared the job of CEO to that of an orchestra conductor, the business world has been exploring metaphorical comparisons and inspirations from the world of music. Take Boston Philharmonic Orchestra conductor, Benjamin Zander's riff on leadership and creativity for business executives. Or innovation expert, and former Harvard Business school faculty member, John Kao's book *Jamming*, a refrain on improvisation and creativity. Now, Warwick Business School Professors Deniz Ucbasaran and Andy Lockett are hitting all the right notes with their study of famous jazz musicians, *Leading Entrepreneurial Teams: Insights From Jazz*, accentuating some essential insights for entrepreneurial team leaders.

Ucbasaran and Lockett (together with Durham Business School Professor Michael Humphreys) chose jazz for a number of reasons. For a start, jazz bands are synonymous with creativity, improvisation and innovation; all essential ingredients for entrepreneurship. Jazz groups and their members often operate in uncertain and dynamic environments, characterised by unpredictable and rapid change. Yet through collective endeavour many famous jazz bands find their own structure and harmony, despite apparent disorder, and become profitable enterprises – both creatively and commercially.

## Note taking

Initially, the authors interviewed many celebrated names in the jazz world, including Wynton Marsalis, Jean Toussaint, and the trumpeter Sean Jones. Eventually, they decided to focus on three names that came up repeatedly in their conversations, three of the most successful and best known names in jazz – Duke Ellington, Miles Davis and Art Blakey. American composer Edward Kennedy "Duke" Ellington was a pioneering jazz orchestra leader from the 1920s through to the 1970s. Trumpet player Miles Davis was instrumental in the development of a number of new jazz styles, including bebop and jazz fusion. Jazz drummer Arthur "Art" Blakey became famous as the leader of his band the Jazz Messengers.



The research focused on the way that these jazz greats created and ran their musical enterprises. In particular, Ucbasaran and Lockett focused on three specific areas of leadership activity: team formation, team coordination and team turnover.

## All together now

There were strong similarities in the process the band leaders used to assemble their diverse teams of talent. In particular, they looked for musicians with a different sound or style that was unique to that band member and would improve the overall sound of the band. That uniqueness was as much bound up with the personality of the individual musician, as it was to do with their technical proficiency.

When organisations are tackling team diversity, conventionally they think in terms of a range of characteristics and attributes, such as gender, ethnicity, cultural background and functional skills. However, the evidence from the jazz world suggests that team leaders could embrace a broader concept of diversity when assembling their team of talent. Their hiring decisions should factor in cognitive and personality diversity as desirable team attributes. This is especially true for ventures and teams where high levels of creativity are required, as in the creative industries, biotech, or high-tech start-ups, for example.

## Discord and blues

Highly disparate teams, many different personalities, and high levels of creativity is a recipe for group conflict. And, sure enough, there was plenty of dysfunctional conflict, and disruptive and destructive clashes of egos and personalities evident in the jazz ensembles. Traditional team leadership theory suggests that to get the best team performance the leader should foster conflict that promotes productive behaviours – functional conflict – while minimising and eradicating dysfunctional conflict.

But this is difficult when the sources of productive and destructive conflict are the same; that is, differences in personality and thinking. So how do leaders deal with destructive conflict? It didn't seem to bother the likes of Ellington, Davis and Blakey. Their attitude was "the music comes first". Discordant behaviour was tolerated on a journey towards overall harmony. The bad behaviour of individuals, whether that was turning up late for practice, or stepping out of a performance to eat a previously ordered steak, was seen as a small price to pay for the moments of musical genius, when everything came together.

Dysfunctional behaviour appears to go hand in hand with the creative process in these highly disparate teams. Instead of trying to squash the squabbling, team leaders do better deploying strategies to benefit from the creative upside of tension and conflict, while accepting problems arising from the worst behaviour. If musicians were late for practice, for example, Duke Ellington did not get angry, he just started without them. What kept these

leaders' teams together, however, was an overarching higher goal: to create the best music.

## Jamming

Teams must coordinate their behaviour and action to achieve an outcome. The team leader can assume a number of different roles when helping the team achieve its objectives. Some leaders are very directive, detailing what tasks they want team members to perform, and how they want them to go about those tasks.

But that was not the approach Ellington, Davis and Blakey adopted. They were more informal. There was very little direct explicit instruction. Instead, these leaders acted more as facilitators, empowering the musicians to collectively coordinate their behaviour and action to produce the desired outcome. As Ucbasaran and Lockett note, Miles Davis discouraged band members from rehearsing in case it led to musical clichés from over practice. Similarly, he often asked his musicians to play a piece in an unusual key, so they did not rely on learned fingering patterns. The performers were not left entirely to their own devices though. The leader created a framework within which team members could work. This framework "balanced guidance and structure with freedom to explore, express and make mistakes."

Duke Ellington, for example, often composed small musical phrases or musical triggers for each musician, say the authors. This ensured a basic level of coordination and pointed them in the right direction, but still provided the freedom for the band member to extemporise.

Innovation and creativity, failure and disappointment, usually go hand in hand. Team members will try things out, some fail, some succeed. Team leaders should create an environment where people feel safe to experiment, to improvise and take risks. "Do not fear mistakes. There are none," Davis is credited as saying.

## Squad rotation

The third aspect of leadership behaviour that Ucbasaran and her colleagues looked at was managing team turnover – people joining and leaving the team. In the jazz ensembles studied, musicians joined and left on a regular basis.

Yet the high turnover of team members, despite the resulting loss of knowledge and skills, was seen in a positive light. That was partly because of the benefits of getting a fresh shot of knowledge, ideas and creativity when new members joined.

A common reason for the jazz musicians leaving was that they felt sufficiently qualified to go and run another band. The three band leaders were understanding about this, particularly as it was a process they had also been through. In some cases, in particular with Art Blakey, they actively encouraged and coached team members to become leaders.

Finally, some team members left only to return later on. Ucbasaran and Lockett compare this to organisational techniques such as rotational assignments, that encourage

Deniz Ucbasaran during filming in legendary jazz club Ronnie Scott's

“Do not fear mistakes. There are none”, Miles Davies is credited with saying”

individuals to gain new skills and knowledge elsewhere and bring them back to the group. It might also be seen as similar to the sabbatical, taking time away from the group and returning with renewed vigour and a fresh perspective on their work.

## Hitting the right chord

Ucbasaran and Lockett's study of jazz leaders offers some useful lessons for entrepreneurial leaders, especially where innovation and creativity are paramount. Ellington, Davis and Blakey were fixated on the end objective – making great, exciting, innovative music. To meet that objective they were willing to tolerate and even embrace discordant behaviour among team members. They also promoted individualism and egalitarianism, and created the space for the group members to express themselves and experiment.

To maximise creativity, Ucbasaran and Lockett suggest that leaders should avoid being over prescriptive, and value ambiguity over clarity. While leaders may need to restrain themselves from micromanagement and telling their team members what to do, they have an important role to play in creating frameworks, triggers and cues, setting direction, and providing inspiration to team members. They may also need to stimulate and provoke new responses, and to take measures to avoid the team getting into a rut and falling back on learned responses, especially when under pressure. The team leader can break up

routines, and may benefit from pushing people into unfamiliar, even uncomfortable situations.

If entrepreneurial leaders want high levels of creativity from their team, they must accept that sometimes things will go wrong. The jazz leaders embraced mistakes as part of the process of creating something new and valuable. Team leaders should create room for experimentation, and be forgiving of failure en route to success.

Finally, the evidence shows that rather than part on bad terms, team leaders should respect the wishes of those group members that leave to become leaders in their own right. By maintaining a positive relationship with departing talent, team leaders expand their network of contacts, possibly enabling them to identify talent from elsewhere. And there is always the chance that the departing team member may return at some point in the future.

As the jazz icons Ellington, Davis and Blakey would no doubt agree, there is no magic score that if followed note by note will make you a great leader of creative talent. However, take an entrepreneur, a few cues from the aforementioned jazz trio, mix in a little improvisation, and you are more likely to hear the sweet sound of success. As Louis Armstrong once sang: "Now that's jazz." ■

Watch Deniz Ucbasaran's short film 'Leadership, creativity and all that jazz' at [wbs.ac.uk/go/deniz](http://wbs.ac.uk/go/deniz)



2011 Nobel Laureate in Chemistry Dan Shechtman

## The creative challenge

There is, as Eubanks points out, a practical imperative to the research: from it, companies can learn how to harness creativity. Organisations spend many millions of pounds in the areas of innovation and R&D, but where best should the money be invested and how does creativity occur? “The romantic notion of the artist at his easel creating a masterpiece or the scientist in her lab making a discovery is belied by a growing body of evidence, which demonstrates that many factors beyond individual creative genius influence the creative process – factors such as job characteristics, organisational resources, support and education,” Eubanks observes.

To find out more, Eubanks and her colleagues examined the lives of 59 Nobel Prize winners in physics, chemistry, medicine and economics.

In particular, they were interested in the different stages of the Nobel laureates’ careers. They wanted to know whether creativity and problem solving are the preserve of the young – or does acquired wisdom open intellectual doors? Again, the implications for organisations are clear. If creativity really is the preserve of the young and inspired, what can organisations do to tap into this group? The research also looked at the mentors and teams the prizewinners worked with, and their influence on them. Did they have freedom to experiment early on in their careers or were their early creative endeavours constrained? Were they part of a team? Were they open to ideas and insights from other disciplines?

The research used a historiometric approach – a quasi quantitative-qualitative method of statistical analysis for retrospective data. This involved analysing interviews with the laureates and autobiographies of them. (Short, inspiring biographies and interviews of the winners can be seen at [www.nobelprize.org](http://www.nobelprize.org)).

## The freedom to try new things

The research found that early career success was associated with holding a degree in a different field from their prizewinning discipline, and having the freedom to try new things. “Breadth of knowledge appears to be particularly important for early career success,” says Eubanks.

A typical example from the laureates is that of James Mirrlees who won the Nobel Prize for economics in 1996. The Scot studied mathematics at Edinburgh. He persuaded the authorities to condense the normally four-year course into three years and to allow him to also study philosophy. He then went to Cambridge to study economics, worked in India, taught at Oxford and later returned to Cambridge. He lists his hobbies as “playing the piano, reading detective stories and other forms of mathematics, travelling and listening”. Mirrlees was a kind of Renaissance man

of the Scottish borders.

Or consider the career of George Akerlof who won the Nobel Prize for economics in 2001. In a wide-ranging career, Akerlof was a reporter for the Yale Daily News, worked in India, discovered sociology after a career in economics, studied Hindi-Urdu and analysed markets with asymmetric information at some of the world’s most famous universities. Again, there was nothing linear about Akerlof’s career – or his thirst for knowledge. Early career mentors are also important. “The study also clearly demonstrates the important role of the leader both in terms of mentoring and setting research habits in early career, and in managing time, resources, and relationships later in one’s career,” says Dawn Eubanks.

As an example, consider Gary Becker who won the Nobel Prize for economics in 1992. Becker began life as a mathematician, then discovered economics. He contemplated switching his work to sociology, but then worked with Milton Friedman at the University of Chicago. Working with Friedman and his colleagues at Chicago, Becker established a reputation after using economic theory to look at prejudice in the working lives of minorities. “It started me down the path of applying economics to social issues, a path I have continued to follow,” Becker reflected. His later work examined birth rates and family sizes.

For late bloomers, the research suggests that those who succeed are adept at making time and resources available to carry on their research. Says Eubanks, “Creative output at a later career stage tended to be characterised by exhibiting leadership and managing multiple demands. It then becomes the challenge of the scientist to free up cognitive capacity to carve out time for research to continue.”

To summarise, this is how to win a Nobel Prize: be born into a family of modest means with an abiding commitment to education; be academically exceptional (usually at mathematics); go to one of the world’s great universities to study your initial source of precocious brilliance, but then change to another somewhat related subject; visit every art gallery and attend every theatre you can; go to an even more impressive university to study for a second degree; do a PhD in your chosen subject; work with a senior thinker in the field; write a groundbreaking paper which slowly becomes recognised as a work of intellectual genius; work abroad for a year or two; return to teach at your original university; and graciously accept the new university building being named after you.

Easy, really, once you know how. ■



2011 Nobel Peace Prize Laureate Tawakkol Karman

“Many factors beyond individual creative genius influence the creative process – factors such as job characteristics, organisational resources, support and education”

ANALYSIS



Ever wondered what it takes to win a Nobel Prize? Des Dearlove meets Dawn Eubanks to delve into what Nobel laureates have in common

# How to win a Nobel Prize

A total of 863 individuals and organisations have received Nobel Prizes for their work. To date, only 44 of the recipients have been women. Their average age is 59 years – the youngest winner was Lawrence Bragg for physics in 1915; the oldest, Leonid Hurwicz for economics in 2007, aged 90.

But what links the prizewinners? Is there a pattern which

could provide a formula for how to win a Nobel Prize?

The short answer is, no – you probably guessed that already. But, research by Dr Dawn Eubanks, Associate Professor of Behavioural Science & Strategy at Warwick Business School (along with Michael Palanski, Juani Swart, Michelle Hammond and Joy Oguntebi), sheds interesting new light on what the apparently very different Nobel laureates have in common.

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Watch Dawn Eubanks' short film 'Creativity and the dark side of leadership' at [wbs.ac.uk/go/dawn](http://wbs.ac.uk/go/dawn)





ANALYSIS



Research by **Qing Wang** suggests that western companies have a long way to go if they are to really understand Chinese consumers. Ashley Potter investigates

# Understanding Chinese

Napoleon once labelled China the 'sleeping dragon', but it is truly stirring now and is set to breathe fire across the world. By 2025 China will have built ten New York size cities and by 2030 the country will have added more city dwellers than the entire US population. These mind-blowing facts were unearthed in a report entitled *Preparing for China's Urban Billion* by McKinsey & Company.

And what about this one: in 2009, China surpassed Japan

to become the world's second largest economy in terms of GDP. According to Deutsche Bank's chief economist for Greater China, Jun Ma, by the early 2020s China will overtake the US to take the top spot.

These stats tell all you need to know as to why every western company is desperate to get a piece of the massive opportunity that is China since its vast potential was unveiled by the country's move to 'state capitalism' some 30 years ago.

Illustration: Christian Tate

KFC has recently vowed to open 500 restaurants a year in China, while fast food rival McDonald's is planning to double its outlets to 3,000 by the end of next year. By 2011, 21 Fortune 500 companies had set up their regional headquarters in China. But if western companies are to take advantage of the insatiable appetite of this vast land of promise, they have to understand the Chinese consumer.

Professor Qing Wang believes businesses in the west have a long way to go before they ride this now waking dragon into a new economic boom.

Being brought up in China, educated in the west, and currently Professor of Marketing & Innovation at Warwick Business School, Wang is in the perfect position to unwrap the complex consumer that sits in the east.

Wang says: "People tend to think because they are themselves consumers surely they understand other consumers, but in fact if you're not careful you tend to produce lots of bias. One of which is that consumers are consumers so they will have the same needs and desires whether they are in China, Brazil, Russia or the UK and the US, but what my research actually discovered is very different."

## Cultural misconceptions

The common misconception is that after years of isolation from the delights of capitalism, and with money in their pocket, the Chinese will be dying to ape the west in a sort of Darwinian natural evolution of the consumer. They will simply rush to Starbucks and start buying Gucci handbags by the truckload just like their western counterpart.

On surface, this seems to be the case. For example, according to BBC News, about 20 per cent of Burberry's revenue now comes from emerging markets like China, up from just six per cent sales in 2008 and 13% in 2010. The firm expects to open between eight and ten new stores in China and Latin America as part of its expansion.

Even more impressively, luxury car maker Jaguar Land Rover (JLR) has revealed annual pre-tax profits of £1.5bn, up from £1.1bn for the same period last year. Overall sales for the year grew by nearly 30 per cent, mainly driven by strong demand from China, which is now the second largest and the most profitable market for JLR.

People think that's the evidence that once the Chinese have the money their needs will converge with their counterparts in the west. But Wang's research revealed something fundamentally different, ie the way Chinese consumers think and what motivates them to buy, and "that difference is not simply due to the stage of development; it's something deeply rooted in their culture," she says.

"People in eastern societies are embedded in many social relations. They believe that the world is interconnected and pay attention to relationships. In contrast, individuals in western societies believe that the world is discrete and that behaviour can be predicted using rules. Therefore eastern cultures promote holistic thinking, whereas western societies promote analytic thinking."

What does this mean in their brand choice? "First, the Chinese

tend to choose brands that reinforce their social connections. They buy brands to say 'look, I'm one of us; I want to be liked and accepted'. In the west they choose brands to demonstrate their individuality and self-identity. Both are conspicuous consumption but with very different motives."

## Traditional values

As an expert in innovation, Wang says that these cultural differences between the Chinese and western consumers also have implications for the market acceptance of innovation. The Chinese consumers appear to be more variety seeking and novelty seeking than those in the west simply because they see links between objects that seem discrete to their western counterparts.

"Gift giving is another strong manifestation of the culture in the east. They don't just give some token gift, you know... like socks at Christmas. They're giving some really valuable gifts because the value of the gifts symbolises the value they

put on the relationships that they want to nurture. The type of gifts might have changed from traditional Chinese luxury goods like gold jewelries and silk embroideries to Rolex watches and Prada handbags, but the culture of gift giving is still intact, and so is the reason for buying."

Wang, who advises US, British and Chinese companies on emerging market consumer insight, believes companies have to adopt a very different advertising strategy in China.

"If you're advertising to western

consumers you probably try to emphasise individual freedom and achievement, you know, like driving a Freelander in the wilderness" says Wang. "In China it would be more effective to stress the reward of social acceptance, like taking family and friends to an expedition in a stylish Discovery."

Increasingly, western brands are produced in places outside their home country. Will this affect their value? According to Wang's research, the answer is "it depends". "With Nike and other sports brands, consumers are really quite happy with wherever they're made as long as they're good quality and they're genuine," says Wang. "They don't mind the likes of Apple iPhone or Jaguar Land Rover being built in China or other emerging countries either. They are technological brands, they have tangible features and attributes, which you can very easily test and see whether or not they are working."

"But symbolic luxury brands like Prada, Gucci or Louis Vuitton, their value is largely intangible and emotional, and country of origin becomes an intrinsic and inseparable part of their brand appeal. So the authenticity element of the brand image is damaged when you're not producing it in that country."

It is another subtle difference that western companies have to understand if they are to capitalise on the waking dragon. ■

“First, the Chinese tend to choose brands that reinforce their social connections. They buy brands to say ‘look, I’m one of us; I want to be liked and accepted’”

ANALYSIS

Watch Qing Wang's short film 'Understanding Chinese' at [wbs.ac.uk/go/qing](http://wbs.ac.uk/go/qing)





**ANALYSIS**



The recent death of JR Ewing actor Larry Hagman reminded everybody of the oil boom of the 1980s, but the Dallas bad boy would have loved riding the new boom in the United States. Shale gas and oil could transform the energy industry. Ashley Potter talks to **Monica Giulietti** and **David Elmes**

# From Dallas with love

The image of JR Ewing, wearing a huge white Stetson and smoking a mammoth Cuban cigar, still resonates for all who watched TV in the 1980s and will have been reminded of that era by his death last year. The fictional Texan oil tycoon straddled the TV world in an era when global oil corporations played an increasing role in the world economy, ensuring affordable and reliable energy after the price spikes caused by oil-producing nations in the 70s. So does Larry Hagman's death at the age of 81 symbolise the end of oil's golden period?

## At an energy crossroads

In some ways yes, and in some ways no. 'Peak oil' concerns about a rapid decline in global oil supplies have become more muted with big finds in deeper areas of the oceans, production being restored after conflict in Iraq and oil now produced commercially from the shale rocks that provided the US with a surge in gas production just a few years ago. But much of this oil is expensive to produce and prices are high. 2011 was the first year where the price of one of the world's main types

of crude oil averaged over \$100 per barrel. Concerns about oil are just one part of the challenge that governments around the world face when thinking about their energy needs. Fossil fuels such as coal, oil and gas now have renewable alternatives such as wind and solar. And nuclear has become a politically charged option after the Fukushima power plant in Japan was overwhelmed by a tsunami.

Perhaps the UK could do with some of JR's no-nonsense talk - at times its new Energy Bill resembles the complexity and controversy of a Dallas plotline. But at least it is an attempt to define a new path for its energy industry and face-up to the myriad challenges.

Dr Monica Giulietti, Associate Professor of Global Energy at Warwick Business School, has been following the UK energy prices for 16 years. From 2007 to 2011 customers' electricity direct debit bills have gone up 24.7 per cent according to the Department of Energy Climate Change (DECC). That is a steep rise and indications are that prices will continue to increase as the government subsidises the transfer to renewable energies. DECC estimates that £110bn of investment is needed for developments that include new nuclear power stations and offshore wind farms.

"From 2004, Britain became a net importer of fuel because oil and gas production from the North Sea has gone down," said Giulietti. "That is a big problem. The least appealing solution in the long term is that the country is going to have to rely on other countries for its energy."

## Alternative sources

At the moment, the UK imports coal and gas to generate electricity and can also import electricity directly from continental Europe. "The UK's electricity system has a certain amount of surplus capacity, currently around 14 per cent over peak demand. But with the progressive closures of a number of older power stations this is expected to fall to as low as four per cent by 2015, which is a margin we have not experienced in recent history," says David Elmes, Head of the Global Energy group at Warwick Business School. So if we have another 'who shot JR?' moment on TV, the UK could have a power cut - the British habit of using electric kettles to make a cup of tea at the end of a favourite programme is a frequent cause of peak demand.

The UK Government set up DECC in 2008 to push the country's energy industry into action, but it is proving to be a challenge. "This is a difficult and complicated period, where the UK is trying to redefine the relationship between industry and the government," says Elmes. "What's needed is clarity, so the country can move ahead and develop its energy industry. The government is trying to change from three decades of market competition, letting the industry do what they want to do, to government having a stronger role in telling industry what it wants. The UK is becoming a more structured market that is implementing government policy."

Part of that policy has been to make investment possible

in expensive new choices such as new nuclear power stations and offshore wind turbines. Meanwhile, back in JR's homeland they are forging ahead with oil and gas produced from shale rocks using hydraulic fracturing, or 'fracking'. Oil and gas in shale has been known of for decades but only recent changes in technology and production processes have made its production economic. Experts now predict that the world's biggest economy will produce enough oil and gas to become self-sufficient within 20 years. Low gas prices in the US are already seen as helping its industrial recovery, while companies in Europe are complaining that higher energy prices are making manufacturing in the region less competitive. Again, this is forcing the UK to make difficult decisions.

## To frack or not to frack?

Fracking involves breaking up the shale by pumping fluids underground. Since fracking near Blackpool in 2011 was linked to earth tremors, UK press stories of earthquakes have added to existing concerns about water pollution and uncontrolled gas releases that have been raised in the US. UK caution

between environmental concerns and encouraging a new source of domestic gas reflects different views within the coalition government.

Elmes believes there are factors why fracking has grown rapidly in the US that may make it less easy in other countries. "The US has benefitted from a low price form of gas that has supported their industrial activity and could leave Europe less competitive," says Elmes. "But it has come at an environmental cost, which has still to be fully understood. The US environmental regulations have been slow to catch up with the technologies involved. There are also several other factors that have encouraged production from shale. In many parts of the US,

if you own the land, you own the oil or gas below it. If shale gas lies under your farm, you might become a millionaire. In other countries, resources underground may belong to the government making development more complex."

"The US also has an existing network of pipelines, and regulations that allow access to pipelines. If developers find shale gas they can get it to market fairly easily; they also have an industry structure with lots of small, local drilling companies who responded quickly to the need for cost-competitive drilling and fracking. That capability doesn't exist in Europe."

Renewables present political and economic challenges and involve uncertainties, but so does relying on gas - whether imported or produced in the UK from shale. While the UK tries to make some tough choices, the US has jumped ahead with a self-confidence that JR himself would be proud of. Perhaps we'll see a new US soap full of feuding and fracking called Haynesville, after one of the shale gas regions. ■

“Experts now predict that the world's biggest economy will produce enough oil and gas to become self-sufficient within 20 years. Low gas prices in the US are already seen as helping its industrial recovery”

ANALYSIS





Ashley Potter meets **Daniel Read** to discuss vice, temptation and why we make unhealthy choices

# The choice is yours?

**D**aniel Read is talking about vices. Fortunately he is not delving into the world of *Fifty Shades*, the Professor of Behavioural Science's vice is coffee, which is strange because he seems to like tea more. As Read explains, it seems his yearning for coffee goes against economic theory and that is where his branch

of science comes in. Behavioural science is basically there to pick up the pieces where economic theory breaks down, because economics isn't just dealing with numbers, but people as well. People like Read and his unfathomable addiction to coffee, or all those diet-obsessed people who then have a Big Mac for lunch, or even smokers. Crazy decisions that

keep happening and leave market researchers scratching their heads. Anyway, back to vice.

"When people are choosing some distance away from a potentially exciting thing which has short-term benefits but maybe long-term costs, they'll say I want to choose the good thing," says Read. "I use the term virtue and vice; a virtue is something which is good for you in the long run, a vice is something which is good for you, maybe in the short run, but not so much in the long run.

"So, by choosing between these virtues and vices, people are some way away from the actual moment of consumption. They're quite patient, they want the good thing, but then when the moment of consumption comes around their preference is reversed. Then, afterwards, they may even feel some regret and they might make plans to choose something different in the future. This is a fundamental phenomenon of people, but it has important consequences."

It is pretty hard to draw up a marketing plan when people are reversing decisions, deciding on hunches or doing things just out of habit. Take Daniel Read's strange attraction to coffee.

"I often think about why I choose coffee - I drink a lot of coffee - I'm staring at one right now," says Read. "I actually think that I might like tea more than coffee but I very rarely drink tea, I only drink coffee. It's a pure habit. From an economic approach, I think I must like coffee more than tea. But, I'm not actually sure that I do. I think somehow I have a habit that always makes me choose coffee. Maybe drinking a lot of coffee is part of my image, the image that I project, or a self portrait I have of myself as a coffee drinker, but whatever it is I don't actually think that the benefits I have of coffee - benefits of the taste and consumption of it - are greater than that from tea. And so, behavioural economists will try to understand why people make the decisions they do, without making the assumption that they are - what economists would call 'utility maximisers'."

## To the max

Read may sound like one confused 'utility maximiser' but he is part of a new Behavioural Science group at Warwick Business School (WBS) that is trying to pin down such bizarre goings on that could have far reaching effects. It is the only such group in a European business school.

One immediate result is that the Warwick MBA programme is peppered with research from the Behavioural Science group, which is now 11 strong. They also use a lab with 26 experimental machines to uncover the latest findings in the field.

"Our MBA participants learn how individuals form judgements about the world and how they make decisions. Principles from this field are directly relevant to business decisions, whether in finance, strategy or marketing," said Dr Mike Shulver, who is Assistant Dean for the Warwick MBA. "Behavioural economics draws on insights from psychology and from economics to help us understand how people behave - economic behaviour is really all behaviour. It is going to be a flagship programme for WBS in the coming years."

## Fries with that?

Daniel Read's particular area of interest is what he calls 'intertemporal choice', how people make trade-offs between something that has an immediate pay-off to something where the rewards won't come for a long time. This is when those deadly decisions between a salad and a Big Mac come into play.

"For the whole day you're thinking, 'I'm going to have a salad for dinner,' then when dinner time comes around you order a gigantic hamburger," said Read. "Let's say you want to find out what consumers will want. So, you have some product and you show consumers a mock-up of the product. And you say to each of them, 'would you buy this thing, would you use this thing if you were given a choice?' and they might say they would. But, actually, you won't really know if they're going to choose until you actually have the opportunity to choose in exactly the context in which it appears."

“For the whole day you're thinking 'I'm going to have a salad for dinner', then when dinner time comes around you order a gigantic hamburger”

A classic example of 'intertemporal choice' playing out in the real world to disastrous effect was with American fast food restaurant chain Taco Bell, whose CEO Bob Martin lost his job after a disastrous campaign introducing its new low fat range called 'Border Light' in the 1990s.

"Taco Bell's market share actually went down even though they had added new things," said Read. "They were actually offering twice as many options

to people, they could have the standard things or they could have 'Border Lights'. People wanted to eat more healthily, they wanted to change that they were going to these restaurants and all they were eating was junk. So, what was going on?

"Well, what was happening was that it is easy for people to say something - people readily say they would like to eat healthily - but when it comes down to it, when they have to choose, then suddenly the high fat, deadly items become more attractive. The curious thing is that afterwards Taco Bell then started to pile on the junk, offering things that were far more fattening, things that to a European consumer would be quite shocking, and their market share went up. What has been very successful for them recently is 'the fourth meal' which is the very antithesis of healthy eating; let's add an extra meal to your day.

"You can actually see Taco Bell's history in the last 20 years as being a reflection of this work on intertemporal choice, as everything can be explained by consumers who are tempted by high fat junk food. So when they come to eat something, what they're going to want is high fat junk food, even if they plan to have something healthy. So if you ask them in a questionnaire what they would like to eat, they will say 'I'd like to have more healthy items', even though they always go for the junk.

"McDonald's did a good thing because they always offer healthy items but they don't make a big deal of it. If you want something, it is there; you can get a salad, you can eat well there but most people don't."

It is the perfect example of people saying one thing and doing completely the opposite. Sometimes, temptation is simply too great. ■



# Feel the force



Is nonmarket strategy  
an idea whose time has come?  
Des Dearlove meets **Kamel Mellahi**

One of the big ideas gaining currency in the business world is the notion of nonmarket strategy. The term is a catch-all for all the forces that affect businesses that do not come from the workings of the market. Nonmarket strategy, then, includes everything from political lobbying to managing relationships with environmental pressure groups and NGOs. It also includes public opinion and the social and moral dimensions of a firm's strategy.

The origins of nonmarket strategy can be traced back to the 1940s, and the work of the economist Joseph Shister. In the 1990s, the idea found its way into management literature via the work of another economist, Stanford University's Professor David P. Baron. His 1995 *Californian Management Review* article, 'Integrated Strategy: Market and Nonmarket Components', provides a useful definition: "The nonmarket environment includes the social, political, and legal arrangements that structure interactions outside of, but in conjunction with, markets and private agreements. The nonmarket environment encompasses those interactions between the firm and individuals, interest groups, government entities, and the public that are intermediated not by markets but by public and private institutions."

In other words, while traditional business strategy is concerned with positioning the firm optimally in the face of market forces, nonmarket strategy is all about positioning the firm beneficially in the face of nonmarket forces.

As Baron observes: "Public institutions differ from markets because of characteristics such as majority rule, due process, broad enfranchisement, collective action and publicness. Activities in the nonmarket environment may be voluntary, as when the firm cooperates with government officials, or involuntary, such as when government regulates an activity or an activist group organises a boycott of a firm's product."

What Baron was talking about was the complex web of social and political influences and institutions that exert a powerful force on the behaviour and reputation of firms. Where Baron led, others have followed, as nonmarket forces became a useful term to describe an increasingly important set of strategic levers and stakeholder relationships.

## Nonmarket thinking

One of those making an important contribution in the field is Kamel Mellahi, Professor of Strategic Management, and Head of the Strategy and International Business group at Warwick Business School. His research is especially concerned with the role of nonmarket strategy in emerging markets.

"It is widely accepted now that good connections with powerful political actors and institutions constitute a critical element of business success in emerging markets, where competition is shaped by nonmarket forces and institutional voids," says Mellahi. "This makes nonmarket strategy critical for firms operating in both developed and emerging economies."

Advocates of nonmarket strategy argue that firms need to make the leap from thinking about isolated "non-business" issues and recognise that, together, they form the nonmarket environment of the firm.

And yet strangely, the term is not as well known or accepted as it might be. Instead, management attention has focused on individual pieces of the nonmarket environment – such as corporate social responsibility, environmental issues or political lobbying – rather than seeing it as a coherent whole worthy of a holistic strategic response.

## Towards a better definition

One of the difficulties with nonmarket strategy lies with its definition. "Any concept that is defined in terms of what it is not – ie nonmarket – is problematic," says Mellahi. "But alternative descriptions – such as CSR or lobbying – fail to capture its full scope. Alternative terms have also failed to catch on. Perhaps it should be called 'social and political strategy'?"

What is beyond doubt is that nonmarket strategy is moving up the corporate agenda. As CEOs recognise the increasing pressures they are under from political and social forces, so the importance of a nonmarket response or strategy will increase.

But Mellahi tempers his enthusiasm for nonmarket strategy with some words of caution. "Important as



Illustration: Christian Tate

nonmarket forces are, there can be a dark side to nonmarket strategy. The value of political networks in particular, changes over time.”

He uses the example of foreign multinationals in the Chinese automobile industry to illustrate his point. The Chinese central government does not allow foreign car companies to set up wholly owned car manufacturing operations. Instead, they have to operate through joint ventures (JVs) with local companies and can only own a maximum of 50 per cent.

In the 1980s and 1990s, Shanghai Volkswagen Automotive, the joint venture set up by Volkswagen (VW), prospered while other joint ventures created by Peugeot and Chrysler struggled. In part, VW’s success was due to the fact that nonmarket forces dominated the automotive industry in China and VW’s nonmarket strategy was effective. In particular, its ability to embed itself in China’s political networks paid dividends.

At that time, Chinese political institutions – as well as dictating which suppliers the joint venture could use – also accounted for most of the passenger cars sold.

“Just as firms constantly review and revise their market strategies, they must also adopt a similar awareness and discipline with nonmarket strategy”

VW’s political ties, and willingness to pay inflated prices to local suppliers, enabled it to secure sales at a time when market forces were not the dominant factor.

But, by 2000, market forces were asserting themselves as demand came increasingly from ordinary private buyers. At that time, VW’s political embeddedness made it difficult for it to negotiate more competitive prices from local suppliers. As a result, VW’s market share collapsed from 50 per cent of passenger cars to 17 per cent in just four years between 2001 and 2005.

“What the VW case illustrates is the need for firms to be flexible in their nonmarket strategies. What serves a company well at one time may actually become a disadvantage later,” says Mellahi. “That’s why it’s critical that just as firms constantly review and revise their market strategies, they must also adopt a similar awareness and discipline with nonmarket strategy.”

### The price of political correctness

Mellahi’s research with two other academics, Pei Sun of the School of Management at Fudan University, Shanghai, and Eric Thun from the Said Business School at Oxford University, compared the experiences of a number of foreign car manufacturers trying to enter the Chinese market.

In particular, their study focused on the experiences

of VW in relation to the structure and intensity of the domestic political network in which it was embedded from the early 1980s to the mid 2000s. VW’s experiences were juxtaposed with unsuccessful early entrants such as AMC/Chrysler and Peugeot, and some successful late movers such as General Motors (GM), Honda and Hyundai.

The aim was to see how the value of political embeddedness in local political networks changed as the environment shifted from one that was dominated by nonmarket forces to one that is increasingly dominated by market forces.

In China, the central government is responsible for approving the creation of new assembly JVs, the partners involved and the details of the deal, including the models produced. In the case of Shanghai Volkswagen Automotive, the Chinese partner – Shanghai Automotive Industry Corporation – was essentially a division of the Shanghai municipal government. In addition to the entry barriers this created, which included high tariffs and local protectionism, both central government and local government institutions accounted for the lion’s share of passenger cars consumed in China up until 2000.

Between 1982, when the JV was established, and 2000, VW benefited from its close ties political ties in China, while JVs with other car manufacturers, including Peugeot and Jeep (part of Chrysler) struggled.

From the late 1990s, however, as market forces began to assert themselves, those same political ties that had served VW well became a liability.

The first half of the 2000s saw a rapid erosion of VW’s market leadership: its market share of the passenger car segment fell by nearly two-thirds from 50 to 17 per cent in just four years from 2001 to 2005. Shanghai GM took VW’s long-standing market leadership position. What VW discovered to its cost was that its political embeddedness – which had allowed it to dominate the market by paying inflated prices to suppliers for parts in a protected (nonmarket force dominated) environment – made it difficult to negotiate with suppliers in a changed environment shaped by market forces.

“The experience of VW in China is a good illustration of the need for firms to monitor the impact of their nonmarket strategies over time,” says Mellahi. “It underlines the importance of retaining some flexibility and strategic agility in responding to nonmarket forces as well as market forces.” ■

Watch Kamel Mellahi’s short film ‘Learning from business failure’ at [wbs.ac.uk/go/kamel](http://wbs.ac.uk/go/kamel)



# Growing from the middle



In the search for economic growth, mid-sized companies are often neglected. Des Dearlove finds out how new research co-authored by [Stephen Roper](#) is set on changing that

Much of the business world is fixated on the polar commercial extremes. At one end is the perennially sexy world of start-ups. Entrepreneurs gather plaudits, investors and column inches with seeming ease. The brightest and the best young business

talent want to start their own businesses and change the world. At the other end of the commercial spectrum, there are the corporate giants of our time. Their sheer size and scale make them irresistible. Think of the lure of the Fortune 100. When things are tough, the polar

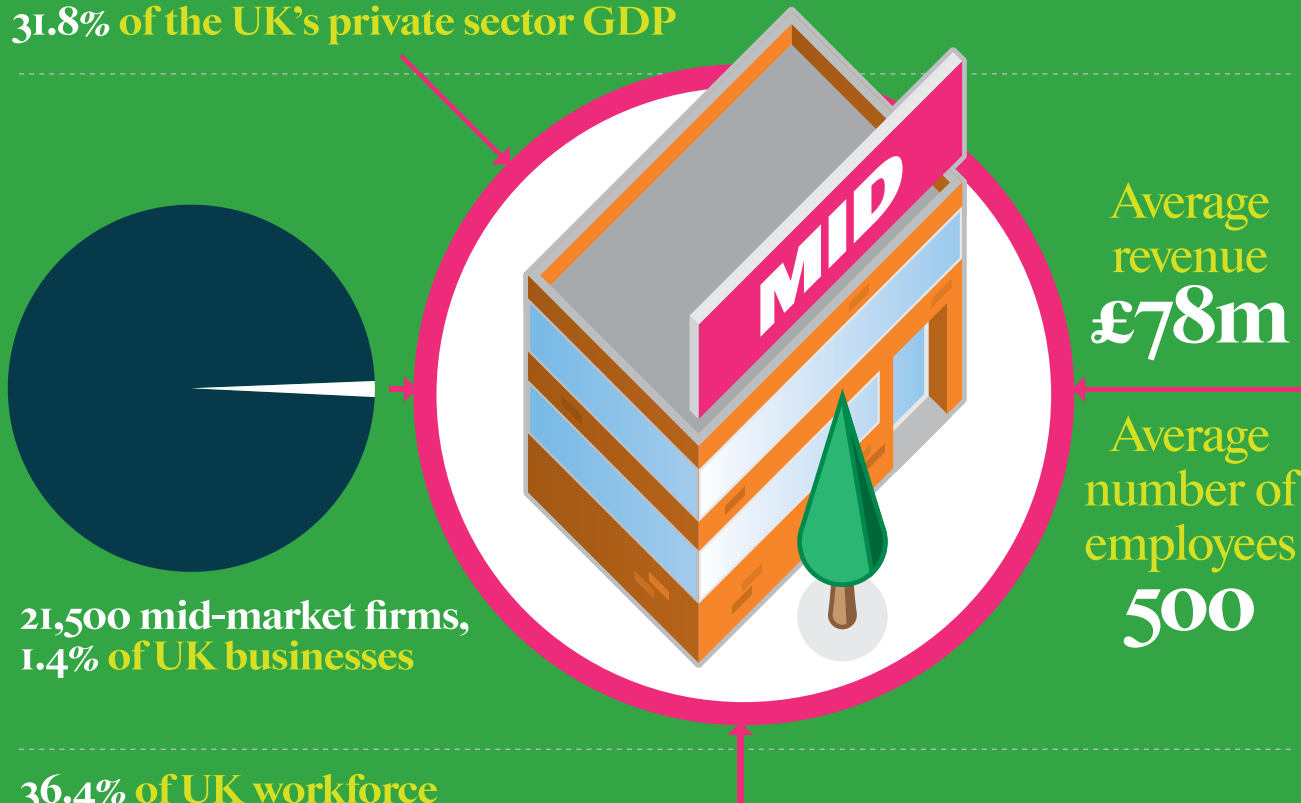
extremes are celebrated with even greater gusto. We are told that growth – when it comes – will be stimulated by entrepreneurs and exploited by big companies. Small and large are seen as the champions of economic growth.

The result is that, to stimulate





31.8% of the UK's private sector GDP



21,500 mid-market firms,  
1.4% of UK businesses

36.4% of UK workforce



growth, the policy and media focus emphasises stimulating growth from entrepreneurs and small and micro firms through grants, a loosening of red tape and making the UK more attractive to big business through corporate tax breaks and relaxing employment regulation.

But there is something missing: the middle. Between the hopeful start-ups and the corporate giants lies a core of middle-sized businesses. And when it comes to growth and employment, mid-sized firms punch way above their weight. Indeed, new research from Warwick Business School shows that mid-sized firms are the unsung heroes of the UK economy – and have been its bulwark in the current recession.

### German for growth

In some countries, the power of the middle is both understood and celebrated. Most famously, the success of medium-sized companies in Germany – known as the *mittelstand* – is rightly celebrated. In the land of corporate titans such as Mercedes, Siemens and BMW, mid-sized companies are the real engines of growth and prosperity, and have been for many decades.

What many people don't appreciate is that, like Germany, the UK mid-market is a significant driver of both output and jobs. The UK's middle-sized companies have also proved far more resilient to the current recession than their smaller and larger business brethren.

While the mid-market consists of roughly 21,500 firms, or only about 1.4 per cent of total companies in the country, it contributes 31.8 per cent of private sector GDP.

Its role in providing jobs in the UK is just as significant, if not more so; mid-market firms employ 10.9m people, or 36.4 per cent of the UK workforce. On top of that, the much-ignored middle generates annual sales of £1.7 trn, representing 32.3 per cent of total private sector revenues.

Professor Stephen Roper, Director of the Enterprise Research Centre at Warwick Business School, is the co-author of a wide-ranging report, sponsored by GE Capital,

called *Leading from the Middle: The Untold Story of British Business*. The report compares UK mid-market businesses – of which there are some 21,000 – to their German counterparts.

From a structural standpoint, the UK mid-market closely resembles that of Germany, consisting of firms with revenue between £15m and £800m (€20m and €1,000m). The average UK mid-market firm has revenues of £78m (€98m) and employs 500 people, similar in size to its German counterpart.

"Our research suggests some of the strengths of the UK mid-market. These 21,000 companies had increased their employment in recent years, while larger firms had lost around 700,000 jobs during the recession," says Roper. "Our study found that mid-market firms have done tremendously well to keep the country afloat during the recession, but they lag behind their European

*“In the land of corporate titans such as Mercedes, Siemens and BMW, mid-sized companies are the real engines of growth and prosperity”*

counterparts, particularly Germany, in terms of global exporting. Out of France, Italy, Germany and the UK, the UK came last in terms of percentage of revenue from outside the EU, with just 17 per cent. For Germany it is 25 per cent and Italy 30 per cent.

"For that to improve the government needs to adopt a holistic approach, providing value added services. Our report discovered that UK mid-market companies are being held back by a skills shortage and a lack of investment in research and development."

### Driving growth

*Leading from the Middle* makes compelling reading for policy makers. It provides an array of statistical

ammunition for those who champion mid-sized firms.

Despite being only the third largest economy in Europe, the UK mid-market is the second largest in GDP terms after Germany and, interestingly, employs more people than any of the equivalent mid-markets across Germany, France and Italy.

Additionally, the mid-market is particularly relevant in light of the current focus on how growth might be achieved more evenly throughout the UK. The mid-market across France, Germany, Italy and the UK is, for example, heavily geared towards manufacturing. Across the four markets, manufacturing represents one-third of mid-market GDP while representing only a quarter of total private sector GDP across the four countries. The UK mid-market is similarly overweight in manufacturing, although this is less pronounced than in Germany and Italy.

As well as playing a potential role in any renaissance of UK manufacturing, mid-sized firms may also hold the key to bridging the UK's north-south divide. Despite employing more than one million fewer people than large companies in the UK, mid-market firms actually employ more people in absolute terms in the North of England (1.56m) than both large firms (1.54m) and small and micro firms (1.01m). Between 2007 and 2010, the unemployment rate in the North East rose from 5.7 to 10.1 per cent, almost double the 2.5 per cent increase seen across the country as a whole. That makes the mid-market's ability to grow jobs during this period even more distinct.

Another interesting aspect of mid-sized firms demonstrated by the research is their ability to span the global and local. In addition, mid-market companies contribute proportionally more GDP and employment outside of London than large businesses, with 71 per cent of mid-market jobs (7.7m) being based outside of London and the South East. This is particularly relevant because of the way UK mid-market companies behave.

Mid-market companies have the scale and appetite to export and operate globally (41 per cent of UK mid-market companies operate globally), but also remain closely tied to their local communities. In the UK mid-market, almost 70 per cent of suppliers come from the domestic economy, while more than 50 per cent of companies don't outsource.

This owes a lot to the management structure of mid-market firms, as does their approach to their employees. Mid-market companies are primarily privately owned and, as such, operate with longer-term growth in mind. In fact, between 2007 and 2010, as large companies cut hundreds of thousands of jobs, mid-market companies actually grew employment, ensuring that the surge in unemployment seen since the start of the credit-crunch was far less severe than many commentators first expected.

### Built to last

The resilience of mid-sized firms during the recession following the financial crisis is perhaps the most eye-catching finding of the research. "We set out to find which UK companies' employment levels remained stable in recent years by studying the staffing levels of various sized companies, looking specifically at how those levels changed from before the start of the recession in 2007 to the point when global economies started stabilising in 2010," explains Roper. "What we found may surprise. It was mid-market and smaller companies, not big businesses, which created jobs over this period. In fact, among firms that survived the recession, UK mid-market companies were actually net job creators. Whereas large firms reduced their payrolls by 692,000 people, or an average of 950 jobs per company, mid-market firms created about 26,000 positions. Given that the mid-market employs more than one-third of the UK's workforce, it's easy to see how much worse the labour market would have fared if mid-market firms responded to the economic pressure as large corporations did."

Mid-market companies delivered



an even better performance than smaller firms on a business-by-business basis. While small firms created approximately 29,800 jobs over the time period studied, on an average basis, each surviving mid-market firm in the UK created 2.8 times more jobs than a surviving small business. When micro firms (those with less than ten employees) are included in the comparison, mid-market firms on average created 36.5 times as many jobs.

The results are perhaps more impressive given the severity of the economic contraction in the UK.

Between 2007 and 2010 the UK economy saw the number of people unemployed rise by 874,000. That is more than 50 per cent higher than the increase in unemployment in France and Italy, while the German economy actually added jobs over the same period. Despite that, roughly the same number of German mid-market firms created 84,000 jobs over the same period, at a time when that nation's economy was growing at a much faster rate than in the UK. Germany's large companies reduced their employment by only 120,000, less than a fifth of the jobs slashed by UK corporations.

This suggests that UK mid-market firms were under far greater pressure to reduce headcount than their German counterparts. The fact that surviving mid-market firms in the UK added any jobs at all during the recession is, in itself, a major accomplishment. Yet, despite its sterling performance, UK policy makers have been slow to offer support.

### Helping the middle

If governments accept the importance of mid-sized companies, the big question is what can they do to help that sector? In the UK, one answer is the creation of the £2bn British Business Bank. Roper believes the proposed business bank is a welcome step closer to the kind of government backing necessary for UK businesses, but warns that finance alone is not enough if the UK's growing firms are to match the success of Germany's *mittelstand*. This is a long-term project and the money needs to be backed with expert advice.

"Finance alone is not so much of a problem for mid-market firms, it is more the small firms of 50 to 100 employees who are in need of the money. The mid-market firms need expertise to go with the money. When a venture capitalist backs a company they don't just provide money, but management and strategic support as well. Medium-sized firms need help identifying the markets where they can use this extra finance, and developing the product services that

go with them," says Roper.

"The proposed business bank is very welcome and should make a significant difference to UK SMEs in the longer-term. But it won't do much to kick-start the economy in the short-term. This is a long-term solution and I think it will be two years or more before any new funding gets to companies.

"Implementing this proposal will be crucial to its success. The government is proposing to use challenger banks to reach SMEs and these banks will need to develop new capacity to deal with this type of business-facing activity. So, I don't think we will see any impact from the business bank in this parliament."

The stakes are high. Roper calculates that policy measures which helped mid-sized UK firms to match the growth of their German counterparts could generate an additional 240,000 jobs over five years.

### Knowing more about the middle

Now, Roper is Director of the new Enterprise Research Centre hosted at Warwick and Aston Universities. The £2.9m centre, launched in January, will help develop understanding of the factors affecting business investment, performance and growth. It aims to become a national and international focal point for research, knowledge and expertise on small and medium-sized businesses.

"The centre will research important issues including business ambition, leadership and management, finance, innovation, productivity and diversity. Our key objective is to provide policymakers and SME managers with the evidence they need to make good decisions for growth. We have three main ambitions: to conduct and publish exciting and novel research; to provide the evidence for better growth strategy in the UK; and to establish the Enterprise Research Centre as a reference point for anyone interested in issues around business growth. One element of the work of the new centre will focus directly on mid-market firms," says Roper. There is, it seems, a middle way to growth. ■



## Growing pains

**Denys Shortt is a serial entrepreneur and founder of mid-market company DCS Europe, which will this year see sales of £150m. He is very familiar with the jobs and growth challenges mid-market firms face**

"In the UK, the government's focus on very large and small business is evident; it tends to have direct relationships with the very large companies – the Jaguar Land Rovers and Rolls Royces etc. There is rightly a lot of focus placed on them, after all they are our nation's largest employers.

Then the small companies get focus, because they are part of either the Chamber of Commerce or the Federation of Small Business, two organisations who do a good job promoting and pulling together very disparate businesses.

In my opinion, mid-market companies have generally been left to their own devices. We hear little from government and are seldom asked for our opinion.

Mid-market companies can suffer from severe growth pains. It is easy for an SME to take a couple of people but a mid-market business might need another 50 people to reach their next stage, and that can be a challenge.

The rise in the cost of fuel will affect mid-markets more as they continue to struggle to find adequate volumes of staff. Ideally they need to locate in large population areas or places with excellent transport links. But they need land for growth. Our local council has not allocated any land for mid-market companies. In fact, there are no offices left to buy or rent in our area for 200 people or more. Mid-market companies either have to move or split their site, which is not ideal. ■



# Creativity Inc.

Jonathan Neelands argues that creativity lies at the heart of business – and always has



Creativity and business are not supposed to mix. The stereotypical corporate world is full of buttoned-up suits and rational decision makers. Even in Silicon Valley, where the tieless, jean-wearing, technological wunderkind emerge as digital entrepreneurs, there is still a sense that disciplined innovation rather than pure creativity begets commercial success.

But, my belief – and experience – is that creativity lies at the heart of business. Creativity – defined as acting in or on the world in new and significant ways – is a powerful and universal force throughout the business world.

There is nothing new in this. Far from the sun-kissed streets of California’s entrepreneurial powerhouse, there was an older, much less appreciated crucible of creativity. The origins of the first explosion of commercial creativity occurred in Britain in the 18th and 19th centuries, during the Industrial Revolution.

The Industrial Revolution was an outpouring of creative juices as much as it was of sweat and blood. Indeed, our modern sense of creativity, with its connotations of newness, originality, invention and progress, was forged in the fields of commerce. Ironically, during the Industrial Revolution the arts and artists became the role models of creativity rather than inventors, explorers, entrepreneurs and industrialists. Romantics such as Blake, Shiller and Shelley became fierce critics of the excesses of the ‘dark satanic mills’ and of the effects of the free market. Their creativity became associated with divine and natural genius, in contrast to the very human creativity of entrepreneurs.

Time and time again, creativity unlocks and



STRATEGY

Warwick MBA students explore leadership via literature



reconfigures the social and economic building blocks of a new era. Throughout history, periods of social turmoil and change are preceded by – or give rise to – explosive bursts of creativity. Think of the Renaissance of the 14th century, the Age of Enlightenment in the 18th century and the Industrial Revolution – or the current digital revolution, for that matter.

The human capacity for creativity is hard-wired to the human capacity for problem solving.

## Creatively destroying

The Austrian-American economist Joseph Schumpeter coined the phrase ‘creative destruction’ in the 1950s. Today, it is almost as familiar as Adam Smith’s ‘invisible hand’ as an explanation of the way that capitalism works. And yet, how many times have you heard the phrase without considering the role of creativity in the capitalist mantra? (There is an irony too in the fact that Schumpeter adapted the idea from the writings of Karl Marx, whose motivation was not to applaud capitalism but to destroy it.)

As an example of creative destruction consider post-war Germany. Germany had been ravaged by two world wars in a 30-year period. It was a place of devastation and despair. Yet, there was great creativity. The German economy (helped by the Marshall Plan) resuscitated itself over the next 20 years. Today, at another time of economic crisis, it is the dynamism of the German economy that is propping up the euro zone.

But even in its darkest moments, there was still the light of creative possibility. In 1945 the German playwright Bertolt Brecht, living in exile in California, observed:

“It is well known how beneficially people can be influenced by the conviction that they are poised on the threshold of a new age. At such a moment their environment appears to be still entirely unfinished, capable of the happiest improvements, full of dreams and undreamt of possibilities, like malleable raw material in their hand. They themselves feel as if they have awakened to a new day, rested, strong, resourceful. Old beliefs are dismissed as superstitions, what yesterday seemed a matter of course is today subject to fresh examination. We have been ruled, says mankind, but know we shall be the rulers.”

This sense of possibility and renewal is central to creativity. Marx suggested that at times of economic crisis entrepreneurs seek to ‘disturb the equilibrium’ of failing economies by creating new products and inventions to revitalise the market. There is here a close link between



“The rights, rituals and motivations of workers in creative spaces offer clues as to how we might do business in other contexts”

artistic and entrepreneurial creative agents - both seek in different ways to ‘disturb the equilibrium’. Artists ‘disturb the equilibrium’ by challenging orthodoxies and aspiring to represent a new and different world. Creativity is the opposite of cynicism. That’s why I believe creativity is a business and social imperative for the 21st century. We stand at the threshold of a new era – if we choose.

## Creative collaboration

My working and political life has been dedicated to finding ways of physically interacting and participating through dialogue and shared action in public spaces. My spiritual home is in the drama studio or rehearsal room, but it could have been in a craft workshop,

laboratory, design studio or other working place of creatively and socially working together. What interests me is how we might do business in ways that are based on socially creative communality, cooperative exchange, the collaboration of interests and a keen sense of the common good.

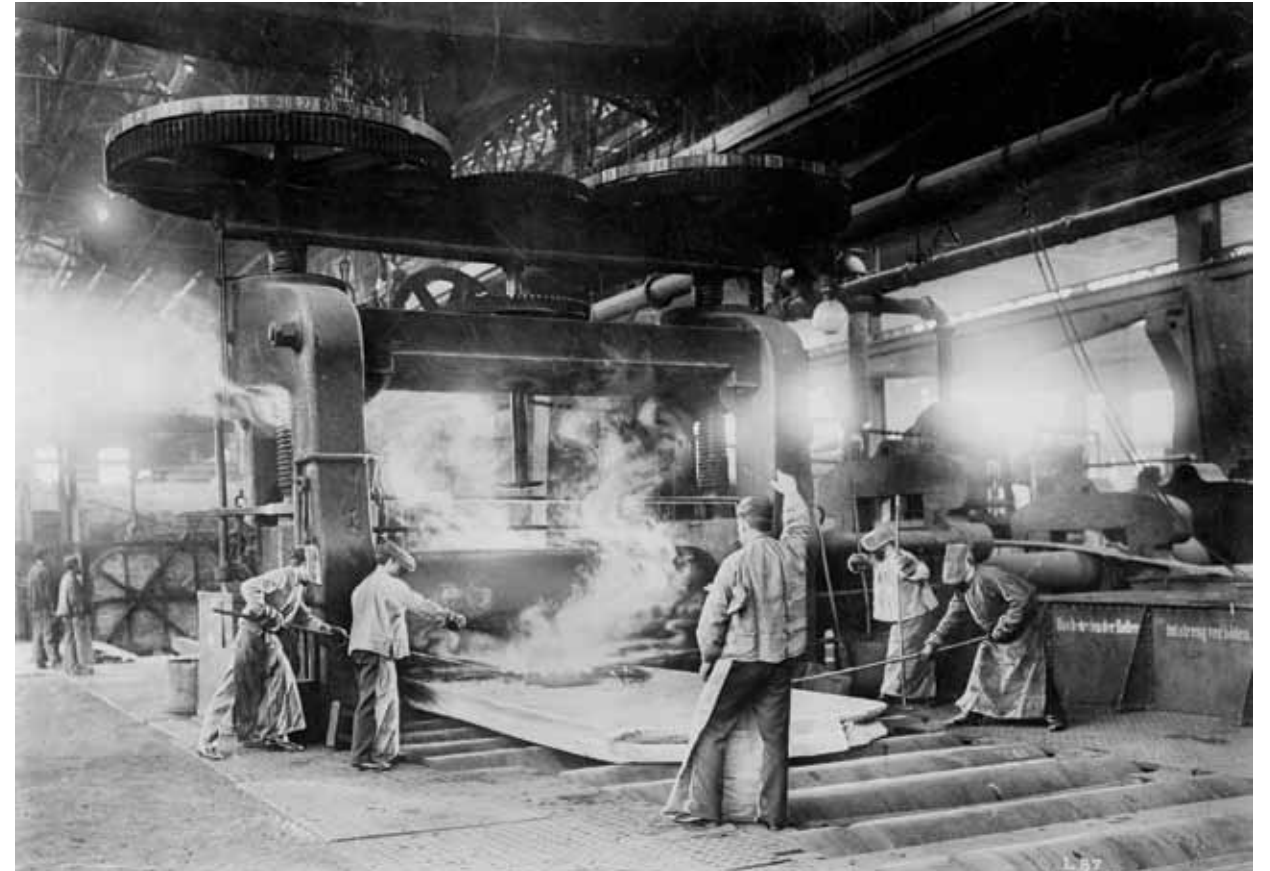
The rights, rituals and motivations of workers in creative spaces offer clues as to how we might do business in other contexts. It is wrong-headed to imagine that the arts, creative work and academia can exist outside of the world of business and markets; that there can be aesthetic and intellectual worlds that are not tarnished or sullied by the touch of Mammon. Or sharpened and invigorated by the same forces. Creativity, in my experience, does not happen in a vacuum.

All cultural organisations are also businesses. Take the Royal Shakespeare Company (RSC), which I know well from their collaboration with Warwick Business School (WBS). The RSC is the world’s largest producing theatre valued for its

creative achievements in the artistic sense, but it is also a creative business doing business creatively. The RSC is a company of actors and other artists but it is also a company in the business sense.

The performance of the company is literally measured by the performance of the company. And there are older, more distinguished precedents. It is worth remembering that the RSC’s eponymous patron did not write his plays in a vacuum. Shakespeare was subject to commercial realities. His need to pay the bills, and the discipline it instilled, spurred him on to produce many of his best plays. Much of his material was provided by the creative destruction – political and religious – that he observed around him at that time.

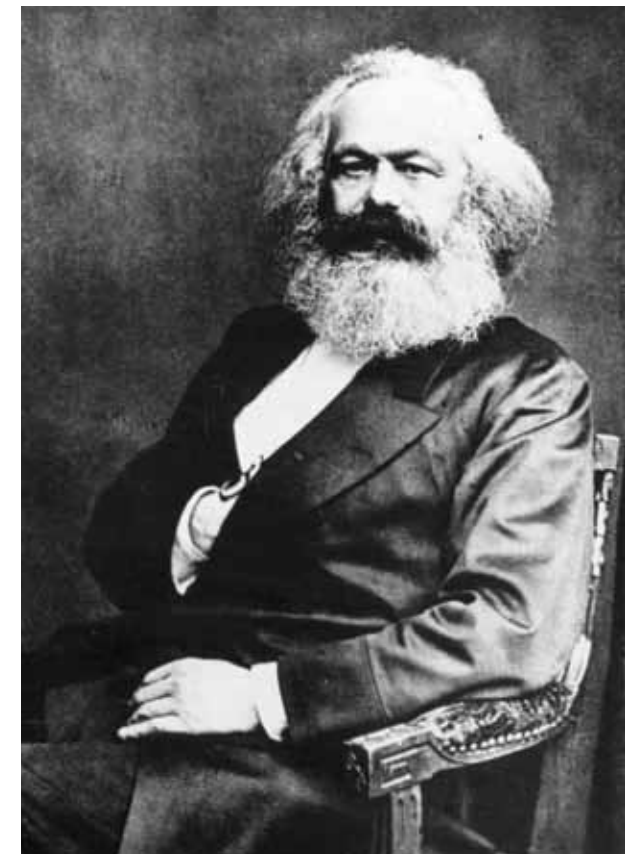
WBS has a partnership with the RSC, which brings creativity and artists into the school to encourage and support the WBS mission to do things differently.



▲ The Industrial Revolution was an outpouring of creative juices as much as it was of sweat and blood

▶ Karl Marx suggested that at times of economic crisis entrepreneurs seek to “disturb the equilibrium”

▼ Bertolt Brecht observed that “It is well known how beneficially people can be influenced by the conviction that they are poised on the threshold of a new age”







▲ Professors Neelands and Tsoukas talk to students about leadership and judgement

Creativity and doing things differently are, if not identical, then synonymous. Doing things differently suggests a more creative approach to the world of business, but it is also a recognition that we cannot in any sphere of our lives continue as if we are not facing political, economic, social and environmental crises, which may engulf us. We are being battered by Schumpeter's, now constant, gale.

### Open to learning

Personally and professionally, I feel most at home working in drama and theatre spaces, which are open spaces both in terms of how the space itself is used and constantly re-imagined, and open also in terms of knowledge and the outcomes of the creative work that goes on in that space. I am happiest in spaces where there is openness to new ideas; new uses of tools; new levels of trust in others; the possibilities of failure; openness to risk; openness to the unimagined.

This kind of openness, coupled with a sense of autonomy to be self-determining and self-directing is, I believe, a pre-requisite for creative work and invention.

So, how can businesses create such open spaces? Within the notion of open space, there are three concepts or principles.

The first concept is flow. Originally proposed by the Hungarian psychologist Mihaly Csikszentmihályi, flow is the mental state of operation in which a person performing an activity is fully immersed in a feeling of energised focus, full involvement and enjoyment in the process of the activity. Think of losing yourself in playing music or writing, or in playing a sport. According to Csikszentmihályi, flow is completely focused motivation, so that the self is immersed in the activity.

Open spaces are usually shared spaces with other actors or colleagues, so there is also openness in terms of how we dwell together in creative spaces. Flow is the desired state that we aspire to.

This raises important questions for businesses. In particular, what forms of cooperation foster social creativity? The mood of learning, working, creating in open spaces is subjunctive – full of possibilities, imaginings, what-ifs, maybes and possible beginnings.

At best, it is a cooperative space without coercion or external legislation. We capitalise on our strengths and differences. It is a differentiated mode of exchange. It is also a public rather than intimate space, we come wearing the neutral masks of the citizen, the disinterested professional or craftsman. It is important that we do so,

and that our cooperation is indirect and impersonal.

In the open space of work or learning, we develop empathy rather than sympathy for each other. The sociologist Richard Sennett suggests that whereas sympathy is a hug, empathy is an encounter – a deeper and tougher form of cooperation in which we seek understanding of each other and of ourselves through working together on goals that are bigger than our individual self-interests.

Brecht put it well when he reflected that: “In 20 years of activist theatre I do not believe I have raised anyone’s consciousness, or liberated them, or brought them new understanding. I have, however, been changed with and through others, and they I hope, with and through me... in theatre, as in life, we develop one another.”

Open spaces also require actors to act – to be self-instituting, to transform, to become. They are focused on creating what the educator Paolo Freire called vital knowledge: “The kind of knowledge that becomes solidarity, becomes a ‘being with’. In that context, the future is seen, not as inexorable, but as something that is constructed by people engaged together in life, in history. It’s the knowledge that sees history as possibility and not as already determined. The world is not finished. It is always in the process of becoming.”

In essence, being in flow is accepting that nothing is pre-determined or set in stone. We – and our business processes – are in a fluid rather than solid state.

### The playful attitude

Closely related to flow, the second concept implicit in open space learning is that of playfulness.

In my work as a teacher I try to help young people to imagine how

they might become, how they might re-imagine themselves, their relationship to others and to the world we share. The key to social transformations on the scale required to meet the demands of the 21st century is in understanding how to utilise in our adult world the playful strategies of children, both with objects and the pursuit of socially playful goals, and in their innate uses of the imagination.

There are connections between children’s uses of play, the play of a company of actors in producing a play, and the possibility that play as an attitude to process rather than as an event may offer a model to other groups intent on creative invention.

In *Homo Ludens* published in 1938, Johan Huizinga, who later died in Nazi detention, argued that in the pre-industrial age we were all playful as adults as well



“The mood of learning, working, creating in open spaces is subjunctive – full of possibilities, imaginings, what-ifs, maybes and possible beginnings”





Children learn to succeed through constant repetition and modulation

as children and that this playfulness was essential both to invention and to cooperative or political life. In his thesis, the introduction of the factory bell made work serious business, without space or time for play.

According to Csikszentmihályi, flow is most likely to occur when there is a match of high challenge and high skill – when we are stretched by the problem to test the outer limits of our ability. And of course play itself is no fun unless there are obstacles and challenges. But obstacles and challenges are only fun when the consequences of error and failure are reduced and means-ends relations are loosened.

So play is also a preparation for the necessity of repetition and modulation in creative training and work. Because there is no penalty in not achieving a pre-determined goal in play, children learn to succeed through constant repetition and modulation. They practice for hours with the same Lego or clay, for instance, in the same way that an artist must practice for hours to create original music.

It is also the case that children’s play, particularly with objects, strives towards increasing complexity. Sennett claims that play is the foundation for craftsmanship which, in a sense, is another word for creativity – using tools in order to fashion ideas into new and original outcomes.

Play takes place in the space between people. The child psychologist Donald Winnicott suggests, that in playful encounters, children learn to experiment with the idea of otherness. That the presence of the other, which can

be very threatening, becomes in play a delightful source of curiosity and that this curiosity – or disinterested empathy – contributes towards the development of healthy attitudes to friendship and professional life.

One other purpose of the rules of play is to create the illusion at least of initial equality in terms of power. The principles of exchange in the marketplace of play are differentiated to ensure that all players are able to participate more or less equally in terms of age, ability and other differentiating factors. There is no fun in playing with apex predators – there has to be the possibility of a win-win exchange. In play there is a freedom from the self; a disinterest that makes playing sometimes as enjoyable as winning.

### All together now

Along with flow and playfulness, the third principle of open space learning is togetherness, or working as part of an ensemble. This is where personal or individual creativity crosses the line into business creativity. In the workplace, we need to work as part of the larger organisation. Even though there are opportunities for individual creative brilliance, the creative ego needs to be harnessed to – or engaged by – the organisational goals.

One of the first and most important aspects of this sort of togetherness is the setting aside of hierarchical position. So, in open space learning there are flexible and less hierarchical uses of space, and knowledge is considered

provisional, problematic and unfinished. There is often an ‘uncrowning’ of the power of the teacher, leader or director and an expectation that learning, or rehearsal, will be negotiated and co-constructed. Open space learning requires trust and mutuality amongst participants; the circle is its essential shape. Crucially, the space is open to others, it is a shared public space constituted in order to negotiate meanings socially and artistically.

In certain aspects, this model corresponds with what Richard Sennett and Jonathan Cobb identified as the Social Triangle. Their research in the seventies in Boston found that manual labourers forged strong informal bonds at work. On one side of the triangle was a respect between bosses and workers based on two principles – earned authority and the moderation of humiliation in the relation of command and obedience. Earned authority means that workers themselves endowed the boss with authority – to rules freely accepted. They followed the boss because they wanted to, not because they had to, and this comes close to the idea of the ‘uncrowning’ of the teacher or director. One reason for this earned power was that the boss did not use his power to humiliate in the relation of command to obedience. According to Max Weber, humiliation occurs when the servant has no choice (no autonomy), humiliation occurs when the master shows no recognition. This is close to what I mean by trust and mutuality between participants.

The second side of the triangle is based on the informal ties of loyalty and mutuality between workers themselves, forged as much through gossip and covering each other’s absences as through the work itself. Mutuality that leads to great leap of faith – trust in each other – particularly when the going gets tough. This kind of extraordinary trust, which allows for the most amazing risks to be taken, is particularly true in the lives of a company of actors.

The third side of the triangle comes from the other two and is the willingness of all involved to cooperate under duress – to muck in and do whatever it takes when there is a crisis.

The qualities of earned authority; trust; honour; absorption in pursuing goals that are beyond individual self-interest; recognition; freedom to initiate and both develop, abandon and modify ideas and ways of working; tough cooperation; and a playful attitude to work are strongly evident in the actor Geoffrey Streatfeild’s memory of working with the RSC ensemble during its season performing Shakespeare’s history plays:

“Our ever-growing trust enables us to experiment, improvise and rework on the floor with an astonishing freedom and confidence. This ensemble is a secure environment without ever being a comfort zone. All of us are continually challenging ourselves and being inspired by those around us to reach new levels in all aspects of our work.”

The key to creating a secure environment without creating a comfort zone is getting the balance right, in leadership, between protection and challenge. Remember that flow is about the balance between challenge and skill. Too high a challenge and workers fail and become disinterested in the wrong sense. Too much protection and they get bored.

My interest in these spaces of flow, playfulness and togetherness is one of sociability and of scale. The scale and complexity of the problems we face are of such a magnitude that they can only be addressed socially, collectively and collaboratively. I do not want to change the world or to work towards creative transformations in society. My humbler mission is to discover whether in open space learning we can model a better way of living, working and being.



### Reinventing our worlds

We are all actors driven by events to shape new social, artistic and commercial ideas and responses. We may feel embarrassed or fearful of the idea that we are all actors in a social performance with others. You may want to distance yourselves from luvvies and the arts, but in our professional lives we are used to the idea of ‘performance’ – we have performance indicators, we have performance management and we have meetings that lead to action points that require actors to act.

Michael Boyd, the Artistic Director of the RSC, once asked: “Can an

ensemble company act in some sense as a... better version of the real world on an achievable scale which celebrates the virtues of collaboration?”

It is both an intriguing and inspiring notion. The need to act (literally) in our personal and professional lives has never been more pressing. As Brecht’s Galileo pronounced, “A new era has dawned, a great age in which it is a joy to be alive.” The new era demands creative responses from us all. ■

“The third principle of open space learning is togetherness, or working as part of an ensemble. This is where personal or individual creativity crosses the line into business creativity”

Watch a film about the Warwick MBA module ‘Leadership and the Art of Judgement’ at [wbs.ac.uk/go/jonathan](http://wbs.ac.uk/go/jonathan)





# Big problems, small solutions



David Cameron is a fan. So, too, are governments, organisations and individuals throughout the world.

Steve Coomber meets **Nick Chater** to examine the concept of nudge, the wonderful world of small improvements

In July 2010, shortly after becoming British prime minister, David Cameron set up the Behavioural Insights Team (BIT), popularly renamed the 'Nudge Unit'. The team was set up within the Cabinet Office to explore applications of the nudge concept in UK policymaking. It is chaired by Sir Gus O'Donnell, former head of the civil service, with Dr David Halpern, Chief Strategy Advisor, 10 Downing Street, as its director. Its remit is to "find innovative ways of encouraging, enabling and supporting people to make better choices for themselves". The idea was to find alternatives to the reams of regulations churned out by government.

Nick Chater, Professor of Behavioural Science at Warwick

Business School (WBS), is a member of the BIT academic advisory board. "The BIT aims to inform UK Government policy by understanding individual behaviours," he says. "So very crudely the idea is to take what we know about psychology, rather than just what we know about economics, and use that to drive policy. There are many areas where understanding the psychology of individual behaviour is of critical significance. For example, the kinds of things in the frame of the BIT include issues concerning people's tax behaviour, how people can improve their health or reduce their carbon footprint. In short, trying to help people lead better lives, not by coercion, but by structuring the environment so that it is easier to do the right thing."

## Nudge, nudge

The nudge concept is brilliant in its simplicity. When Schiphol International Airport in Amsterdam wanted to minimise the unpleasant after effects of a day's misdirection in the men's restroom, it came up with an ingenious solution: etch the image of a house fly inside the bowl of the urinal. Instant result: an 80 per cent reduction in spillage. It may seem an inconsequential anecdote, but at its heart is a concept that may help to tackle some serious societal problems, from obesity to unemployment – the concept of a tiny nudge that can make a big difference.

Governments use a range of measures to encourage citizens to engage in certain types of behaviour. They mandate behaviour through rules and regulations, backed up by punishments for non-compliance. They can incentivise behaviour through economic inducement such as reducing or increasing taxation, for example, or through the state benefits system.

These measures have their limitations, however. The level of coercion – what would probably be viewed as heavy-handed government intervention – may just be politically unacceptable. Many people simply do not believe it is the role of government to interfere with the way they live their lives. And people may simply not regard a particular rule or incentive as applying to them. They may not believe that they eat unhealthily, or classify themselves as obese. Even if they do recognise that a rule or incentive applies to them, they may not pay attention to that message, or prioritise action in response to it, because of the many other things that need attending to in everyday life.

Politics also colours what can and cannot be countenanced as a means of encouraging a certain type of civic action. Political parties with libertarian tendencies, that favour small government, want to keep state intervention in people's lives to a minimum, and avoid accusations of creating a "nanny state". Ideally, the argument may run from this particular political standpoint, the



market should be trusted to provide a solution. But, say the advocates of nudge, the market won't always work: sometimes nudges are needed.

### Just a little nudge

This is where the behavioural sciences have a role to play. In recent years a number of disciplines – sociology, economics, psychology and the political sciences – have focused on decision making behaviour. Concepts, such as bounded reality – that people must make decisions in the face of severe limitations on time, knowledge and experience – have helped provide a richer understanding of human behaviour. The result is new ways of thinking about how best to achieve social policy goals.

Chater founded the new Behavioural Science group at Warwick. "Behavioural science is the scientific approach to individual behaviour applied to understand social and economic phenomena," he says. "Its methods are, to some extent, experimental. They draw significantly on the neurosciences. They are trying to understand the mechanisms inside individual people and how those mechanisms apply out in aggregate behaviour – so how they affect social behaviour, how they affect markets and the economy at large."

Some of this new thinking about decision making was captured in the 2008 book, *Nudge: Improving Decisions about Health, Wealth, and Happiness*, written by American economist Richard Thaler, Professor of Behavioural Science and Economics at the University of Chicago Booth School of Business, and Cass Sunstein, legal scholar and a Professor of law at Harvard Law School, (and which includes the Amsterdam urinal story). Although the origins of nudge date back to 2003 at least, and an article by the authors in which they coin the term "libertarian paternalism": paternalistic in seeking to influence the choices of individuals, libertarian in that individuals are free to opt out of "specified arrangements" if they choose to.

The argument is that most people's decision making is far from rational or perfect, as classical economists

might have us believe. According to one popular viewpoint, it is as if two systems of thought, the reflective (deliberate and thoughtful) and the automatic (instinctive and impulsive) are in conflict. Various factors influence decision making, including emotions, habits, rules-of-thumb and outright biases. People may, for example, rely too much on a single piece of information when making a decision. They might favour the status quo rather than making a change, even though changing would provide a better outcome. By acknowledging these decision making limitations, it might be possible to construct choice architecture to frame choices in ways more likely to encourage desired behaviour. So argue Thaler and Sunstein.

“Telling late tax payers that most people in their towns had already paid their tax, increased payment rates by 15 percentage points”

### Testing behavioural insights

It did not take long for policymakers to seize on Thaler and Sunstein's ideas. In the US, for example, Sunstein worked with the Obama administration in the Office of Information and Regulatory Affairs. Elsewhere, nudging found favour with governments, national and local, in countries such as Denmark, France and more recently Australia.

In the UK, the BIT initially focused on areas such as fraud, error and debt, energy efficiency, consumer affairs and health. And, judging by the BIT's latest annual update 2011-2012, it is making encouraging progress.

The team was tasked with meeting three objectives for summer 2012: to transform two major areas of policy; to spread understanding of behavioural insights across Government; and to achieve at least a tenfold return on the cost of the

team. The review concluded that all three goals were met. In particular, BIT "led six major pieces of work, published four policy reports, and contributed to tens of other policy areas". It also achieved savings of some 22 times the cost of the team, as well as identifying specific interventions that will save at least £300m over the next five years.

Part of its success can be attributed to the methodological way it approaches making interventions. It has pioneered the use of experimentation and 'randomised controlled trials' (RCTs) in public policy, to determine the effectiveness of public policy interventions. Testing initiatives to discover what works and what does not.

In the area of fraud, error and debt, for example, telling late tax payers that most people in their towns had already paid their tax, increased payment rates by 15 percentage points. An RCT with the Courts Service revealed that personalised text messages were six times more effective than final warning letters in getting fines paid. Trials have also demonstrated that, in the area of energy efficiency, offering a loft clearance service to home owners can significantly increase the prospects of the owner installing loft insulation by over a factor of four. Elsewhere, the team is conducting trials focusing on helping people back into work more quickly, supporting SMEs, empowering consumers, encouraging charitable giving through payroll giving schemes and reducing alcohol consumption.

### An Antipodean nudge

For the time being the popularity of nudging, and harnessing the power of behavioural sciences in shaping decision making, is on the increase. The specialist know-how of the WBS Behavioural Science group is likely to be in considerable demand. The BIT has recently agreed to export its expertise to the government of New South Wales, Australia, for example. Soon, it seems, most of us will be being nudged, in one way or another, whether we realise it or not. ■



Pole and line tuna fishing in the Maldives



Steve Coomber meets **Angela Fitzpatrick** to find out why she was compelled to co-found ethical company the Reel Fish Co.

# Canned tuna's Reel deal

In 2008, Greenpeace published a report titled *Tinned Tuna's Hidden Catch*. It contained some unpalatable facts about one of the UK's favourite seafoods. Most of the canned tuna sold in the UK, out of the 770m tins annual total, was caught by highly intensive purse seine fishing, combined with fish aggregation devices (FADs). It is a method of fishing that not only catches and kills a high proportion of non-targeted

species globally – enough to fill the equivalent of nearly one billion tins of tuna annually – but is driving commercial tuna stocks to extinction.

Today, largely thanks to the Greenpeace campaign, most UK retailers are committed to selling sustainably caught tuna. One small business, though, has always been ahead of the shoal. The Reel Fish Co., co-founded in 2009 by Warwick MBA



alumna Angela Fitzpatrick, launched its Reel Tuna range in 2011 – a branded, 100 per cent pole and line sustainably caught canned tuna range.

Many of Fitzpatrick's entrepreneurial skills can be traced back to her postgraduate degree. The Warwick MBA changed her life, she says. After a first degree in Latin and English, and 15 years working sales in blue chip companies, Fitzpatrick wanted a broader perspective on business. "I wanted to know about operations management, management accounting, marketing," she says. "An appreciation of how it all fitted together."

Studying for a three year Executive MBA at Warwick, she soon gained an insight into all aspects of running a business. Many of her assignments focused on her employers, Heinz. So, for example, as part of operations she looked at a new product Heinz was bringing to market, and the challenges faced by the people involved with the product's launch. Or when she was studying financial accounting, Heinz was introducing Activity Based Costing at the same time.

After her second year, Fitzpatrick took a study break for family reasons. Not long afterwards she moved companies, first to Wrigleys, then to John West Foods in 2006, where she worked as sales controller. It was while she was at John West that Fitzpatrick began to think about the sustainability issues associated with commercial fishing.

"We were really successful as company during that phase. We were routinely asked for a sustainable option," says Fitzpatrick. Although she raised the issue of doing a pole and line caught canned tuna product, she was unable to make any progress.

Reading the *End of the Line* by Charles Clover convinced her that it was time for a change. "It is a seminal piece of work which tells you that if people continue to fish without limits, then there won't be any left," she says. "When I read the book, I suddenly thought, 'I cannot do this anymore. I can't behave in a way that precipitates a situation that leads to the extinction of a species'. I'd already reached that position in my head, so that is why it was easier to make the move. I knew that there was an alternative out there. A better way to do things."

The idea for the new business came over a bowl of moules et frites in Chester, with work colleague Bryn Scadeng. If both the chilled and fresh versions of tuna were being delivered sustainably, why not canned tuna? As Fitzpatrick notes, canned tuna is an everyday purchase with 90 per cent household penetration, there should not be a different approach to sustainability just because it is in a tin.

## Poles apart

And so, in 2009, The Reel Fish Company was born. "Morally I couldn't sit there and perpetuate the situation, I wanted to

make a change. I knew that the climate was right and consumers were also starting to see this – that made it accessible as a business model," she says. "Bryn and I thought, 'right we can do this, it is going to take a lot of work, but let's go and see what we can do'."

It was always going to be a tough task. The two canned fish giants Princes and John West had about a third of the market each. Add in the supermarket's own label brands, and there was not much of a competitive ocean to swim in. But Fitzpatrick had an angle she thought would work.

At the time, the majority of canned tuna on sale in the UK was caught with industrial purse seine net fishing. These are nets, often a mile long, drawn around the schools of tuna, closed beneath and tightened like a drawstring purse. They were usually used in combination with FADs, which fish congregate around, making it easier to trap them in the nets. This is intensive fishing on a giant scale. It is simply not sustainable over the long term. It depletes the ocean of tuna. And it also has a huge bycatch of non-targeted ocean species such as turtles and sharks.

Fitzpatrick wanted Reel Fish to offer one of the first branded, environmentally friendly, all caught canned pole and line tuna product ranges in the UK. Pole fishing, as the name suggests, is simply fishermen on a boat catching tuna with a pole, line and barbless hook. To get the tuna feeding, water is sprayed on the ocean, or baitfish thrown out. Then the tuna are hooked and lifted onto the boat, one by one. Bycatch, minimal.

Without securing a supply of tuna there was no business, so Scadeng and Fitzpatrick travelled to the Maldives to source the principal ingredient in their product range.

"You can get pole and line caught tuna from various parts of the world. But the reason we chose the Maldives is because they do not allow any purse seiners into their waters. So we knew that we had total traceability," says Fitzpatrick. "Plus it is a coastal state model, and you are putting the money back into the economy. We pay a portion

of the money up-front to the factory, they know we're committed to the supply chain and the goods. So these people are not just selling the raw material around the world for other people to process and add the value."

It took a year of relationship building and negotiation to convince the Maldivians to supply Reel Fish. Once the raw materials were sourced though, it was time to start planning the product launch in earnest.

In the early days of the business, Fitzpatrick's MBA know-how (she completed the MBA in 2008) proved invaluable. Whether it was business plan writing, holding her own in technical conversations about financing, using tools like Porter's five forces, or devising a product differentiation strategy, Fitzpatrick drew extensively on her MBA knowledge.



“I suddenly thought, 'I cannot do this anymore. I can't behave in a way that precipitates a situation that leads to the extinction of a species.'”



Reel Fish Co. founders Bryn Scadeng and Angela Fitzpatrick

Before launching the new product in the supermarkets, Fitzpatrick had approached Asda and involved them in the creation of the product. It was a robust process with the buyer at Asda challenging Fitzpatrick on the rigour of Reel Fish's sustainability policy. Engaging with retailers in this way ensured that Reel Fish had a stronger product when it finally launched in an Asda store in Wakefield, on July 10, 2011.

## A sustainable future

It was great timing. Greenpeace had drawn attention to the sustainability issues around tuna fishing and its retail in the UK in 2008 with its report *Tinned Tuna's Hidden Catch*. Public awareness about the issues involved had grown considerably, yet the major brands were still only making limited progress towards supplying a sustainable product in the stores. Indeed, as of October 2012, Greenpeace reported that although now navigating in the right direction, Princes and John West still had some way to go to meet their commitment to switch to 100 per cent FAD-free and pole and line canned tuna by 2014 and 2016, respectively.

Launching its "reel taste" "never from nets" range of solely pole and line caught canned tuna in 2011, The Reel Fish Co. was ahead of the curve in providing a branded sustainable canned tuna product. Other stores soon followed Asda's lead stocking Reel Tuna. "After that we got into the Co-op, Waitrose in September, Tesco in November, Sainsbury's in January 2012, Morrisons in April 2012 and then Ocado, August 2012," says

Fitzpatrick. "So we covered all of the major grocers, as we would define it. Now we are talking to retailers in Holland and the Republic of Ireland."

Reel Fish is already selling some four million cans of sustainably caught tuna a year, and expanding. There is talk of moving into added value tuna – tuna with other products, such as pasta, for example. And when the company has got its Reel Tuna model exactly the way it wants it, Fitzpatrick would like to offer other fish, such as salmon, for example.

Canned tuna is a highly competitive market in the UK, and Reel Tuna is always likely to be under pressure on price and have a smaller market share than its main competitors. Yet although Princes, John West and the supermarket own labels have moved, or are moving towards, more sustainable tinned tuna products, Reel Tuna has the advantage of being a brand that showed the way, and is very strongly associated with ethical fishing methods and sustainably sourced fish.

"In a market that's worth £250m, each one per cent is worth £2.5m to our business. If we chip away at that, it becomes a lot of market share our competitors must try and recover. And those big players have to spend an awful lot of money even to move share," says Fitzpatrick.

"I think that we've had a degree of success because we have driven behaviour change in our competitors. But, being the size we are, it just means that if we want to swim with sharks we have to be even better at what we do and even clearer about what we stand for – the most responsible method for catching the fish, and great taste and quality." ■



# Ready for take-off

[Paul Kehoe](#), CEO of Birmingham Airport, has a bold vision for the airport's future. He shares it with Ashley Potter

Given his vision to turn Birmingham Airport into the UK's biggest airport outside of London, nobody could accuse Paul Kehoe of being short-sighted. Nobody, that is, apart from the Royal Air Force (RAF).

The irony for the Birmingham Airport CEO is that if his short-sightedness not been spotted by the RAF, he would be flying planes rather than organising them and transforming the West Midlands hub into one of the business class travellers' favourite destinations.

Peering through his glasses out of his huge office window and across the airport, Kehoe points to 200 acres of mud that heralds a potential game changer for Birmingham and the Midlands. It will bring a full-length runway, which, with the planned HS2 rail link, could solve Britain's airport capacity problems and move Birmingham from the seventh busiest airport in the country to the third.

It would be quite an achievement to crown an impressive CV, emulating his father, Reginald, who started as a docker and rose to be manager of Garston port. Thanks to his cousin Arthur, Kehoe got into planes rather than ships – just as well given the demise of the country's docks.

Arthur would take the then two-year-old on weekly plane-spotting trips to Liverpool Airport – now John Lennon Airport – and though he admits being “bored out of my mind”, a love for roaring jets in the sky was born.

He joined the air cadets and set his sights on the RAF, but discovered all that squinting at the blackboard at West Park Grammar School was not because the teacher had terrible writing.

“I went to Biggin Hill and passed the physical test, but

then they discovered I was too short-sighted,” says Kehoe, who now oversees 143 companies, 6,000 staff and 87,000 aircraft movements in and out of the airport. “They said ‘you could probably navigate but your eyesight is pretty rosey’. It was hugely disappointing.”

Instead Kehoe became a professional plane-spotter, as the RAF sponsored him through Leicester University to become an air traffic controller. Stints at RAF Cranwell and RAF Brize Norton sandwiched six months in the Falklands Islands. “It was in 1984 and we were officially still at war,” says Kehoe. “There was no peace treaty;

Argentina had just surrendered, so every night we had to park these three-ton trucks down the runway so the Argentines couldn't land to do a surprise attack. We had tin helmets and gas masks, and I learned how to fire a gun but never had to do it, thankfully.

“We were operating out of the original terminal building at Port Stanley and it had a 6,000 feet metal runway. It was the quickest way to

cover the holes in the original, so you could land Hercules and Nimrods on it, plus Harriers and Phantom F4s. It moved every time a plane landed, so occasionally engineers had to move a plate out and put it at the other end.”

After eight years in the RAF and feeling stuck in HR, an MBA at Warwick Business School saw Kehoe come full circle and back to Liverpool Airport. It was one of four airfields he looked after for British Aerospace in the 1990s and unfortunately it had not changed much since Arthur took him plane spotting there in the 1960s – “it was a bit of a dog”.

But that experience propelled Kehoe on a journey that saw him criss-crossing the world like an Airbus, setting

“Our business passengers have gone from 20 to 27 per cent. Manufacturing has softened the blow for us, but other airports are really struggling”



Paul Kehoe in his office at Birmingham Airport

INSIGHT



up Serco Aviation in Canada, Australia and the Middle East before landing as CEO of Belfast International, followed by three years in charge of Luton Airport and, after a brief sojourn running a legal mail service, he was at Bristol Airport for 18 months before finally arriving at Birmingham just in time for the financial crisis and the worst depression in the country's history.

"It has been awful," says Kehoe. "The worst four years economically in aviation's history. Since 1946 there has been a line been drawn, with the number of passengers going up six per cent per annum. There were blips in 1973, 1981 and 2001 and it has come back within six months. Then suddenly, in 2007 it turned down and it hasn't come back up."

"In the last four years, Britain has lost travel equivalent to an airport the size of Gatwick; 35m passengers have disappeared from the countries' 25 major airports. Stansted has seen numbers fall from 23m to 17m, Manchester 24m to 18m.

"We peaked after the start of the loss because Ryanair came in and gave us a little lift. We started to grow to 9.6m and then the recession hit us and we lost 900,000 back to 8.7m. We have pulled back since to 9.1m."



It has been a turbulent time for the aviation industry and some airlines, like BMI Baby, have nosedived out of business. Tourists may have stopped heading overseas, but Kehoe has managed to keep Birmingham pointing at the horizon at least, thanks to the Midlands' strong manufacturing base. Despite the recession, Kehoe has managed to keep investing in the airport. In 2012 it was named best UK airport by Which? and by the UK National Transport Awards.

Kehoe has overseen the transformation of Birmingham Airport and its revenue streams that now amount to almost £1bn. "We have taken our two separate terminals and merged them into one big one and have got efficiencies from that," says Kehoe. "Around 20 years ago probably 80 per cent of our income came from landing and passenger fees, now it is 45 per cent. We have not raised our landing fees for 17 years because the airlines won't stand for it. We now get 55 per cent from parking, property, retail, and food and beverage."

Over the last few years £260m has been pumped into the airport and it is investing another £100m to extend its runway, which will allow aircraft to fly direct to the west coast of the US, China and South Africa. When it is finished in 2014, Birmingham will have the capability to handle more than 36m passengers.

It all points to a bright future, but pulling out of the

tailspin of the UK's recession is dependent on so many outside factors that Kehoe is cautious about the future. "Things are getting better but it is on a knife edge," says Kehoe, whose enjoyment for speed extends to flying, skiing, sailing and tinkering with a miniature railway in his back garden. "We saw leisure passengers not fly, companies go out of business and three years ago Jaguar Land Rover, which is right next to us, were about to close. But they have turned things around and they can't make enough cars now. They have been exporting and our business passengers have gone from 20 to 27 per cent. Manufacturing has softened the blow for us, but other airports are really struggling."

It is a brave move to keep investing in such turbulent times, a situation that has seen the government stall on how to solve the UK's airport capacity crunch. A myriad of plans have been made, from the so-called Boris Island (after the London Mayor Boris Johnson), to expanding Gatwick, or Heathrow, and even creating a dual-hub between Heathrow and Stansted with a rail line linking them.

"The third runway at Heathrow and second runway at Gatwick are both seven to ten years away, while Boris Island is at least 15 years away," says Kehoe, suddenly looking like a politician. "We have a 'now' problem."

Not only that, but the logistics of building an airport in the Thames estuary or extending Heathrow or Gatwick are huge. As Kehoe points out, to fit another runway at Heathrow would need rail services connecting to a new terminal – it's sixth – plus widening the M4 and M25, building a town the size of Woking for 10,000-15,000 workers and their families and subjecting half a million more Londoners to noise pollution.

Kehoe believes Birmingham offers a better solution. Not only that,

Kehoe feels Birmingham should be part of a radical move to a multi-hub system that would end Heathrow's dominance.

"We export three million passengers to London to fly every year," says Kehoe. "If we can bring some of those back we can free up some of the capacity in the south east. The reason they go down there is because BA is a great product and they have a BA gold or silver card. People will drive to get in a BA lounge, to get those gold points and the upgrade."

"This was a BA airport for 60 years, then they left here along with Manchester, Glasgow, Edinburgh as operating bases. We would welcome them back. They want to prove a point and get their third runway at Heathrow, but if they don't get it why not come back here? They are a national flag carrier after all."

"We should follow the German model. Lufthansa has



taken a multi-hub strategy and grown various airports around Germany and Europe, rather than concentrating all their eggs in one basket like Heathrow. Theoretically, Lufthansa could do that at Birmingham, but there is a national trend to support your national flag carrier still. KLM UK tried it but KLM in the end sold that. Air France and Lufthansa are concentrating on their hub strategy because they can become the dominant carrier and that stops others coming in. Until they run out of capacity there, why would they think about investing elsewhere?"

But that's the point. Heathrow and Gatwick have run out of capacity, so why not use the existing airports, rather than expensively expanding? The endless stalling could force BA or the government's hand. If it does, Kehoe is busily positioning Birmingham to take advantage. "I want us to rightfully take our place as a piece of national infrastructure," says Kehoe. "It was genius to build a railway station 600 metres from us in 1984, but they stopped the runway 400 metres short of full length capability to connect to the world."

"20 years later we are extending it 400 metres, after the council has moved the A45. That buys us about 2,500 miles of range. The Boeing 777, which can only get to Dubai 4,000 miles away from here at the moment, will be able to take a full fuel load and go the full 7,000 miles. It could change everything."

Kehoe, who is on the Advisory board of Warwick Business School and is chairman of Marketing

Birmingham, knows he will still have to not only "market the hell out of" the airport, but Birmingham and the Midlands as well.

"It is the economy of the Midlands that drives the passenger flow," says the 53-year-old. "Birmingham is the third most visited city in the UK after London and Edinburgh. You have got Shakespeare, Cadbury World, the Bullring, Selfridges, curries, Warwick Castle, motoring heritage and more."

"We need to use our funds wisely to market the region and encourage foreign direct investment. And it is working; after London, Birmingham is the biggest city of foreign direct investment. The Midlands' manufacturing hub is giving us a mini renaissance and HS2 will effectively move the airport 70 miles closer to London. It is going to take 35 minutes to get to London from here."

The HS2 rail link from London to Birmingham has been the subject of endless protests, but Kehoe is adamant it would be a huge boost for the Midlands' economy. "All three political parties have signed up for it," says Kehoe. "It is seen as a vanity project, but if you want freight off the road you have to increase the capacity on the rail lines. Increasing the commuter trains with HS2 will help that and move this airport to zone four of the London Underground."

Kehoe has shown the RAF how short-sighted they were by going on to fly all manner of planes, but it is Birmingham and the Midlands who could truly benefit from his long-term vision. ■

“The Midlands’ manufacturing hub is giving us a mini renaissance and HS2 will effectively move the airport 70 miles closer to London”





# A day in the life

## Ed Gardiner at the Design Council

**Warwick Business School has forged an innovative partnership with the Design Council to bring the benefits of integrated design to business. The Design Council used to be a public body, but is now an enterprising charity whose aim is to bring the transformative power of design to the things that matter. Ed Gardiner has been appointed WBS Behavioural Design Lead, spending four days a week at the Design Council and one at Warwick Business School**

**8:50** Ten minute walk to work. Love walking through London, it's so scenic.  
**9:00** The Design Council is housed in the fabulous Angel Building, and I always marvel at the classic piece of corporate art in the lobby **1** (Out of the Strong by Ian McChesney); it is meant to be like treacle drawn from a tin and looks really good. I was hired a year ago by Warwick Business School (WBS) to lead the new partnership with the Design Council and am part of both the Behavioural Science group and Working Capital project at WBS, and the Challenges team at the Design Council, so-called because we run national competitions - or challenges - that use design to address society's issues. We sit in an open plan office, so it's very sociable.



**9:05** Yesterday there was a big meeting with some public health consultants from Southwark and Lambeth Councils. Our project with them - called the Knee-High Project - is trying to understand how design can have an impact on early child development. We are trying to break the vicious cycle between vulnerable parents and vulnerable children by looking at everything from making sure their parents read to them, to nutrition. Simple things like getting enough sleep dramatically correlate with educational attainment.

**9:45** I write up the notes from last week's quarterly steering group meeting for the WBS / Design Council partnership, which we have by video

“Kids are growing up screen-to-screen, rather than face-to-face, so we are looking how to change behaviours in the long term using technology”

conference. It was the new Design Council Chief Executive John Mathers' first introduction to the partnership. We talked about how to get Warwick MBA students involved in Design Council projects, a new project on design in the boardroom and the launch of the Behavioural Design Lab.

**11:20** Quick cup of tea and then on with a paper, which is introducing the concept of Behavioural Design. What

we are trying to do is bridge the gap between academic research and creative problem solving, which is what design is essentially. Combining those things means we have a very strong proposition for the public and private sector to tackle social issues in energy and health, among others.

**Lunch** is a sandwich at the communal table **2**, which is very large so we can all sit around and chat.

**13:30** I call Warwick Medical School because we recently put in a pitch with them and Warwick Manufacturing Group to the BUPA Foundation for a medical research grant. The project looks at how we can design a social media application to use existing social networks like Facebook to ensure children eat healthily. Kids are growing up screen-to-screen, rather than face-to-face, so we are looking how to change behaviours in the long term using technology.

**13:55** I go to a meeting in our fantastic 'fishbowl', where you can scribble ideas on the glass walls, about a project with an energy services company looking at how to encourage energy efficient behaviours in the workplace. They heard about Nick's [Chater's] work with the Cabinet Office, so they got in touch with the Behavioural Science group.

**15:30** I get out of the meeting and send an email to the Cancer Environments team at Macmillan. They have recently agreed to fund a Research Fellow in the Behavioural Science group to look at behaviour change in cancer treatment facilities. It's our first project under the Behavioural Design Lab so exciting to get the job advert out.

**17:30** I switch off my computer and say goodbye. I used to cycle to work when the Design Council was in Covent Garden and I really miss that, but it is a short walk home and then feet up to watch the football after a good day in the office. ■



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# City guide

## Mumbai



**Niti Shah**, a graduate from Warwick Business School's MSc in Marketing & Strategy, shares some of her favourite haunts in the melting pot that is Mumbai



Mumbai is the most populated and wealthy city in India, and its commercial and entertainment capital. Generating five per cent of India's GDP, and handling 70 per cent of capital transactions to its economy, Mumbai is home to financial institutions including the Reserve Bank of India, the Bombay Stock Exchange and the National Stock Exchange of India. The city also houses India's Hindi (Bollywood) and Marathi film and television industry. The city was renamed in 1996, changing from Bombay, with the new name coming from the goddess Mumbadevi.



### Best time of the year to visit

**November to February** is best, when the city is not so hot and humid. I love Mumbai during the monsoon in July, as long as you don't mind the muck and traffic snarls.



### Favourite restaurant or bar

**Woodside Inn 1** at Colabe is open until midnight and specialises in pizzas and burgers. **Cafe Leopold** is also a good place for a night out. **Out of the Blue** in Bandra serves European and Italian food and is great for chilling out and business meetings. Since it's an open air restaurant it is best to visit in the evenings. The terrace bar at **Gadda Da Vida**, at the Novotel Juhu Beach, overlooks the sea and is ideal to enjoy a drink at the end of the day.

- ◇ [www.woodsideinn.in](http://www.woodsideinn.in)
- ◇ [www.leopoldcafe.com](http://www.leopoldcafe.com)
- ◇ [www.outoftheblue.in](http://www.outoftheblue.in)
- ◇ [www.novotel.com](http://www.novotel.com)

### Good for a business lunch



**Mainland China 2** is great for a business lunch, serving delicious food like sizzling eggplant with spicy tomato garlic sauce and steamed sea bass with soy and ginger.

- ◇ [www.mainlandchinaindia.com](http://www.mainlandchinaindia.com)

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### Where to shop

**Colaba Causeway**, the 'Culture Square' of Mumbai, is great for cheap Indian-style bags, shoes, clothes and accessories – perfect for shopaholics. **The Bombay Store** in Colaba has unique ethnic items. The best shopping malls are **Palladium**, **Phoenix Mills** and **Infinity Mall 2** in Malad. On Linking Road in Bandra there is also a huge market, famous for having everything!



Dana Ward / Shutterstock.com



### Best place to chill out

For stand-up comedy and gigs the **Comedy Store**, Palladium is good. For plays, there is **National Centre for the Performing Arts** in the south and **Prithvi Theatre 4** in the north. **Shiro** is a good lounge-type pub, while **Café Mondegar** is also great to relax with couple of beers.

- ◇ [www.ncpamumbai.com](http://www.ncpamumbai.com)
- ◇ [www.prithvitheatre.org](http://www.prithvitheatre.org)
- ◇ [www.shiro.co.in](http://www.shiro.co.in)

### Sights not to miss

If you really wants to soak in Mumbai, a detour around the south Mumbai is great, especially **Colaba**, **Fort 5** – the business district – and **Churchgate**.

A walk to the **Gateway of India 6** is a perfect way to get to know the city. Many go to the **Marine Drive 3** promenade for morning and evening walks. **Bandra Bandstand Promenade** features the **Walk of the Stars**, a 2km stretch honouring Bollywood film stars, and is where many celebrities live and stay so keep your eyes open!





# City guide London



Life in London is a vibrant cosmopolitan affair and **Sarah Zareian**, a graduate of the Warwick MBA, shares some of her favourite places in The Big Smoke



*“As long as I gaze on Waterloo sunset I am in paradise”*

Oh, the immortal words of The Kinks’ wordsmith Ray Davies. Everything in London is beautiful at sunset, but there is plenty to do any time of day or night, and all year round, in the UK’s capital city. London is home to three of the world’s Top Ten museums and galleries, has 850+ art galleries and 170+ museums. Annually there are over 17,000 musical performances and 250 festivals, including Europe’s biggest street festival – the Notting Hill Carnival – which attracts nearly one million people every year.



## 1 Taking afternoon tea

For a very special occasion I really recommend afternoon tea at the **Savoy 1** or **Claridges**. Dainty sandwiches, exquisite sweet pastries and the finest tea, coffee or hot chocolate – and perhaps a dash of bubbly!

◇ [www.fairmont.com/savoy-london](http://www.fairmont.com/savoy-london)  
◇ [www.claridges.co.uk](http://www.claridges.co.uk)



## 2 Favourite restaurant or bar

**Hix** is a fabulous British restaurant, think dark woods, an air of history without being stiff. It also has a super cocktail bar, **Mark’s Bar 2** downstairs which is a real hidden gem! I also really like a place called the **Experimental Cocktail Club** for cocktails, but it’s very popular so best to book in advance.

◇ [www.hixsoho.co.uk](http://www.hixsoho.co.uk)  
◇ [www.marksbar.co.uk](http://www.marksbar.co.uk)  
◇ [www.experimentalcocktailclublondon.com](http://www.experimentalcocktailclublondon.com)

## 3 A bit of culture



Although London is famous for its **West End**, where there are theatres with big blockbuster shows, I prefer **The Almeida 3** – a 325 seat theatre in the heart of Islington, North London that has great intimacy; everyone feels like they get to know the cast really well.

◇ [www.almeida.co.uk](http://www.almeida.co.uk)

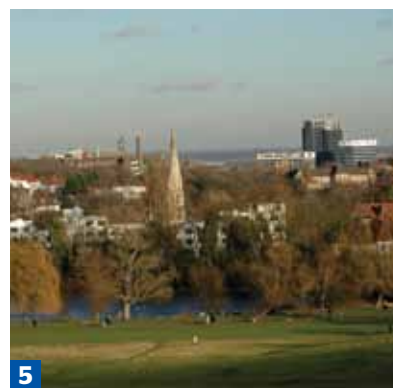
Richard Bryant | Jason Lowe



## 4 Where to shop

I shop around **Bond Street**, it’s easy for me to get to it and I like to have the fresh air when shopping. There are enough shops for shopping for work clothes and plenty of shoe shops, what more could any woman want?

◇ [www.bondstreet.co.uk](http://www.bondstreet.co.uk)



## 5 Where to relax

I love **Primrose Hill**. It’s breathtakingly beautiful and you can take some time out to relax and enjoy the greenery and slightly bohemian atmosphere. I also recommend **Hampstead Heath 5** on a sunny day. Although it’s only six kilometres from Trafalgar Square, it is beautiful countryside with lots to do: there’s a zoo, an athletics track, an education centre, three swimming ponds and a lido!

◇ [www.primrosehill.com](http://www.primrosehill.com)

Christian Tate



## 6 The Great British Pub



There are some fabulous old pubs to try out in London, including my favourites **The Hollybush** and **The Freemasons Arms 7** both in Hampstead. Proper beer, nice food, comfortable seats and a warm welcome. Lovely!

◇ [www.hollybushhampstead.co.uk](http://www.hollybushhampstead.co.uk)  
◇ [www.freemasonsarms.co.uk](http://www.freemasonsarms.co.uk)



## 7 Sights not to miss

**The Shard 6** is the tallest building in Western Europe at 310m (1,016ft), and is a real multi-use building with offices, apartments, a 5-star hotel and, of course, The View From The Shard - London’s highest viewing gallery offering 360 degree views. **Tower Bridge 4** by the river is beautiful by day and by night, and if you check their website you can coincide your visit to see the bridge opening up. Also, everyone should have a go on the new **Emirates Airline 8** (cable car) which runs between North Greenwich and the Royal Docks – the view is excellent! The timetable and booking is available on the Transport for London website.

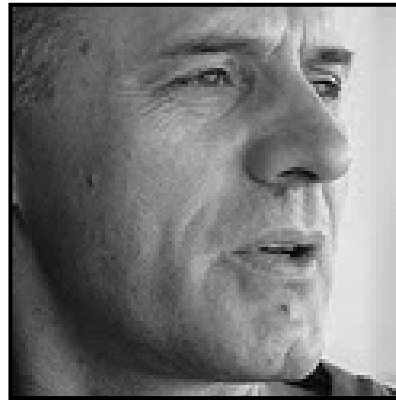
◇ [www.the-shard.com](http://www.the-shard.com)  
◇ [www.theviewfromtheshard.com](http://www.theviewfromtheshard.com)  
◇ [www.towerbridge.org.uk](http://www.towerbridge.org.uk)  
◇ [www.tfl.gov.uk](http://www.tfl.gov.uk)



# Five books I love

## Haridimos Tsoukas

What I am has been critically influenced by what others have written. I am not consciously aware of those influences most of the time, but I know they are there. These are the books that have shaped me as a person and an academic



The five books I have chosen indicate my long-time preoccupation with what philosopher Stephen Toulmin called “the ecological style of thinking”. I love these five books for their intellectual breadth; their holistic approach and the subtle appreciation of context, agency and process they manifest; their philosophical underpinnings; and the moral vision of life they offer.

### The book that expanded my horizons

#### *Mind and Nature* Gregory Bateson



Gregory Bateson was so many things: an anthropologist, a psychiatrist, a biologist, a cybernetician, a philosopher. His

*Mind and Nature* has been profoundly inspiring for me. He shows the “metapattern” that underlies the apparent diversity of the world, the necessary unity that connects all living beings. His metapattern consists of relations, connections and differences – everything that connects “the crab to the lobster and the orchid to the primrose and all the four of them to me. And me to you. And all the six of us to the amoeba in one direction and to the back-ward schizophrenic in another”. Reading *Mind and Nature* you cannot but begin to think holistically, notice patterns, draw creative analogies, appreciate complexity and beauty. Your horizon expands, your sensitivity is heightened. ■

### The book that was my doctoral studies companion

#### *Decision and Control* Stafford Beer

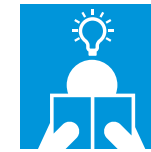


I was fortunate to have had Stafford Beer as my teacher during my doctoral studies in the late 80s. Like Bateson, Beer was a polymath:

an operational researcher and cybernetician, with a strong interest in philosophy, biology, poetry, mathematics and management. His *Decision and Control* was a rigorous argument for paying serious attention to complexity and its management, long before complexity science appeared. The book reflects the 60s optimism that by thinking systemically, we can better handle social, economic and management problems than by thinking about them in disciplinary silos. Beer is not preoccupied with technique, but with the sort of thinking needed to cope with complexity. His motto is Ashby’s “law of requisite variety”: only complexity can cope with complexity. His emphasis on modelling and the rigorous use of analogies (such as the human nervous system) was inspiring; knowledge generation in the natural and the social sciences depends a lot on making and exploring analogies. Both Bateson and Beer made me see that metaphors are not mere rhetorical ornaments but knowledge generating devices. ■

### The most inspiring book in my discipline

#### *The Social Psychology of Organizing* Karl Weick

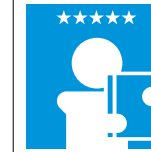


I regard this as the most inspiring book in my discipline – Karl Weick’s *The Social Psychology of Organizing*. Published

in 1969, it has been the most powerful and eloquent plea for putting process right at the centre of studying and managing organisations. Weick does not simply advance an argument, but changes the entire language of discussion: instead of talking about “organisations” he insists on “organising”. It is not that he denies the reality of organisations but he notes that what we label and experience as “organisations” (notice the inverted commas) are products of human action. “Organisation”, he argues, should be seen as an emergent phenomenon: it emerges from the coherent and constrained interaction of several individuals. Similarly, there is no such thing as “the environment”. The latter, more appropriately, are “enacted environments” – human constructions. Individuals in organisations act and in doing so, they create the materials that become the constraints and the opportunities they later face. Organisations talk to themselves to find out what they think. Weick is well known for the statement that more than any other defines his work: “How can I know what I think until I see what I say?” Weick’s book is impressive in the intellectual resources he draws on – ethnomethodology, cognitive dissonance theory, evolutionary theory, systems theory, phenomenology and pragmatism. The book is full of novel insights, playful cartoons, and counter-intuitive arguments; it is even poetically elusive at times. Weick does not hesitate to mobilise poetry (eg Cavafy’s *Ithaka*) to offer the reader additional insights; he does not want merely to demonstrate the validity of his arguments but to carry the reader along. His advice to practitioners (“complicate yourself”) is as brilliant as it is timely. ■

### The book I always recommend to students

#### *Change* Watzlawick, Weakland and Fisch

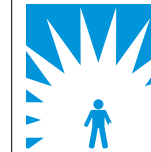


A book I always recommend to students is Watzlawick, Weakland and Fisch, *Change*. I detect doubt when they see 1974

as the publication date, but it is a classic book as relevant to understanding change today as it was when it first appeared. The book is as impressive for its rigor as it is friendly with the familiarity of examples it discusses. Its authors are psychotherapists who – drawing on Whitehead and Russell’s “theory of logical types”, Wittgenstein’s philosophy, Ashby’s cybernetics and an impressive array of other authors, including novelists and poets – offer a way of understanding the paradoxical quality of change in social systems: the more something changes, the more it stays the same. It is an excellent example of how sophisticated theory can be profoundly practical. The authors give us ways of thinking, which can help initiate profound change. The reader is sensitised to look for patterns of interaction as well as for the vicious circles into which we often fall, finding it difficult to extricate ourselves from them, while, at the same time, deluding ourselves that we “change”. It gives us the language and examples to consider change across a range of levels of analysis – from couples, through to groups and organisations, institutions and politics at large. The book conveys something of the impressive polymathy one often sees in post-war central European scholars. ■

### The book that made me understand the quest for the good life

#### *After Virtue* Alasdair MacIntyre



The book that made me grasp the language-dependent character of social practices, the philosophical underpinnings of the

social sciences and, more crucially, the close relation between moral philosophy and the social sciences was Alasdair MacIntyre’s *After Virtue*. It makes a subtle and complex argument for a return to Aristotelian ways of understanding social life. MacIntyre’s philosophical argument furnishes us with a potentially sociological understanding of morality. To the extent virtues are firmly grounded in communities (or social practices), he invites us to pay attention to the “internal goods” social practices are set up to inherently pursue, as well as to the “standards of excellence” that regulate their functioning. Virtues are no mere attitudinal states but human qualities acquired in the context of social practices, the possession and exercise of which helps us achieve the goods internal to our practices. MacIntyre offers a vision of “institutions” as potentially threatening social practices (and the associated virtues) through their emphasis on “external goods”, such as fame, wealth, social status etc. MacIntyre opened my eyes to the importance of Aristotle’s philosophy and his notions of phronesis (practical wisdom), judgement and the role of the emotions. Reading MacIntyre and, through him, Aristotle, one becomes sensitive to the importance of virtues for sustaining social practices and the quest for the good life. ■



Patients at Lodwar District Hospital in Turkana county, Kenya

RESEARCH



Ashley Potter finds out how a visit to Kenya galvanised **Gerry McGivern** to apply his expertise in organising healthcare to Africa

# A lifeline for Kenyan babies

Rows and rows of incubators stood before Dr Gerry McGivern, Associate Professor of Organizational Behaviour. More than 20 of them packed into the room and when he looked closer there wasn't just one baby, but two in each one. In another room to his right a doctor was using an oxygen mask to revive an hour-old baby. He walked through another door to find more premature and newborn babies in heated plastic cots. There were no mothers to be seen, just a handful of nurses. In all more than 60 babies were stuck wriggling and squirming in incubators and plastic

cots. The memory of the complicated but ultimately joyous birth of McGivern's now two-year-old son flashed through his mind. There was no joy here. Just a strange hush filled with the tension of life struggling to survive. This was a major public hospital in Kenya, 2012.

As he left that neonatal ward, McGivern knew he must help. And after years studying and researching the organisation of the UK's National Health Service (NHS) he knew he could.

McGivern arrived in the country during a national strike of Kenyan doctors over the state of public healthcare.

Maïsoi Grandon/Department for International Development

Emergency rooms frequently don't have gloves or medicine, and power cuts sometimes force doctors to use the light from their phones to complete a procedure.

The strike made things worse. Already short of medical staff, Kenya's government fired 1,000 of the 2,000 striking doctors (although they have since been reinstated). At least two patients died due to lack of treatment during the strike, according to union officials.

With no doctors around, any birth complications meant no chance of survival for babies and huge risks for mothers. Most stayed at home to give birth, some went to witch doctors for help. Yet the government claimed health facilities coped well without the striking workers.

Suddenly, the problems and controversies surrounding the NHS paled into insignificance. This was a real crisis in public health – people and babies literally dying because of a lack of doctors, equipment, facilities and organisation.

There was not much McGivern could do about the lack of doctors, but he knew his expertise on the NHS's organisation and management could save lives. "Many of the babies I saw that day will have died," says McGivern, now back at Warwick Business School (WBS). "When I walked into that ward, I was thinking this could be my son, it could be him. I realised how lucky we are that he was born in an NHS hospital. You come away thinking if there is any important work to do it is this, if you can make a little bit of difference you can save babies' lives."



Dr Gerry McGivern (far left) with Kenyan healthcare staff

“You come away thinking if there is any important work to do it is this, if you can make a little bit of difference you can save babies lives”

## Pouring out

McGivern had already been to Malawi helping Warwick Medical School train clinicians, so when he was contacted by the KEMRI – Wellcome Trust Research Programme about a project to improve paediatric and neo-natal care in ten Kenyan hospitals, he jumped at the chance. The English trust works with the Kenyan Ministry of Health to improve care for children, and they need McGivern's organisational expertise.

"Malawi is a really poor country but they do have a public healthcare system," says McGivern, an Associate Professor of Organisational Behaviour at WBS. "Kenya has one as well, but I heard stories about children being diagnosed with cancer who could have been saved by hospital treatment, but because their parents had no money had to go home to die. You have to pay an entrance fee."

With a strike and appalling conditions, McGivern says morale among doctors and nurses is understandably at rock bottom. Many Kenyan (and Malawian) doctors leave their country to earn ten times as much in the UK or in South Africa.

"It is like pouring doctors into a bucket with a big hole in the bottom," says McGivern. "They pour out just as fast as they pour in. I don't know the answer. One doctor said to me, 'I had seven babies die on me one day and at that point I had to disassociate myself from it all'. Many doctors have given up trying."

McGivern won't be able to work miracles and turn them into Africa's version of the NHS. Kenya spends only two per cent of national income on public health care, a quarter of the amount in the UK, and national income per head in Kenya is one twentieth of that in the UK. But he believes better organisation can help. "Compared to the British NHS, public healthcare in Kenya is shocking," says McGivern. "But it could be slightly less shocking if better organised. In Kenya, and Malawi, many of the biggest problems are organisational ones. It is about taking and adapting proven ideas from healthcare services being used in the UK to improve African healthcare."

"You are never going to solve all the problems, but you can make it slightly better. That is why I want to get more involved in this Kenya project, because they are trying to bring evidenced-based best practice to how you treat babies and children, and see how that makes a difference."

"This project will measure clinical outcomes. They will say to the hospital 'x per cent of the kids you were treating died this week, is there anything we can do to make it better, did you follow this guideline?'

"The idea is for me to bring some organisational expertise to that. It is basically supporting people, developing clinical leaders and trying ideas we have seen work in the NHS."

Of course, there are rays of hope even in the Kenyan public healthcare system, inspiring doctors trying desperately to fight against a tsunami of poor practice. "I met a great Kenyan consultant paediatrician. She is trying to make things work, trying to bring in best practice

guidelines," says McGivern. "She is saying to clinicians: 'when a kid comes in and he is dehydrated, get some liquid in them so they don't die, you did know that didn't you?'"

McGivern brings up the example of his work researching improving cancer services in the UK, where various organisations were pulled together in a well-structured pathway for patients. "In Kenya we can organise a similar network. Then you can get everybody together to develop best practice."

"Healthcare is all about people, so it is trying to get everybody to buy into creating the best pathway and standard of practice. I have studied the way they do that in the NHS and observed good examples of best practice. This Kenyan paediatrician is trying to bring in best practice, but when she leaves, everybody goes back to not bothering again. When you get teams of doctors, nurses and management working together that is much more effective."

McGivern is planning to return to Kenya next year and is excited that his work will actually save lives. "We are encouraged and pushed to demonstrate the impact of the research that we do, so this is an example of how you could have a massive impact by bringing some academic ideas into practice," says McGivern. "You see those babies lined up in incubators and you think this is important, I could make a real difference." ■



# Quantum strategy at Apple Inc.



Apple is a master of Quantum Strategy, which is both unconventional as well as extremely difficult to implement. [Loizos Heracleous](#) explains the magic of Apple and why it will stand the test of time



Over the last 15 years Apple has revolutionised the personal electronics, telecoms, computer and media industries through a string of blockbuster products that offer unique, designer, integrated customer experiences. In the process, Apple helped to accelerate the blurring of industry boundaries and position itself in a way that it exerts significant bargaining power over both consumers and industry players, with outstanding performance results. Apple is the most valuable listed company with a market value of \$600bn in mid-October 2012, having gathered the highest accumulation of cash and liquid reserves (\$117bn in June 2012) of any listed company. And it regularly achieves net margins above 20 per cent in industries where most competitors achieve single-digit margins.

The chief architect of the business model and value system that led to this exceptional performance is widely acknowledged to be the late Steve Jobs. With Jobs' passing in October 2011, many wondered whether the magic at Apple would last, or gradually fizzle out.

My research suggests that the magic will last, at least in the medium term.

This is not only due to clear and consistent strategic choices which have served to institutionalise the Apple way, but also due to the fact that Apple has pursued a strategy that

is both rare and incredibly difficult for competitors to imitate.

## Quantum physics

A key aspect of Apple's strategy is the ability to balance intense efficiency in operations (in fact the highest efficiency levels in its peer group) with outstanding serial innovation and addictive product design, both of which command premium pricing and redefine markets. This combination defies conventional wisdom, which maintains that if a company's competitive advantage is based on intense efficiency and value, it won't invest beyond what's necessary in innovation, design or service, and in fact will strive to cut costs everywhere along its value chain so as to align these elements with its strategy. Conversely, conventional wisdom holds that a company competing on innovation, outstanding design or service excellence will not be able to reach intense levels of efficiency since these capabilities are costly to develop and maintain.

Apple has accomplished serial innovation and outstanding design in terms of its offerings and its own business model, as well as simultaneous cost leadership, having become more efficient than the traditional cost leader, Dell.

Apple has achieved what might be seen as the holy grail of strategy, and

it is worth asking how. The answer can help us gain insight into the trickiest of strategies to execute, and one that most companies do not even try to achieve. This strategy, if successfully executed, represents a shift of the iso-value curve in any industry it is employed in, not just movement along such a curve where most competitors are positioned.

I call this Quantum Strategy, after the idea that at the quantum level of reality, the same electron can be at two places at the same time, and two different electrons can occupy the very same physical space, both seeming logical and natural impossibilities, which nevertheless do occur. An understanding of Quantum Strategy offers lessons for executives, in particular the principles involved in breaking the trade-offs that are conventionally assumed to constrain strategic choices.

## Solving the quantum puzzle

Apple has achieved its outstanding performance through effectively implementing an unconventional strategy: differentiation through innovation (along various dimensions that include serial, strategic and incremental innovation), with simultaneous intense levels of efficiency, leading to the lowest costs in its peer group.

Conventional wisdom – most



# Quantum performance

EXCEPTIONAL INNOVATION & DESIGN...	AT ROCK BOTTOM COST
<b>Indicators of differentiation</b> <ul style="list-style-type: none"> <li>Winner of several innovation and design awards; consistent groundbreaking offerings</li> <li>Ability to command premium prices and achieve exceptional profit margins and revenue growth</li> </ul>	<b>Indicators of efficiency</b> <ul style="list-style-type: none"> <li>Lowest SG&amp;A costs; highest inventory turnover; both more efficient than Dell</li> <li>R&amp;D intensity lowest in peer group (while recognised as world's most innovative company)</li> </ul>
<b>How Apple achieves differentiation</b> <ul style="list-style-type: none"> <li>Focus on, and investment in, innovation capability; deep collaboration approach</li> <li>People strategy - hiring the best people and motivating them to excel (location advantage from being based in Silicon Valley)</li> <li>Branding - image of maverick creativity; investment in Apple Stores in high profile locations</li> <li>Apple's proprietary ecosystem allows higher pricing control and customer capture</li> <li>Historically, Steve Jobs' leadership - demanding, perfectionist, visionary</li> </ul>	<b>How Apple achieves intense efficiency</b> <ul style="list-style-type: none"> <li>Strategic focus in terms of product markets, types of products and product features</li> <li>Distributed organisation design - high value added functions in California, manufacturing outsourced to cheapest locations</li> <li>Synergies from related diversification in terms of industries as well as products (eg technological platforms)</li> <li>Intense focus on supply chain efficiency (less warehouses, reduction of supplier numbers)</li> <li>Flat organisation and simplified processes increase efficiency</li> </ul>

famously set out by Michael Porter – holds that such strategies would be impossible to achieve in a long-term, sustainable timeframe because they entail mutually contradictory investments and organisational processes; and that companies that try to achieve them would end up “stuck in the middle”, without any competitive advantage – a position that has gradually become strategic orthodoxy. It is said that companies that achieve such strategy can only do so temporarily, and only if competitors are themselves stuck in the middle, having achieved neither cost leadership nor differentiation; if cost is strongly affected by market share and inter-company relationships; or if a firm pioneers a major technological or process innovation. Such advantages would swiftly be copied by competitors however, leading to the need for firms to eventually make a clear choice about which generic strategy to follow, and configure their organisation accordingly to implement it.

Apple's reputation for exceptional innovation is widely appreciated.

“Innovation is only one part of Apple's quantum strategy. What is harder to understand, is how all this can be done at a level of efficiency that is superior to that of the traditional cost leader, Dell”

It was celebrated as America's most innovative company by *Business Week* for seven consecutive years (2005 - 2011) and has topped Fortune's world's most admired companies for the fourth year in a row (2008 - 2011). Apple's design prowess, and ability to seamlessly integrate hardware and software while attracting the best people, is widely recognised.

Apple's approach to differentiation is exemplary. It focuses on developing innovation capability through having the best people and pushing them

hard, within a corporate culture where innovation is second nature. Add to this the “deep collaboration” approach made possible by the fact that Apple's innovation is centralised in a single physical space – its campus in California – and you have an innovation hotbed. Buttress your market presence through clever, contrarian maverick branding, supported by actually coming up with radically new products, and you can develop a cult following. Control the customer experience and create barriers to entry for competitors and barriers to exit for customers through developing constellations rather than stand-alone products, and you can charge premium prices with near impunity. Have a courageous, eccentric, genius, driven leader who takes the tough decisions and makes the difficult choices associated with the above, and you have a recipe for success. Apple's gross margin in 2011 was 40.5 per cent and net margin was 23.9 per cent.

But innovation is only one part of Apple's quantum strategy. What is harder to understand, is how all this can be done at a level

of efficiency that is superior to that of the traditional cost leader, Dell.

## Cook's controls

Efficiency was a major goal of Steve Jobs when he recruited Tim Cook in 1998 from Compaq to be Apple's chief operating officer. Cook was instrumental in driving efficiency by streamlining Apple's manufacturing processes, supply chain and distribution operations. Soon after moving to Apple, Cook rationalised the warehouses for finished products, reasoning that “if you have closets, you'll fill them up”. He also cut the number of key suppliers from 100 to 24, enhancing Apple's bargaining power with these suppliers; and asked them to set up near Apple's facilities so that components could be delivered just-in-time and manufacturing time slashed.

However, what is not widely recognised is that Apple's efficiency is as much due to strategic focus and simplicity, as to supply chain rationalisation. Apple focuses in terms of target market, of product line, of product design and even in terms of its own organisation design.

First, Apple aims largely for the consumer market as opposed to the B2B sector, allowing the company to simplify its investments and operations and focus on what it does best. The market proposition in the consumer sector can focus on coolness, desire, fun, elements alien to corporate buyers who are accountable for IT investments and go for reliability and value.

Second, the narrow depth and breadth of the product line preserves management attention, facilitates marketing and increases negotiating power over suppliers. Apple chose not to produce printers and scanners, for example, given the narrow margins and low cult potential. Rather than offering several models of the iPhone with an array of different functions, as, for example, Nokia or Sony-Ericsson do, Apple offers one main model of the iPhone which is regularly updated.

After Jobs returned to Apple in 1997, he terminated two-thirds of development projects, since

he judged them as not having the potential to deliver groundbreaking products. Jobs exclaimed in the first management meeting after his return, which he attended in shorts and sneakers and bearing stubble, that Apple was in trouble because the products had no 'sex' any more.

Third, the simplicity in the design and features of the products that Apple does produce. The designs are both streamlined and limited in number, and include only a few features that buyers will actually use. In making these difficult choices (of what to focus on and which features are best to include out of the hundreds of potential features), Apple becomes both aligned with its customers' usage patterns, increasing value for the customer, whilst at the same time decreasing the cost of production through simplicity in design and rationalisation of features.

Fourth, Apple's own organisation design is flat and bureaucracy is eschewed. As Jobs explained, Apple “is organised like a start-up. One person is in charge of iPhone OS software, one person is in charge of Mac hardware, one person is in charge of iPhone hardware engineering, another person is in charge of worldwide marketing, another person is in charge of operations”. Apple retains control of the functions that matter (design and innovation), while outsourcing the functions that can be provided by others more efficiently (manufacturing).

As with other elements of its strategy, Apple has ignored popular pronouncements that companies should locate their R&D facilities around the world, near their main markets, and engage in global transfer of learning. Rather than disperse its operations around the world, innovation takes place in a single space, the magic cauldron at One Infinite Loop in California. By hiring the best and co-locating them in the innovation melting pot of Apple's campus, Apple achieves extraordinary results, with only a fraction of innovation spending related to its competitors; at the same time as it is acknowledged to be the most innovative company in the world. ■

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# The wisdom of derivatives



Des Dearlove interviews **Söhnke Bartram** about how multinationals hedge their risks, and the role of derivatives in the current financial crisis

**Söhnke M. Bartram is a Professor of Finance at Warwick Business School (WBS) and a Fulbright Visiting Scholar at UCLA Anderson School of Management. Prior to joining WBS, he held faculty positions at Lancaster University and Maastricht University. He is a member of an international think tank for policy advice to the German government.**

**Des Dearlove: How did you first get interested in finance?**

**Sönke Bartram:** I got into finance by accident. I was studying business administration and there was no finance course available. I graduated and wasn't really sure what to do. I went to job interviews to do consulting work. McKinsey said I was too young and that I should do a PhD. Then, an opportunity came up at a private business school in Germany to do a PhD in Finance.

The focus of my PhD was macro economic risks and how they affect stock returns. That was about ten years ago.

**That's a topic that's become even more relevant.**

Absolutely, and I also worked in asset management where macro risks are currently very important. If you want to pick stocks it's very hard at the moment because the relative attractiveness of stocks is less driven by fundamentals, and more by macro economic factors and how they affect returns.

So that became very relevant and I have been able to contribute to that debate. But at the time my interest was actually motivated by a research paper I had read. There's a paper by Philippe Jorion in *The Journal of Business*. It looks at US multinational firms.

So these are the biggest firms in the US that have the most exports, the most foreign trade and you would think that if any firms should be affected by exchange rate movement it would be these, right?

However, out of 287 US multinationals only 5.2 per cent had a significant exchange rate effect at the five per cent significance level. So that means basically, it could be driven by chance. There was no systematic effect that he could find.

**You are talking about big multinationals, such as General Electric and General Motors?**

Yes, the big US companies that have the most foreign sales. The effect of exchange rate fluctuations on purely domestic companies without any foreign imports, and that are just selling locally, is less obvious. However, the firms in Jorion's study are companies that you would expect to be affected given their foreign business activities, so the lack of an empirical effect was a really big puzzle. It's called the foreign exchange rate exposure puzzle.

**So what explains it?**

We published a paper called *Resolving the Exposure Puzzle*, in which we show something that people had suspected for some time - that companies are hedging.

That's really hard to show because stock returns encapsulate a lot of effects. So we had to look below the level of the stock return to understand what was going on.

**What is going on?**

Where a company is exposed to exchange rate risks, but has no expertise in forecasting where the euro or the dollar is going, then it's actually good for them to reduce their exposure. And our research showed that companies actually do this.

**And they're doing this in an organised, managed way rather than it just being the effect of being a multinational that you're automatically hedging?**

That's a fair point. You would expect that if you're a big multinational and you're selling to 23 countries, say, around the world there's some diversification affect, right? Because the currencies move in different ways. But that's not the main effect. You can be a domestic company and still be exposed to currency movements if you, say, have big competitors in Japan who are importing into your market. If the exchange rate moves in their favour, they sell their products cheaper in the local market and you have to adjust your pricing, even though you may not be selling or sourcing abroad.

**So if we're looking to the competencies of multinational firms – if we were making an investment – is this one of the competencies we should be looking for then, an expertise at hedging?**

Absolutely, and sophisticated institutional investors do that since you can say that hedging currency risk creates shareholder value. The core competency of a manufacturing firm should obviously be manufacturing. If you make cars then that's the business you should know – where the trends are going, how big the cars should be, what materials to use, how energy efficient, where to sell and source, and so forth. So in that sense, currency risk can be a distraction and it can affect your business in ways that you can't predict and that you don't really want, and so it is sensible for companies to protect themselves against that.

**Were you able to quantify the impact of these hedging activities?**

Yes. If you take an arbitrary exposure of 100, then there are different channels or methods to reduce currency exposure. So, if the exchange rate risk affects you as a firm, one way is to pass some of that on to your customers. This has an effect in the order of ten to 15 per cent, so it's noticeable.

Another channel is operational hedging. You see that in the automotive companies. They produce abroad. So a company like Volkswagen has a factory in Brazil. They're not selling most of their cars in Brazil but they produce there because it's cheap. But it also has currency implications. So BMW, to take another automotive company, has a plant in the US and that creates a natural hedge because the company has revenue in US dollars, but it also has costs in US dollars. So they move together and only the difference, ie the net profit, will create currency exposure. And again from 100, that reduces the exposure by roughly ten to 15 per cent.

And then there's a big chunk that comes through financial hedging, which reduces exposure by 45 to 50 per cent. This was a very interesting result because financial hedging has two components. It has derivatives and it has foreign currency debt. The literature has looked a lot at the use of financial derivatives to hedge currency risk but we actually found that the effect is small. It is there, but the effect of foreign currency debt is much bigger, and it makes perfect sense because if you have a big, long-term exposure to the dollar, for instance as say a German car manufacturer, well either you set up a production facility abroad or – much easier and much cheaper – you borrow in US dollars as a long-term pure play on the currency.

And that was the biggest chunk in terms of the hedging effect. When you account for these different channels of hedging you reduce exposure from 100 to maybe 15 to 20.

The data showed that firms don't reduce all of it, but that's explained by the fact that the exposure is very hard to measure, but firms reduce so much of the exposure that what's left is almost negligible in stock returns. It's very hard to quantify and that basically explains the exposure puzzle. It's not that big multinationals aren't affected by currency risk; it is that they're affected, they're aware of it, they know that

it can hurt the company and the value of their shareholders, so they reduce it to levels that reduce the danger and make it safe.

**Some of your research has also looked at drivers of stock market volatility – why firms from some countries have higher stock return volatilities than firms from other countries. Tell us more about that?**

Yes. Financial market regulators are concerned about the volatility of financial markets and what's driving it. We have seen the flash crash and that trading effects can cause volatility in markets, and regulators are investigating to see what happened and whether more regulation is necessary. What we looked at was volatility of stock returns at a lower frequency and we compared US firms to foreign firms.

Obviously, these firms can be very different and so they may not be a good comparison. You want to compare apples with apples, not apples with oranges, and so we picked firms that, for instance, were the same size because smaller firms would be more volatile or maybe firms in particular

industries would be more volatile – so a pharmaceutical company may be more volatile than a retail company. So we picked similar companies in the U.S. and abroad and then the question was which ones have more volatile stock returns and why? Initially we were agnostic. We just observed the volatilities and we found that US firms are more volatile compared to otherwise similar foreign firms.

**That's an interesting result but the next question is: should US market regulators worry about this? The US market is often deemed to be the best developed in the world, so why is it more volatile?**

Well, in principle volatility can be higher because of good volatility or bad volatility.

**What do you mean by good and bad volatility?**

Bad volatility would be if a company has more volatile returns because of country-specific forces, such as political risk, that impose risks on firms that they cannot shed. For example, there might be a higher risk of expropriation if the government is more likely to seize assets.

**So, political risk?**

Yes, political risk could cause bad volatility. It would capture

the risk of expropriation, for instance. And corruption would also go into that category.

**And what would be an example of good volatility?**

Good volatility would be volatility that is higher for reasons that contribute positively to shareholder wealth and economic growth, eg firms doing more R&D, taking on more risky projects and developing more patents. What we found is that the bottom line is good news. Firm stock volatility is higher in the US because it increases with investor protection, stock market development, new patents and firm-level investment in R&D. These are all factors that are related to better growth opportunities for firms and better ability to take advantage of these opportunities.

**What about your work on derivatives? Was their role in the crisis under-played or over-played?**

That's a very interesting question. In the current crisis certainly derivatives played a tremendous role and they received a lot of bad press for that. But, from my perspective, that's not entirely justified.

**What do firms use derivatives for?**

They can be used for risk reduction – we call that hedging – or to increase speculation. In principle firms can do either, and in fact they can speculate under the guise of hedging and the current crisis has certainly brought to the fore that derivatives have significant risk attached to them.

So there's been big concerns about the banking industry and their use of derivatives, but they are also used by non-financial firms. Our research looked at how the non-financial firms use derivatives – so the very big manufacturing firms like General Electric or General Motors. We looked at the use of derivatives by 80 per cent of non-financial firms around the world.

**So these are just ordinary corporations not banks and financial services?**

Yes, these are non-financial corporations that are effectively end-users of derivatives.

**So they're not so inclined to use derivatives to speculate? They're more likely to use them as a hedge or as a means to do their actual business?**

That's the point. They could do either. It's a double-edged sword. People like the investment guru Warren Buffett characterised derivatives as "financial weapons of mass destruction" before the crisis and then people said "Well, this is exactly what happened in the crisis."

But some economists consider them very useful tools for risk reduction. They're very flexible, they're very efficient, so they can be very useful financial instruments. But they can also be abused.

**And what did your research find?**

The bottom line may actually be surprising but comforting.

We found that non-financial firms typically use derivatives to reduce risk, and that's really good news. So first of all we find that firms that use derivatives have more of a reason to use them. In particular, firms that use derivatives have more foreign sales, they are more in commodities-based industries, they have more leverage. So these are firms that should be using derivatives and they do.

And when we look at stock returns that capture the underlying business (or gross) exposure as well as derivatives usage, we find that firms that use derivatives actually reduce their risk. That means that firms are using derivatives sensibly in a way that academics would suggest they do. We show that it creates value for the shareholders of the firm. They should not speculate where the dollar, euro or pound is going because that's not their core business – and most of the time they don't. They should be focusing on producing efficiently and profitably, and they should be transferring the risk that they don't know about to other market participants, and that's what firms do.

**That's reassuring.**

Yes. And we also find interesting variations across countries. So for instance – and this pertains to the current debate – if firms have easier access to derivatives, if the local derivative market is more liquid, firms will actually use them to hedge more. So it's not the case that easy access means that firms are more likely to speculate. In fact, easy access facilitates hedging, as does

better governance. So if shareholder rights are strong, if minority rights of investors are better protected, then firms will hedge even more. So there are some interesting policy implications here.

**So, stepping back from it, what you're saying is that it's like a technology or tool. Derivatives are neither good nor bad in themselves. It really comes down to the people using them and what they're going to use them for?**

Yes. And just because there can be accidents or they can be abused does not mean that the tool should not generally be available and be used. And in fact, the availability of these tools can create jobs and contribute to economic growth.

So when considering more regulation of derivatives we should avoid throwing the baby out with the bath water. ■



“In the current crisis certainly derivatives played a tremendous role and they received a lot of bad press for that. But, from my perspective, that's not entirely justified”

“When considering more regulation of derivatives we should avoid throwing the baby out with the bath water”





Research by **Tobias Preis** crosses divides from physics to finance and aims to understand how we could prevent another stock market crash. Des Dearlove finds out how big data meets Big Brother

# The digital treasure trove

**B**usiness is a magpie science. Business people are, after all, pragmatists and opportunists – they have to be. They are willing to pick up and polish a nugget of information or inspiration no matter what its source, so long as they believe it helps deliver a competitive advantage.

Over the last century, the world of business schools has been informed by sociologists, economists, psychologists, philosophers, anthropologists and many more. But physicists?

Dr Tobias Preis, Associate Professor of Behavioural Science & Finance at Warwick Business School, is a physicist by training. Along the way from physics to business school academic, in 2007 he also founded Artemis Capital Asset Management, a proprietary trading firm based in Germany. “During my PhD, I combined the study of physics with research into financial markets,” says Preis. “I was interested in the behaviour of financial systems and also had some

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background in computer science. My PhD gave me the chance to bring all these different disciplines together, to try and understand the vast amounts of data generated by the financial world. So everything I’m doing today is hugely interdisciplinary, involving large volumes of data.”

In the era of big data, Preis’s research looks at what he calls the “digital traces”, the digital detritus, the granules of information and insight we leave behind in our interactions with technology and the internet in particular. His research is probably best described as “computational social science”, an emerging interdisciplinary field which aims to exploit such data in order to better understand how our complex social world operates.

## Positive traces

One intriguing source of information used by Preis’s research is Google Trends, which tracks people’s Google searches. The service is publicly available. Type in Christmas and you will see predictably yearly patterns for people’s searches ([www.google.co.uk/trends/explore#q=christmas](http://www.google.co.uk/trends/explore#q=christmas)). “It’s a tool which provides you with information about human behaviour on a very large scale, describing behaviour across all the countries in which Google operates – over 200 worldwide,” says Preis. “With my collaborators, I became interested in whether we can use these digital online traces, which capture aggregated human activity, and in particular how we can use this information to improve our understanding of financial markets.”

Along the way, Preis and his colleagues, Helen Susannah Moat and Steven Bishop at UCL and H. Eugene Stanley at Boston University, uncovered an intriguing link. The Google Trends data allowed them to look at a national breakdown of what people search for online. They asked: do people from certain countries tend to look to the future – by keying in searches using next year’s date – more than others? “Some countries are more future-oriented than others. If you just calculate the sum of all searches for the next year, for example ‘2013’, versus all searches for the past year, for example ‘2011’, then you have a ratio which we call the Future Orientation Index,” explains Preis. “If we plot this index against the GDP per capita in all the countries we analysed, then we find a strong correlation between both quantities. This suggests a relationship between the ratio of future-oriented searches to past-oriented searches and the economic success of a country.”

The online search data throws up other extremely intriguing results. For example, Preis, Moat and colleagues have found that the more people search for “debt”, the more likely they are to have sold their shares at a lower price a week later. Similarly, in 2010 Preis and his colleagues showed that there is also a link between the number of internet searches for company names and transaction volumes of the corresponding stocks on a weekly time scale. If more people are Googling Apple, more traders are also likely to be trading in Apple stocks. “These new, big data resources, can provide new insights into human behaviour, in particular human decision making on

a large scale,” says Preis. “Google provides the possibility of looking at the early stages of collective decision making. Investors are not disconnected from the world, they’re Googling and using various platforms and services to collect information for their decisions.” In effect, these new sources of data can predict human behaviour. The events of the world are Googled before they happen. The next challenge for these researchers is to be able to identify key words and phrases at the time they are being used rather than historically.

## The risks of diversification

Preis’s fascination with big data and financial markets also led to his involvement in a study of the US market index, the Dow Jones. His research analysed the daily closing prices of the 30 stocks forming the Dow Jones Industrial Average from March 15, 1939, to December 31, 2010. The results, published in *Scientific Reports*, shed light on why correlation risks in asset bundles were underestimated at the beginning of the recent financial crisis, and provide crucial information on the behaviour of markets in times of stress.

Preis and his academic colleagues discovered that a portfolio of shares, far from being diverse and spreading risk during a time of stock market slump, start behaving the same. This flies in the face of conventional wisdom. Traders are taught to diversify to spread their risk, but this general rule could have helped amplify the crashes, with Preis’s research finding that the correlation between stocks increases as the market slump heightens. Preis believes his findings

could help predict the breakdown in the ‘diversification effect’. In effect, this 72-year study of the Dow Jones could give traders an extra early warning sign in the fight to avoid the kind of stock market crash that struck the world economy in 2008.

“With a higher level of market stress, stocks tend to move closely together rather than behaving randomly, and this has major implications because these correlations are used to construct portfolios which seek to minimise risk,” Preis explains. “We could use the findings to help anticipate diversification breakdowns, which could guide the design of portfolios and contribute to the increased stability of the financial markets.”

“When financial markets are suffering significant losses, our findings could be used to anticipate the increasing lack of diversification in portfolios. This would enable a more accurate assessment of the risk of making losses.”

In collaboration with Moat, Preis has recently begun to investigate what secrets may be held in Wikipedia data. “We realised that Wikipedia data gives you clearer semantic definitions of what people have clicked on, in comparison to data on search terms such as ‘Apple’ which can have multiple meanings. It became clear to us that these data streams give us different perspectives on what people search for and what people find,” he says. There are, Preis anticipates, other digital treasure troves of data waiting to be discovered and analysed to better understand human behaviour and decision making. ■

“These new sources of data can predict human behaviour. The events of the world are Googled before they happen”





# Seven myths of performance management



**There is plenty of advice on performance management but, in practice, results are often disappointing. This is because we tend to make flawed assumptions - it's time for us to re-examine them. By Pietro Micheli**

## Myth 1: Numbers are objective

A performance measurement system enables the gathering, analysis and communication of data on both organisational and individual performance. We want such data to be objective, right? Not necessarily. The quest for perfect, objective data is likely to leave us frustrated and disappointed. Performance data is ambiguous and open to interpretation, and its use and impact on performance depends on commonality of interpretations. While it is important to have robust data, managers should foster similar interpretations through leadership and communication, rather than trying to remove individual views (or, worse, assuming that numbers are 'objective' and therefore speak for themselves).

## Myth 2: Accuracy and precision

We want performance information to be as accurate and precise as possible. Or not. Organisations should treat performance management data as an investment in which benefits outweigh costs, rather than something that should be of the best possible quality. This balance can only be ensured by connecting measures to objectives. So the question is not: is our data as accurate as possible? But, rather: are we getting data that is good enough for our purposes?

## Myth 3: Added value

Value is only generated when data is used. Managers in US Federal Departments recently reported having

more performance indicators than they did ten years ago, but their use of the information to make decisions has stayed virtually the same. Results in the private sector are no different. Too many indicators and reports, and loose connections between strategy and measures, often make measurement systems very expensive pieces of furniture.

## Myth 4: Alignment

Managers and employees should be aligned to achieve the main organisational goals. Sure. But the typical way in which managers try to create alignment ends up generating bureaucracy and negatively impacting on staff morale. Cascading measurement systems in a top-down fashion, and rigidly connecting objectives, targets and indicators, end up generating an infinite sequence of unintended consequences. Sufficient discretion should be left at every level to make decisions about which indicators and targets to use.

## Myth 5: Motivation

Performance targets, indicators and rewards are often used to focus attention, and engage and motivate staff. On paper. In reality we often experience a 'vicious cycle of performance management'. The start point is usually a difficult situation in which performance has decreased or is deemed unsatisfactory. A series of measures is introduced to gather 'objective' data and attach rewards to targets in order to incentivise employees. As a result of this, people get 'measure fixated': they are very clear about what they have to do to hit the target, but they often miss the point,

ie they forget about the underlying objective. To avoid this, organisations should involve people as much as possible while introducing a new system, carefully monitor its use and introduce rewards - if necessary - only once the system has been tested.

## Myth 6: Enabling change

The introduction of new targets and indicators can kick-start the implementation of strategic objectives and promote different ways of working. But when it comes to organisational change, measurement systems have often acted as obstacles rather than enablers. When a system is pervasive and consists of a large number of indicators, organisational inertia may arise. This can become a serious issue for firms competing in very dynamic environments who, instead, need to adopt an empowering and flexible approach to the design and use of measurement systems.

## Myth 7: Improvement

The ultimate goal of introducing a performance measurement system is to improve organisational performance. But does this really happen? Impacts strongly depend on the roles measurement systems play within organisations. The main role is usually to monitor and report to satisfy requirements, internal or external. While this is important and, to some extent, unavoidable, impact on performance is often non-existent. Take the case of sustainability measures. While measuring social and environmental aspects is certainly important, most companies are simply reporting information externally - making no difference to either how the organisation operates or on its results. Performance measurement systems can, and do, make a difference when they are used to promote learning, for example by establishing a dialogue between headquarters and subsidiaries, between different functions within an organisation and between managers and employees. ■

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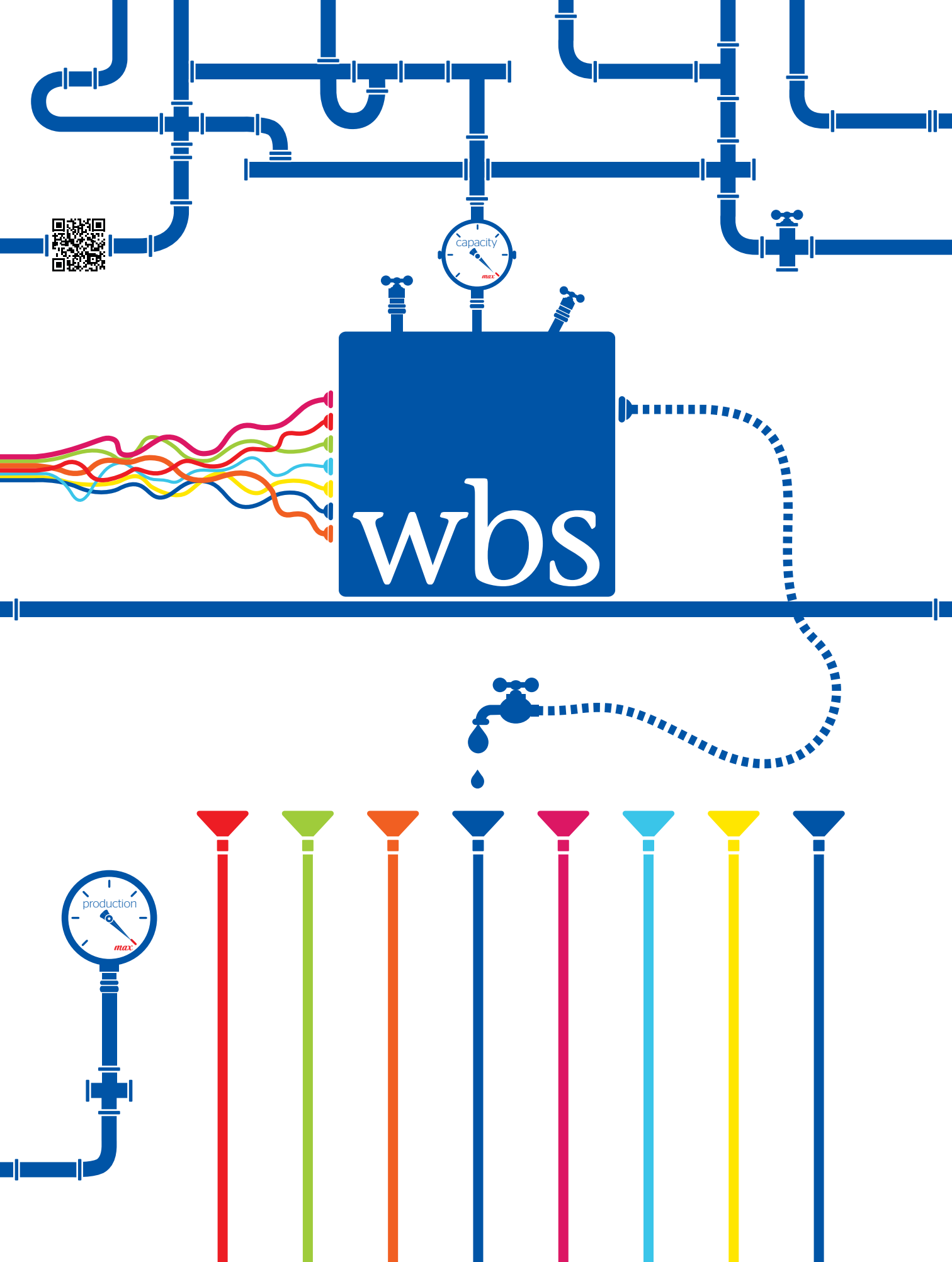
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