



ROTTERDAM SCHOOL OF MANAGEMENT, ERASMUS UNIVERSITY

- ▶ Effective ads: new technology answers old questions

By Linda Couwenberg

- ▶ Improving the supply chain in humanitarian logistics

By Erwin van der Laan and Jan van Dalen

- ▶ Rethinking managerial roles in change initiatives

Chris Murray talks with Bas Koene

- ▶ How can auditors avoid the perils of aggressive accounting?

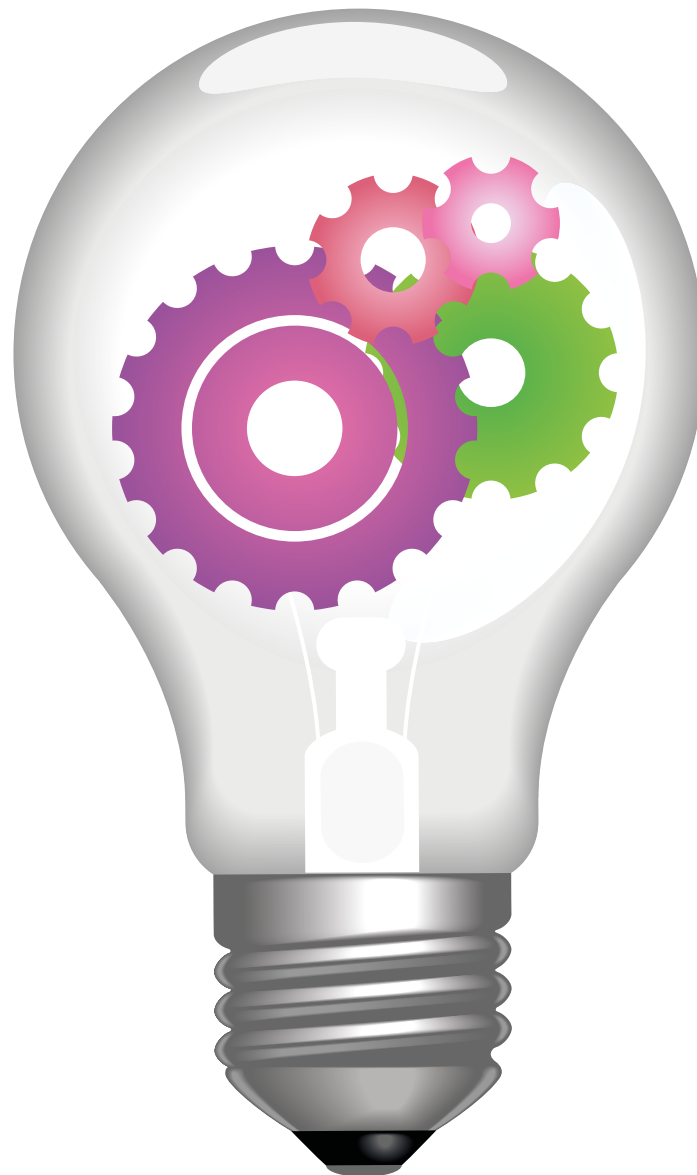
By Marcel van Rinsum

- ▶ Why can't China clean up its act?

By Pursey Heugens

- ▶ The use and misuse of power and unethical behaviour

By Laura M. Giurge



FUEL YOUR FUTURE

DIPLOMA PROGRAMME IN BUSINESS MANAGEMENT AND LEADERSHIP

The 'fast track' for young executives. Learn from academics and business leaders, and develop your talents and skills in leadership, strategy, marketing and finance.

RSM.NL/BML

ADVANCED MANAGEMENT AND LEADERSHIP PROGRAMME

Powerful modular programme for senior managers and directors. An intensive learning journey to enlarge your impact in leadership, strategy and finance.

RSM.NL/AMLp

ERASMUS EXECUTIVE PROGRAMME IN STRATEGIC MANAGEMENT

A high-impact programme preparing executives for top management responsibilities. Learn to master strategic management and let your organisation benefit from it.

RSM.NL/ESM

You can make a difference in today's new world of business. At any stage of your career, RSM Executive Education can help you understand and master the business challenges you face.

Taught by world-class academics, our broad portfolio of short open programmes provides you with new skills and knowledge that you can put into practice immediately. Programmes can also be delivered in-company.

RSM.NL/OPEN

Accredited by



ROTTERDAM SCHOOL OF MANAGEMENT
ERASMUS UNIVERSITY





Contents

► Effective ads: new technology answers old questions

By Linda Couwenberg

page 05

Marketing experts commonly refer to ads as either “emotional” or “rational” in their appeal to consumers. This dichotomy of “thinking versus feeling” is most evident when it comes to discussions around what makes an ad effective. Some studies suggest that an ad that pulls on the heart strings will pack the most punch; others suggest a blend of logic and emotion. However, new research reveals which areas of the brain are stimulated by different ad appeals – and the brain activity associated with the most effective advertising.

► Improving the supply chain in humanitarian logistics

By Erwin van der Laan and Jan van Dalen

page 08

Médecins sans Frontières (Doctors Without Borders) is an NGO with a special mission: to provide medical care in places ordinary physicians can't reach. Making sure all their long-term clinics have the right amount of the roughly 2,000 stock keeping units (SKUs) with which each is supplied is an enormous logistical challenge.

► Rethinking managerial roles in change initiatives

Chris Murray talks with Bas Koene

page 11

Organisational change that is initiated by middle management rather than top management is more likely to gain employee support. This is the conclusion of a recent study co-authored by Bas Koene, assistant professor in RSM's Department of Organisation and Personnel Management.

► How can auditors avoid the perils of aggressive accounting?

By Marcel van Rinsum

page 14

How do you solve a problem like aggressive accounting? With some difficulty, some management teams and their external auditors might argue. Especially if they cannot agree on: (a) just what constitutes aggressive accounting; (b) whether or not aggressive accounting is inherently a bad thing, and (c) whether it manifests itself more in one kind of management/auditor relationship than it does in another.

► Why can't China clean up its act?

By Pursey Heugens

page 17

Winston Churchill once described the Soviet Union as 'a riddle wrapped in a mystery inside an enigma.' Modern China is a very different story. By definition, the workings of the world's largest economy can't really be hidden from view nearly as easily. However, the sheer scale means that certain aspects of that vast market's workings are still not all that easy to understand.

► The use and misuse of power and unethical behaviour

By Laura M. Giurge

page 20

A company is only as good as the sum of its parts. Crucial to this are the dynamics between senior management, middle management, and employees. Until now, research has tended to lump together the actions and attitudes of a given member of an organisation, not allowing for the extent to which an individual's behaviour can change over time. A closer look at decision-making by high-power managers and counterproductive behaviour by employees sheds new light on the matter.

Introduction



It's the Middle Management, stupid!

Management scholars have devoted much energy to understanding how the CEO and other members of the managerial upper echelon might influence a firm's strategy. However, there is a growing recognition that extant management models overlook the critical role played by a firm's middle management in influencing strategic change in the firm. In light of this recognition, a so-called "middle management" perspective is now beginning to emerge as a complement to the upper echelon perspective that has dominated earlier research. Drawing on both the upper echelon and middle management perspectives, recent studies have sought to take the literature forward by way of multi-level research which recognises that both the firm's most senior executives and its middle managers matter when it comes to strategic change. Senior executives and middle managers must interact and jointly create an alignment between the organisation and its environment.

Prior scholarship has typically portrayed the executives who constitute the top management team (TMT) as change agents whose role is to give others within the organisation a sense of what the firm is seeking to achieve via its strategy. In contrast, middle managers have been viewed as sense-makers, charged with executing the plans formulated by the TMT. However, a study by Bas Koene, explored in this issue of *RSM Discovery* magazine, breaks new ground by acknowledging that when seeking to effect strategic change, middle managers can play a far more sophisticated role than has previously been understood.

Also in this issue, you will find practical insights about how brain imaging technology is being used to reveal customers' advertising preferences; the challenges involved in improving humanitarian logistics; the perils of aggressive accounting; China's multi-tiered approach to environmental practices, and how periods of reflection can enhance decision-making in the face of unethical behaviour.

I am sure you will find these articles to not only be stimulating, but also to be of practical value to your own organisational and managerial scenarios.

Henk W. Volberda

Editor-in-chief *RSM Discovery*
Professor of Strategic Management and
Business Policy and Scientific Director of
Erasmus Centre for Business Innovation

Rotterdam School of Management,
Erasmus University
Email: hvolberda@rsm.nl
Tel: +31 (0)10 408 2761
Web: www.rsm.nl | www.inscope.nl

Effective ads: new technology answers old questions

By Linda Couwenberg

Marketing experts commonly refer to ads as either “emotional” or “rational” in their appeal to consumers. This dichotomy of “thinking versus feeling” is most evident when it comes to discussions around what makes an ad effective. Some studies suggest that an ad that pulls on the heart strings will pack the most punch; others suggest a blend of logic and emotion. However, new research reveals which areas of the brain are stimulated by different ad appeals – and the brain activity associated with the most effective advertising.

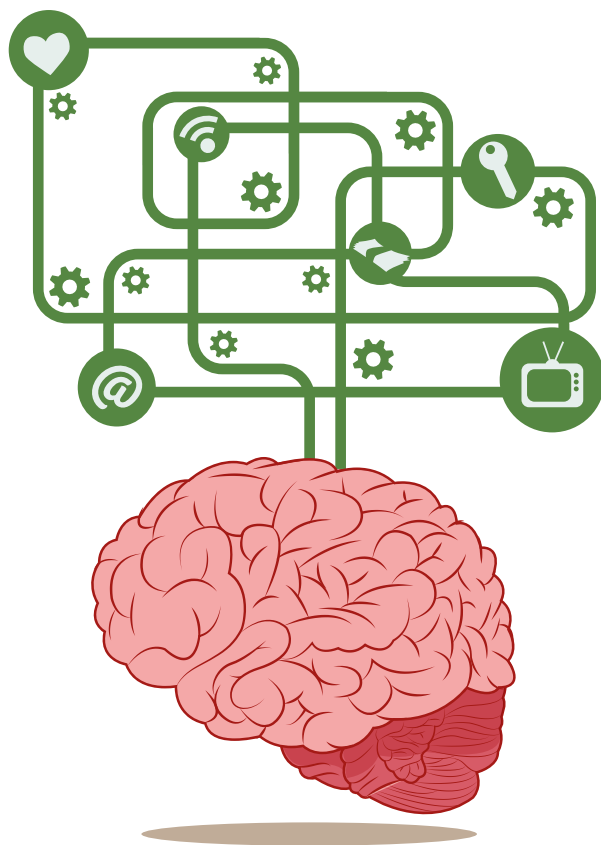
The reality is that, until now, how our brains respond to advertising stimuli has largely remained a mystery. Most of what we know about consumers' internal responses to different ad appeals stems from consumer feedback – a notoriously unreliable research source. Consumers simply cannot always tell us accurately why an ad resonates with them. Their brains, however, can.

In a recent study, we used brain imaging technology to examine brain responses to the most commonly used executional elements in television advertising: functional and experiential appeals. It is these elements that are believed to stimulate either rational or emotional responses in consumers, respectively.

Our findings challenge the simplistic view that these two executional elements stimulate either emotion or reason. A more accurate depiction, according to our findings, is that they activate either higher or lower level cognitive function. As for the most effective ads, our research suggests that these are the ads that activate not one but both levels of cognitive function. And the greater the activation, the more effective the ad.

Neuromarketing research methods hold the promise of providing an unfettered view into the consumer mind. Using functional magnetic resonance imaging (fMRI) technology, scientists can monitor brain activity second by second as subjects are exposed to advertising stimuli, showing which areas of the brain are responding. This data can then be used to elaborate on what we know from conventional research.

Brain imaging technologies, in other words, step in to provide answers where conventional research methodologies have failed to. Raw sales data, for instance, helps demonstrate what works in advertising, but it cannot explain *why*. For this we depend on consumer perception surveys, which ▶



“Precise knowledge of which brain processes are correlated with a higher click-through rate in viewers could help marketers craft more effective ads.”

Effective ads: new technology answers old questions *(continued)*

By **Linda Couwenberg**

work on the erroneous assumption that people are capable of accurately identifying their innermost thoughts and feelings and predict their subsequent choices.

Yet research has shown time and time again just how little we know about our own minds. The mere act of reporting one's response to an ad, for instance, has the power to change it. Circumstances skew our perceptions. Test subjects may unwittingly tell testers what they want to hear. The time lapse between our exposure to an ad and the formulation of our response is time spent on biased reflection. Consumers may also simply not know at all, with much internal brain activity occurring on a subconscious level. It is into this gap that neuroscience enters, presenting us with the opportunity to circumnavigate the "noise" of other methodologies.

What brain scans tell us

Our main goal in this project was to expand our knowledge of the internal brain processes that are evoked by two types of ad appeal: functional and experiential and, specifically, whether

they were rational or emotional in nature. Ad appeals directly predict an ad's effectiveness, so the prospect of accurately measuring them held immense potential value both scientific and commercial.

Ads with functional appeal typically present factual information about a product's attributes or benefits to persuade a consumer on the basis of logic to like and buy that product. Ads with experiential appeal use desirable symbols to create an experience in association with the product: an emotive experience or an imaginative journey, for instance. Some ads mix both appeals.

Both approaches aim to persuade, and we know they do so through stimulation of different areas of the brain. Traditionally, scientists have suggested that experiential ads arouse emotion in association with a product, while functional ads stimulate the consumers' reasoning abilities: they engage in decision-making based on logic, such as whether or not the product offers value for money, practicality, and so on.

In our study, we first exposed a large group of online consumers to eleven variations of a TV commercial

promoting a brand of pain-relieving muscle and joint gel. Each ad used different executional elements. Some ads used functional elements, showing specific features and explaining the benefits of the gel's use. Others used experiential elements, associating the product with positive emotions, sensations or experiences.

After watching an ad online, the consumer had the opportunity to click-through to the product's website. This click-through data was then aggregated and examined across the eleven ad variations.

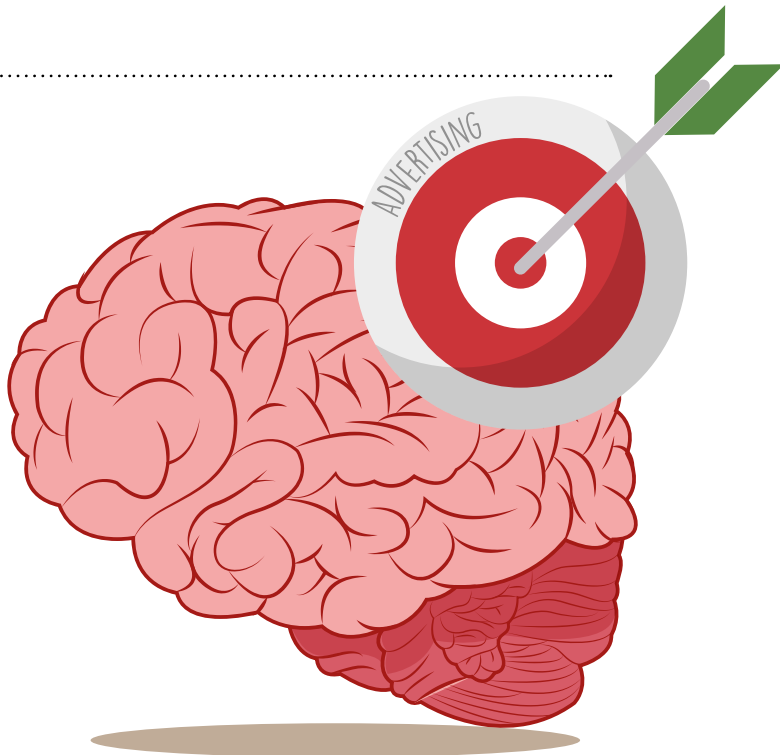
Our findings were that the most effective ads in terms of click-through rates, indicative of intention to buy, were those that contained a combination of both the functional and experiential elements. Our next question was why? What had occurred in the brains of consumers in response to these ad appeals?

To answer this question, we used fMRI to monitor the brain activity in a group of subjects as they watched the different ad versions. The data from these fMRI scans could then be used to understand which mental processes reflected the highest level of persuasion achieved and in response to which precise elements.

More than thinking or feeling

Our data showed that the elements of the ads that highlighted the product's advantages triggered activity in the brain associated with rapidly detecting, recognising and identifying objects: "what am I looking at and how can I use it?" This is a lower level of

"...the most effective ads in terms of click-through rates, indicative of intention to buy, were those that contained a combination of both the functional and experiential elements."



cognitive processing in response to visual input that occurs regularly in our daily lives.

Elements of the ads that appealed to the imagination or had an original way of delivering the message led to activity in the area of the brain associated with more complex cognitive processes, including sustained attention, working memory and creative thinking.

Activity in either of these regions of the brain triggered an inclination in viewers to click-through to the website. However the highest spike in click-through rate occurred when both areas of the brain were activated at the same time.

What can we conclude from this? Firstly, that our responses to ad appeals cannot be divided into those of either emotion or reason, as tradi-

tionally assumed, but rather as either lower or higher in their level cognitive processing. Functional elements, it would seem, stimulate lower-level cognitive processes, while experiential elements stimulate higher-level cognitive processes.

In other words, functional information does not stimulate any deliberative reasoning processes and, on the contrary, higher-level cognitive processes are triggered by experiential appeals. We might speculate then that originality could be an important element for maintaining interest and attention in viewers and enhancing memorability.

Our study demonstrates the extent to which fMRI technology can provide new insights into how ad appeals are processed by the consumer mind, and why a particular commercial is effective.

This has considerable marketing value for practitioners. Precise knowledge of which brain processes are correlated with a higher click-through rate in viewers could help marketers craft more effective ads.

So what are the implications for our future research? I am interested to know how these same mechanisms work in relation to other product categories. What elements of an ad and which brain processes are connected with the most click-throughs when it comes to ads promoting hedonistic lifestyle products such as package holidays, for example? Does this combination of the two elements also work best for the promotion of more expensive products, such as cars? We still have many important questions to investigate and, with this technology, we hope to definitively answer them. ■

This article draws its inspiration from the paper *Neural responses to functional and experiential ad appeals: Explaining ad effectiveness*, written by Linda E. Couwenberg, Maarten A.S. Boksem, Roeland C. Dietvorst, Loek Worm, Willem J.M.I. Verbeke and Ale Smidts, and published in the *International Journal of Research in Marketing*, available online 26 October 2016. DOI: <http://doi.org/10.1016/j.ijresmar.2016.10.005>

Linda E. Couwenberg is a PhD candidate in Marketing Management, Department of Marketing Management, Rotterdam School of Management, Erasmus University. [EMAIL couwenberg@rsm.nl](mailto:couwenberg@rsm.nl)

Improving the supply chain in humanitarian logistics

By **Erwin van der Laan** and **Jan van Dalen**

Médecins sans Frontières (Doctors Without Borders) is an NGO with a special mission: to provide medical care in places ordinary physicians can't reach. Making sure all their long-term clinics have the right amount of the roughly 2,000 stock keeping units (SKUs) with which each is supplied is an enormous logistical challenge.

Médecins sans Frontières (MSF) is such a courageous group it's easy to forget that they don't just send *médecins*; they also send medicines. As an NGO working in often extreme situations, keeping their supply chain functioning as optimally as possible is a huge undertaking. For the past decade, a group of us in RSM's department of technology and operations management have been involved in a project to make that job a little easier.

The engagement began when MSF's operational centre in Amsterdam contacted us 10 years ago, and asked if we had a student who could help them improve their information management. We did, and over time, more students followed him. It didn't take long to realise, however, that the challenge went beyond information, straight to the root of MSF's supply chain. Like many non-profits, MSF had a somewhat outdated supply chain when compared to the state of the art in the private sector.

However, MSF is rapidly making progress and we feel very grateful for having had the opportunity to make a contribution. In our latest study on MSF, we analysed the internal and external factors that affect the forecasting and order-planning process and identified opportunities to improve

MSF's supply chain, insights that we believe may be of value not just to that organisation but to any non-profit group that faces supply challenges. Better forecasting and planning reduces stock-outs, over-stocking, and expiration of goods, which in turn saves time, reduces costs, improves patient care, and may even save lives.

In this latest study, our goal was to understand exactly how the supply chain worked in practice – who orders the supplies, how they get to their destination, and when the clinic ended up with either too few or too many, and what had happened that led to that situation.

Constant pressure

The MSF supply chain functions under constant, tremendous strain. They are always short of money. The work is so tough that many of the doctors at these clinics are on one-year rotations, which means that it's difficult to build much institutional memory in the field. To make matters worse, the nature of their mission entails setting up clinics in places with little or no infrastructure, a desperate population, and often, armed men who may or may not be answerable to a higher authority and who may or may not pilfer

supplies. Finally, stock-outs are never taken lightly, particularly in these hard-to-reach areas, and may literally be a matter of life and death. In an internal report issued in 2015, MSF stated the problem bluntly:

We cannot forecast, do not focus enough on timely delivery of goods, no real quality control for medical local purchases ...[we need] an improved ability to consistently deliver the right goods when needed.

Our first step was to encourage MSF operations to get the field clinics to record their consumption. We asked MSF's Operational Centre in Amsterdam (MSF-OCA) to ask its field personnel to collect details on the con-





sumption of over 2,000 medical SKUs stocked in 19 long-term MSF projects in 2013. The projects were supplied by missions operating in eight countries: Bangladesh, Congo, Ethiopia, Haiti, Nigeria, Pakistan, South Sudan and Yemen. We ended up with 11,486 usable records for analysis in all.

Simply collecting the consumption data was a challenging project for MSF. As Anna Eschweiler, medical pharmacy adviser for MSF-OCA, told us, even collecting the consumption data was a challenge: 'We do this in many contexts where staff often have poor literacy and numeracy skills. It has been a big effort by all to get this far.'

Developing a picture

Once we had a detailed sense of what materials were used when, we could begin to develop a clearer picture of actual usage patterns, which we mapped against initial forecasts and field orders. Overall, we found that 22

Several other internal and external factors tended to influence the forecasting and order-planning process as well. One is systematic over-compensation of safety stocks of more critical items. If those stocks could sit on the shelf indefinitely, that would be inef-

"The MSF supply chain functions under constant, tremendous strain. They are always short of money."

per cent of all medical items suffered a stock-out at some point during the year, 67.8 per cent were at risk, and 38 per cent risked expiration.

Forecasting at MSF is part of the order and procurement process, which involved internationally active operations centres, such as MSF's Amsterdam operations centre, national missions, and local project sites. Each individual project unit orders medical supplies at fixed times during the year from the Amsterdam Procurement Unit, usually every four to six months, from a standardised list of roughly 2,200 medical items.

Forecast accuracy, somewhat surprisingly, turned out to be highest during armed conflicts but lower once the shooting stopped. Our theory is that this happened because the nature of the medical emergencies changes when peace breaks out. The demographics and size of the population may also change dramatically.

efficient but arguably a tolerable cost – buffer or suffer, as the saying goes. However, when it comes to medical logistics, not all serve that stand and wait: many items have a limited shelf life and eventually expire.

We also found that at the clinic level, people tended to over-forecast their consumption. Ideally, consumption forecasts should be unbiased, with order planners at the operations centre deciding what margin of safety to add to the order. Instead, both the field medical team and the planners in Amsterdam were adding safety stocks, resulting in unnecessarily high stock levels.

Part of the tendency toward overstocking is that the consequences of a supply rupture may go beyond simply being out of a particular item. 'The impact of ruptures, apart from the quality of care, disrupts the supply chain at all levels. A critical rupture means the supply staff in the project, mission and HQ effectively have to stop every-

thing to identify a source and a quick supply of the product,' says Nontas Papadimitriou, logistics coordinator for India in the MSF-OCA.

In 2016, the MSF Operations Centre responded to these and other observations, and initiated a plan to improve MSF's supply chain forecasting and planning process. Once proper data collection and analysis programmes are put in place, their supply chain should become much more efficient.

Eventually, they may even be able to predict demand after discounting a variety of local contingencies, such as the condition of the physical infrastructure or the political climate (for instance, the relative likelihood of looting if a truck is stopped or blocked by rebel forces). We think their next steps may also include:

- Looking more closely at patient needs. How much is used is not the same as how much is needed. The current record system records consumption rather than actual demand, which implies that actual demand may be understated in the case of stock outs, and as a consequence, the risk of rupture is underestimated.



- Note the cause of ruptures. The current system notes when a rupture occurs, but not where in the supply chain it happened.

More work lies ahead, but MSF is now definitely on the right track. Today, MSF's forecasting and planning process is considered best practice in humanitarian logistics, and its example is now leading to a new phase of development for the sector: standardised data collection and planning. Once proper data collection and analytics are in place, it may be possible to even begin predicting demand. Humanitarian supply chains differ from retail supply chains in many respects, but as one of our colleagues has noted, they are similar in other ways – perhaps the most important of which is that as crazy as our world can be, its patterns can be analysed, and our navigation of them improved. ■

This article draws its inspiration from the paper *Demand forecasting and order planning for humanitarian logistics: An empirical assessment*, written by Erwin van der Laan, Jan van Dalen, Michael Rohrmoser and Rob Simpson, and published in the *Journal of Operations Management*,

Volume 45, July 2016, Pages 114–122. DOI: <http://doi.org/10.1016/j.jom.2016.05.004>

Erwin van der Laan is Associate Professor of Logistics & Operations Management, Department of Technology and Operations Management, Rotterdam School of Management, Erasmus University. [EMAIL: elan@rsm.nl](mailto:elan@rsm.nl)

Jan van Dalen is Associate Professor of Statistics, Department of Technology and Operations Management, Rotterdam School of Management, Erasmus University. [EMAIL: jdalen@rsm.nl](mailto:jdalen@rsm.nl)

► RSM Expertise

Specialising in the disciplines of Supply Chain Management, Business Information Management, and Innovation Management, the Department of Technology & Operations Management deals with the effective management of how to develop, produce and deliver products and services.

The department's world-class scholars develop scientific knowledge and train students to become reflective practitioners who can successfully manage and design supply chains, information systems and innovation processes. In doing so, the department combines scientific ambition and rigour with practical relevance, both in research and in teaching.

[WEB: www.rsm.nl/tom](http://www.rsm.nl/tom)

*"Today, MSF's forecasting and planning process is considered **best practice in humanitarian logistics**, and its example is now leading to a new phase of development for the sector..."*

Rethinking managerial roles in change initiatives

Chris Murray talks with **Bas Koene**

Organisational change that is initiated by middle management rather than top management is more likely to gain employee support. This is the conclusion of a recent study co-authored by Bas Koene, assistant professor in RSM's Department of Organisation and Personnel Management.

The study on managerial roles in launching and executing organisational change shows that this positive effect of change initiation by middle management is further strengthened when top management engages in change execution. 'The findings of the study are valuable, because quantitative research usually fragments the situation, either investigating the impact of top management or that of middle management in change situations. Actually, *both* middle management and top management have a dynamic, ongoing role to play,' Koene says, noting

Koene says. The middle management research emphasises how experience in the work process leads to grounded and practical change initiatives.

Both, however, also face challenges, he says. Top management needs to motivate people in the organisation to go along with their ideas that may not always obviously benefit them, while middle management operates in a complex organisational environment where their change initiatives may make sense locally, but might be perceived as less relevant in the wider organisation.

"If middle management initiates the change, it's often closer to what people experience and it's more acceptable to people in the organisation."

that they each bring specific strengths and weaknesses to the process.

The top management research emphasises the importance of setting direction for the organisation and legitimisation in the external environment,

People are quick to conclude that top management mostly has a role in change initiation, he says, setting goals and legitimating the change externally and explaining it internally, while middle management then translates and

operationalises the change objectives to fit the local situation.

Koene and colleagues' quantitative study, published in the *Journal of Management Studies*, was based on 1,795 questionnaires received from respondents in 468 organisations. Conducted in collaboration with colleagues from Australia's Monash Business School, Canada's Wilfrid Laurier University and the UK's Cambridge Judge Business School, the study focused on employee support of change in relation to four different configurations:

- Top management initiated and executed.
- Top management initiated but middle management executed.
- Middle management initiated but top management executed.
- Middle management initiated and executed.

Change *initiation*, according to the study, includes identifying the opportunity, making the business case, and securing the resources commitments for the change. Change *execution* involves implementing the change, from defining the day-to-day activities to translating general goals into periodic milestones to giving some sense and direction to those involved in the change process.

Top management initiated change did not consistently engender employee support for change. Nearly 48 per cent of change initiatives in the study were initiated and executed by top managers, making this configu- ►

Rethinking managerial roles in change initiatives *(continued)*

Chris Murray talks with **Bas Koene**

ration the most common in the data. Nevertheless, he says, 'As a way of managing change, this is not an approach that has a very clear positive or negative impact.' Nor did the study show significant positive employee support for change that was initiated by top management and executed by middle management — which accounted for 28 per cent of the change initiatives in the study.

Middle manager advantage

In contrast, change that was middle management initiated and executed showed statistically significantly greater levels of employee support. 'If middle management initiates the change, it's often closer to what people experience and it's more acceptable to people in the organisation,' he says.

'Top management often frames change in strategic terms. When people in the organisation think about change,' Koene explains, 'they think about actual changes in their work processes, what it does to their direct client connections, what it does to their jobs. They experience change and talk about change in a very different way. Middle management, in that sense, is closer to people in the organisation than top management in the way they frame and talk about change.'

However, one of the challenges of change that is initiated and/or executed by middle management is the potential for a unit-focused framework, as opposed to an organisation-wide perspective. 'The risk is that middle managers might have a localised view of what needs to happen, that they

don't see the big picture,' Koene says. 'They might have local interests rather than organisational interests at heart.' As a result, some fear that middle management-initiated change can lead to political conflicts, and less employee support for the change. However, Koene notes, 'This is not what we find.' The research shows *more* rather than less support for change driven by middle managers.

A surprising result

Although the research showed positive employee response to change initiated and executed by middle management, the most effective configuration was the third on the list: change launched by middle management *but executed by top management*. 'People will think top management initiates, middle management executes. The value of these findings is that they highlight that, actually, it can be the opposite. Middle management initiation and top management of change shows a consistently positive effect on employee support for change.'

As Koene explains, this counter-intuitive allocation of roles best leverages the strengths of both middle management and top management while counterbalancing their weaknesses.

Staying involved

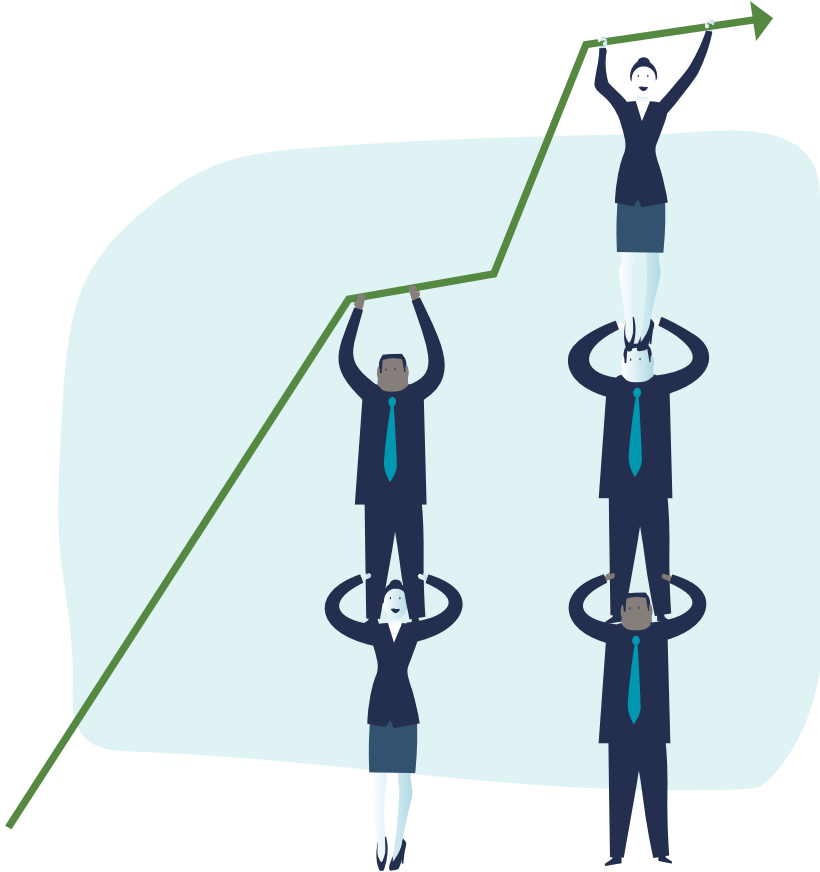
Top managers, Koene says, have an important role to play in linking change to organisational objectives and the overall direction of the company — which is why the continued involvement of top management. 'Top management needs to be involved and stay involved

to maintain the clarity of the organisational vision and direction,' he says. 'Middle management can initiate the change, but top management has to support it and legitimise it, and clarify how it's also relevant in the broader context of the organisation and the organisation's goals.'

As Koene explains, top management can help employees understand the overarching *why* of the change. To garner employee support, he says, 'there needs to be constant attention to what does it mean? What are we doing?' Top management best answers those questions, according to Koene. 'During the process of change, everything becomes more complicated than it was before,' he says, 'People will be doing and experiencing unfamiliar things. It's very important that top management keeps helping them to make sense of what's going on. Top management needs to provide clarity and direction whilst balancing it with healthy doses of realism and reflection.'

Direction and sense-making is just one aspect of top management involvement. 'Good leaders keep the change idea alive. What is very important for top management to consider is that when there is a change project in the organisation they have to frame it so that it remains open to updating and that there is possibility for creative evolution and reframing, taking into account new things,' he says.

In sum, he says, top management ensures that change initiatives remain consistent with the organisation's overall goals and strategies, while at the



“This research points to the importance of understanding organisations not just as clear hierarchies, but as social entities where multiple realities come together and are constantly negotiated.”

same time allowing them to be open to ‘complexity and evolving understandings.’ As Koene explains, ‘The perfect plan doesn’t exist. It’s important to re-evaluate situations as they develop. Top management can thus be inspired by initiatives of middle management in the organisation but also take into account developments that happen along the way.’

Traditionally, research into roles played by managers in organisational change focuses either on a “top-down” approach, with top managers initiating the change that middle managers executing, or a “bottom-up” approach, in which middle managers initiate change that is sometimes resisted by top managers wary of change from below. This either-or bat-

tle of static dichotomies, Koene says, is obsolete.

‘This research points to the importance of understanding organisations not just as clear hierarchies, but as social entities where multiple realities come together and are constantly negotiated,’ he says.

Change, Koene explains, is an evolving process, in which the involvement of both middle managers and top managers remains important. ‘Middle management acts and experiments and initiates in the process of change,’ he says. ‘Top management engages in constantly reconciling the multiple realities and the process of sense making and reorganisation – and constantly deals with emergent experiences in the process of change.’

When it comes to organisational change, this continuous partnership of middle and top managers is, his research shows, what works best. ■

The paper, *Rethinking ‘Top-Down’ and ‘Bottom-Up’ Roles of Top and Middle Managers in Organizational Change: Implications for Employee Support*, written by Mariano L.M. Heyden, Sebastian P.L. Fourné, Bastiaan A.S. Koene, Renate Werkman and Shahzad (Shaz) Ansari, is published online in the *Journal of Management Studies*, January 2017. DOI: <http://dx.doi.org/10.1111/joms.12258>

Bas Koene is Assistant Professor, Department of Organisational Change and Personnel Management, and Director, RSM Case Development Centre, Rotterdam School of Management, Erasmus University. [EMAIL bkoene@rsm.nl](mailto:bkoene@rsm.nl)

How can auditors avoid the perils of aggressive accounting?

By **Marcel van Rinsum**

How do you solve a problem like aggressive accounting? With some difficulty, some management teams and their external auditors might argue. Especially if they cannot agree on: (a) just what constitutes aggressive accounting; (b) whether or not aggressive accounting is inherently a bad thing, and (c) whether it manifests itself more in one kind of management/auditor relationship than it does in another.

This last element is at the core of a paper – *Disclosure Checklists and Auditors' Judgments of Aggressive Accounting* – I co-authored and which was published in March of this year. I will discuss the content of the paper in more detail later, but for now will try to tease out and communicate some of the key lessons that might interest a wider audience.

The pages of corporate history are littered with examples of aggressive accounting, featuring such landmark events as British & Commonwealth's (B&C) ill-fated purchase of Atlantic Computers and Hewlett Packard's (HP) eerily similar purchase of UK software firm Autonomy more than 20 years later.

Much more recently UK retailer Tesco overstated profits in at least three financial years: aggressive accounting. In April this year the *Financial Times* published a story strongly suggesting that UK credit card lenders might be carrying on the tradition. And the failure of Enron in 2001 provides a spectacular textbook example of what can happen when an auditor fails to identify serious misstatements.¹

In 1988, B&C acquired Atlantic

Computers plc for £434 million, subsequent to a series of market purchases that built up their stake in that company. The acquisition destroyed B&C, as Atlantic had been booking profits that did not exist: aggressive accounting.²

In October 2011, HP bought Autonomy in a deal that valued the target at US\$11.1 billion, widely described as a huge premium. Just over a year later, HP wrote off around 75 per cent of its investment as it became more familiar with the aggressive accounting practices of its new acquisition.³

In October 2014, Tesco reported a 92 per cent fall in profits after writing off £263 million. It transpired that Tesco managers had been over-optimistic in estimating how much the

company would receive in rebates from suppliers. In other words, a scandal involving aggressive accounting.⁴

The *Financial Times* credit card story described interest-free credit cards as a ticking time bomb as banks apparently routinely expected eventual future income in the here and now.⁵

The details and complexity differ from case to case but the motives are often staggeringly simple. Two kinds of aggressive accounting can be characterised briefly; both take conscious management to the boundaries of what is reasonable. On the one hand, there is an opportunistic attempt to generate an over-optimistic financial result. This can be achieved by booking

“Our research strongly suggests that certain measures taken to improve the accuracy of account reporting can in fact have an adverse impact...”

anticipated income at the earliest possible time in the product life cycle or by delaying the recording of losses to the latest possible moment. In earlier separate research, we have seen this take place to trigger bonus payments to senior management.

On the other hand, and equally opportunistic, if management sees that a significant loss is inevitable in a given accounting period, they might be tempted to exaggerate the loss attributable to that period by making exces-

sive provisions. When carried out by new management following the replacement of a discredited management team, this is often referred to as “deep sixing”.

Unless disaster strikes in the next accounting period, they should be able to draw on those excess provisions to restore profits. This would have the added benefit of painting a flattering picture of their management capabilities. But it would represent recovery from an artificially low base.

Disclosure checklists

In our joint paper, we set out to investigate whether the use of a disclosure checklist affects the attitude of the auditor to the company that is paying for the audit, nudging the auditor in the direction of glossing over the use of aggressive accounting. Our results imply that the use of a disclosure checklist does indeed result in a less critical state of mind.

Auditors, like any human, can suffer from unconscious biases and respond to incentives – just as management does – but without realising it. When this happens, the watchdog can become less sceptical and too easily acquiesce to perceived management pressure.

In an ideal world, accountants would ask penetrating questions to establish underlying facts before compiling the definitive accounts. Unfortunately, the real world doesn't always work like that. The real world instead too often places undue emphasis on regulation, replication and standardisation. And as referred to earlier,



making the process over-mechanical affects the mindset of the auditor.

The use of a checklist inspires a box-ticking mentality rather than a critical mentality. This is especially true in cases where the auditor feels accountable to a management team with a vested interest in a beneficial outcome. Auditors will tend to give the benefit of the doubt to management and go along with their aggressive accounting methods, after being lulled into a false sense of security by the basic checklist. The glass will tend always to be half-full rather than half-empty.

Our findings have important implications for auditing practice. First, when designing their audit procedures, audit firms need to be aware that downsides exist in the use of disclosure checklists. Although feeling accountable to management by itself has no effect on auditors' acceptance of aggressive accounting, the use of mechanistic checklists can reduce the extent to which auditors remain critical towards their clients. Pro-client bias then looms, thus presenting a subtle yet significant threat to auditor independence. ►

In stark contrast, auditors working to a separate audit committee will tend to concentrate more fiercely on trying to ensure that the accounts on which they are working deliver a true and fair view of the company being audited. Which is, of course, the principal purpose of independent accounting.

Improving accuracy

Summing up our findings in arguably simpler terms, unintended consequences of the audit process would seem to be at work. Our research strongly suggests that certain measures taken to improve the accuracy of account reporting can in fact have an adverse impact on the independence of those doing the auditing.

This article draws its inspiration from the paper *Disclosure Checklists and Auditors' Judgments of Aggressive Accounting*, written by Marcel van Rinsum, Victor S. Maas and David Stolker, and published online in *European Accounting Review*, March 2017. <http://dx.doi.org/10.1080/09638180.2017.1304228>

"If I am correct that the key issue is awareness, there are ways to help people to refocus."

Marcel van Rinsum is Associate Professor of Accounting, Department of Accounting and Control, Rotterdam School of Management, Erasmus University.

EMAIL mrinsum@rsm.nl

Our study did not take place in a vacuum but in the context of an impressive body of research and comment on the topic. I believe it points to several avenues for future research. More research is needed on the costs and benefits of decision aids on auditors' judgment and decision-making, particularly on the effects of checklists. Such research could examine other factors that may play a role in how checklist use affects auditors' acceptance of aggressive reporting, such as financial incentives or personality characteristics.

Of course, our study is subject to limitations. One limitation relates to the participants in our experiment who all work in the same region in the Netherlands and for the same Big Four audit firm. As a result, it is not possible to fully exclude the possibility that auditors in other firms or regions would judge differently.

How, then, do we fix aggressive accounting and prevent the problems it creates? I've already mentioned the limitations of regulation and standardisation in the policing role. Perhaps we should pay greater attention to the potential that lies in promoting the use of de-biasing techniques.

If I am correct that the key issue is awareness, there are ways to help people to refocus. Prompt them to think of all the possible negatives and inaccuracies that you might find in preparatory work. Expect mistakes to have been made and consider (motives for) possible opportunistic reporting. This helps to reinforce the critical mindset and prevents succumbing to bias.

Another solution is to further strengthen the role of the independent audit committee and reduce management's influence. This is an essential part of the journey towards arriving at a genuinely objective and fair view in the final accounts. ■

Sources:

¹ New York Times 29-11-2001 Enron's collapse; the overview; Enron collapses as suitor cancels plans for merger, by Richard A Oppel Jr and Andrew Ross Sorkin: www.nytimes.com/2001/11/29/business/enron-s-collapse-the-overview-enron-collapses-as-suitor-cancels-plans-for-merger.html

² bandcstaffregister.com: <http://www.bandcstaffregister.com/page2866.html>

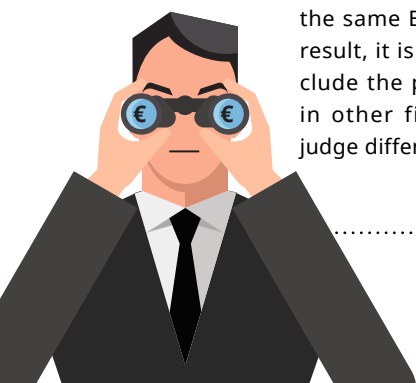
³ Fortune magazine 14-12-2016 How Autonomy fooled Hewlett-Packard, by Jack T Ciesielski, <http://fortune.com/2016/12/14/hewlett-packard-autonomy/>

⁴ Financial Times 22-9-2014 Tesco's unexpected item in P&L area by Jonathan Guthrie: <https://www.ft.com/content/a5166e08-422d-11e4-a9f4-00144feabdc0>;

The Telegraph 23-10-2014, Tesco chairman stands down as company reports 92% fall in profits, by Graham Ruddick: <http://www.telegraph.co.uk/finance/newsbysector/epic/tsco/11181629/Tesco-reports-92pc-fall-in-profits.html>;

Tesco addresses the issue of 'commercial income' in detail on page 17 of its 2015 annual report: <https://www.tescopl.com/media/1426/tescoar15.pdf>

⁵ Financial Times 30-4-2017 Interest-free credit cards a "ticking time bomb", bankers fear, by Emma Dunkley: <https://www.ft.com/content/a7df4432-2daa-11e7-9555-23ef563ecf9a>



Why can't China clean up its act?

By **Pursey Heugens**

Winston Churchill once described the Soviet Union as 'a riddle wrapped in a mystery inside an enigma.' Modern China is a very different story. By definition, the workings of the world's largest economy (by purchasing power parity) can't really be hidden from view nearly as easily. However, the sheer scale means that certain aspects of that vast market's workings are still not all that easy to understand.

One such aspect is the dynamic of environmental regulation. China's gross domestic product has grown by more than 500 per cent since 1980, advancing from an economy a little larger than Canada's to an economic superpower. However, but this progress has come at the expense of the environment: in 2006, the country became the world's largest emitter of greenhouse gases, and in 2009, the leading consumer of non-renewable energy. At the same time, despite the fact that the government now has some tough environmental regulations on the books and controls up to 80 per cent of all businesses, it's made relatively little environmental progress.

How can the government be the controlling shareholder and yet not exercise much control over its own companies' conduct? To find out, we analysed quantitative data collected on Chinese firms between 2008 and 2012 (specifically the 1,425 companies listed on the Shenzhen Stock Exchange and the Shanghai Stock Exchange, both of which since 2008 have mandated environmental records), as well as qualitative data on these companies collected in 2013-2014.

We analysed how administrative hierarchical distance (the degree of distance from the central government and the level of government holding the control of the firm) affects the environmental regulation of the firm. Our study identified nine levels of administrative hierarchy in China, and assessed their impact on corporate environmental actions. In addition to state ownership, our metrics included the level of government subsidy for environmental actions weighted against the revenue of the company, the numbers of times the company was reported to have violated an environmental regulation, and the percentage of top managers who also worked for governmental bodies, such as the National People's

Congress or the Chinese People's Political Consultative Conference.

The results were not quite what we expected. Perhaps the biggest surprise, initially, was the extent to which the state is not a monolithic actor. In fact, from a certain perspective, there is no state. Instead, in China – probably as in other countries with federal governments – the government is a patchwork of overlapping jurisdictions and overlapping interests. As a result, governmental bodies operating at different levels can exert different and even conflicting influences on corporate environmental practices.

In general, higher-level agencies are primarily rule makers and lower-level bodies are mostly rule takers. At the mid-level, however, governmental bodies add hardly any environmental regulation of their own, which means that further down, the pressure tends to level off and even weaken. As the ancient saying goes, in the provinces, the mountains are high and the emperor is far away.

Selective enforcement

In the end, when it came to environmental sustainability, our analysis ►

“...governmental bodies operating at different levels can exert different and even conflicting influences on corporate environmental practices.”

Why can't China clean up its act? *(continued)*

By **Pursey Heugens**

suggested that two kinds of companies tended to be the worst: very large national companies, which have some protection from the government, and locally controlled companies, which tend to have their own set of regional protectors.

Not only are the laws enforced more selectively with respect to companies the nearer their ownership is to entities in one of the nine administrative strata we identified, but the government incentives at each of these strata tends to favour companies whose ownerships are rooted at that particular level. At the national level, for instance, the political and economic importance of the success of state champions such as Sinopec, the government oil company, tends to encourage more selective enforcement actions.

only partially rather than pass up the jobs and revenue promised by the growth of the local firm.

Another insight we gained from this study is how environmental protection evolves in a country where civil society is largely undeveloped. In China, the advocacy groups that act as a check on the private sector and government regulators in the West are either weaker or non-existent. In such a context, most of the mature market playbook regarding how to prod companies to pursue environmental goals – such as stakeholder dialogue, and the influence of non-governmental organisations – isn't really applicable.

Instead, the society is extremely hierarchical. Our interviews taught us that individuals, organisations, and society in general are constantly aware of

*“...I suspect that the country **won't be able to focus on conservation** until China's next Five-Year Plan and President Xi or his successor puts a new plan in motion.”*

At the local level, leaders focus in a similar way on the economic growth of their region, both because they depend on local revenues for economic development, and because most officials see local economic advancement as the key to political promotion. When lower-level governments control firms, officials tend to implement regulations

the power of the administrative hierarchy. For example, Chinese managers and officials strive “to avoid troubles whenever possible” while they show deferential behaviour towards hierarchically superior individuals or organs.

Each time my co-author, who conducted the interviews, was introduced by the CEO's secretary to an interviewee,



he/she would point up and say, ‘she's arranged by the top,’ and nobody would question the interview process anymore. In a more general sense, and in ways unimaginable in the West, Chinese firms consider themselves to be “grandsons” (*sun zi*, also meaning “being very subordinate”) of the government, and therefore subject to its (paternal) authority. Governmental bodies are considered to be like “parents” or even “grandfathers” who have the authority to decide everything for the local area, much as senior members do for a family in a feudal society.

Our interviews similarly suggest that Chinese firms feel they have little influence over the content of new environmental policies by the central government, even though there may be some room to bargain with local governments over the pace and scope of their implementation.

For now, foreign investors committed to making sustainable investments in China should keep in mind



the fact that the companies that tend to be the most compliant tended to be somewhere in the middle – companies that are too far from the central government to win any protection from the highest echelons, but also too far from local and provincial government to be favoured as a home team. These companies in the middle, at the bend of this inverted U, tend to have the best environmental record.

When will China go green?

Is any of this changing? Yes and no. For the sake of the planet and humankind, I certainly hope so. Certainly, the government is aware of the challenge: the amount of attention that it has paid to environmental issues in recent Five-Year Plans has grown enormously over the past 15 years. In the 13th Five-Year Plan (2016), “Green Development” has been promoted to one of the five crucial development concepts to facilitate building a prosperous society in China. Moreover, almost 12 per cent of the

government’s 2017 annual report focuses on environmental protection, compared to one per cent in 1985. However, although the authorities recognise the environment as an important issue, for now economic growth and combatting corruption remain higher priorities.

Companies too are concerned. As one manager told us, ‘Although we are now more developed, pollution has intensified. Our minds are changing against this backdrop... It is, of course, difficult to fix it immediately... More promising outcomes may materialise in three to five, or even 10, years.’

For what it’s worth, I suspect that the country won’t be able to focus on conservation until China’s next Five-Year Plan and President Xi Jinping or his successor puts a new plan in motion. The good news, however, is that when China puts its foot down, the world trembles. As the success of the “tigers and flies” anti-corruption programme has demonstrated, the government

can move rapidly once it makes a commitment. Once the government starts focusing more on environmental protection, the effects are likely to be felt everywhere.

Overall, I am moderately hopeful that China will do the right thing eventually. Whether that will happen soon enough for polar bears to still be standing on firm ice remains to be seen. ■

This article draws its inspiration from the working paper *Government’s green grip: multifaceted state influence on corporate environmental actions in China*, written by Ruxi Wang, Frank H. Wijen and Pursey P.M.A.R. Heugens.

Pursey Heugens is Professor of Organization Theory, Development, and Change, Department of Strategic Management and Entrepreneurship, Rotterdam School of Management, Erasmus University.

EMAIL pheugens@rsm.nl

The use and misuse of power and unethical behaviour

By *Laura M. Giurge*

A high-performing company with strong competitive advantage is only as good as the sum of its parts. Crucial to this are the dynamics between senior management, middle management, and employees. Until now, research has tended to lump together the actions and attitudes of a given member of an organisation, not allowing for the extent to which an individual's behaviour can change over time. A closer look at decision-making by high-power managers and counter-productive behaviour by employees sheds new light on the matter.

Be it within a company environment or outside the corporate context, human behaviour is fundamentally dynamic. For an individual to achieve a goal (professional or personal), opinions may be formed, attitudes taken, behaviours adopted, or decisions made based upon the surrounding changing environment. The field of organisational behaviour focuses on the corporate context to see how and why members of an organisation from the top of the hierarchical ladder right down to the bottom operate and interact with the aim of achieving the best possible results for the company and/or themselves. However, attention so far has been placed primarily on the average changing behaviours of individuals at one specific point in time. To better understand how and why members of an organisation behave the way they do, the variability of their own decision-making and overall behaviour across time needs to go under the lens.

Any manager within a company seeking to boost competitive advantage will have to make decisions. This is part and parcel of any managerial role, whatever the level of seniority. Managerial decision-making will sometimes be in relation to a negative situation, such as dealing with an employee who has a poor work ethic, or to a positive situation, such as giving credit when credit is due. It is generally assumed that the speed of action is key to flushing out a bad egg within an organisation or, more proactively and sympathetically put, finding a way to help the individual or the team that is in danger of harming



the company's organisational performance. According to recent empirical research that zoomed in on decision-making and unethical behaviour in the workplace, such an assumption does not always hold.

Slow is good

The first of three studies, drawing upon the results of two in-the-field experience sampling studies and a lab experiment with undergraduate business students, sought to examine decision-making in relation to both the objective time in which decisions were made and the influence of the decision-maker's structural power. In short, under the microscope was what could be termed "time-appropriate decision-making". This concept allows for the situation where a more considered period of reflection before acting could be of benefit to an organisation, as opposed to constantly rushing in all guns blazing. The motivation behind this new angle was based on the previous premise of many researchers that speed of action is the only possible driver of organisational performance and therefore competitive advantage.

By factoring in the level of the decision-maker's structural power and consequently the subjective assessment of such power, a greater level of sophistication to the issue has been unearthed. The most revealing is the connection between structural power and the time taken for making decisions. Based on this first part of the study, it emerges that the higher the position of a manager, the greater the chances that he or she will see the virtue of tak-

ing things more slowly before deciding on a course of action and kick-starting operations. However, time is not the only factor that any given manager faces. With the assumption that the correct decision-making time is set, the team as well as the individuals comprising the team must also have the right approach. The workplace will always be defined by the varying actions of the people that are a part of it, so how best to deal with a scenario where some members of an organisation display bad behaviour in the workplace?

"...a more considered period of reflection before acting could be of benefit to an organisation, rather than rushing in all guns blazing."

Addicted to "no"

It is an unfortunate likelihood that most companies will contain the occasional "bad apple" whose behaviour at work will be deemed less ethical than that of their peers. However, to label such a person as fundamentally unethical in the workplace fails to account for the time dimension inherent within such behaviour. For the constructive, proactive manager seeking to rectify the problem, time is once again the underlying and essential factor. The second empirical study, drawing again upon the experience sampling methodology, conducted with a selection of

organisational members over 10 consecutive working days, sought to dig deeper in order to understand to what extent counterproductive work behaviour is governed by time. In short, are such members of an organisation behaving in a counterproductive way (eg, systematic late arrival and early departure, poor relations with colleagues, etc) over a sustained period of time to the extent that it verges on addictive behaviour?

Sure enough, the empirical study revealed that such a trend is prevalent

over time, ie, such behaviour repeats itself from one day to the next. Poor quality of sleep also proves to be an enforcer of such a pattern, especially when the worker in question places less value on moral issues. The good news for managers is that a number of practical solutions exist to combat such a situation. For instance, managers can establish trade-offs with such employees such that failure to refrain from negative behaviour one day is presented as a small slip that can be corrected rather than as an incorrigible fault. Nevertheless, this should not prevent recruiting managers from ►

The use and misuse of power and unethical behaviour *(continued)*

By **Laura M. Giurge**

“...managers higher up the corporate ladder displaying a moral attitude to work are more likely to have a positive trickle-down effect to their subordinates.”

valuing the moral attitude of a potential new employee during the selection process.

Set an example

The final study, this time conducted only in lab conditions with undergraduate business students, switched attention onto managers and, more specifically, onto their approach to power and the likelihood of them making decisions backed up by moral reasoning. Put differently, the question this final study aims to address is whether the decision-maker's power has an impact on how he or she decides what would be a morally right or wrong action to pursue in any given situation. In the scenario where counterproductive work behaviour exists within a person, this can make a world of difference.

The results firstly suggest that managers' own power is detrimental to the cognitive process involved in making ethical decisions. In particular, it was

found that power draws attention to one's personal interests at the expense of others' interests and well-being when it comes to deciding what would be a morally right or wrong action to pursue. Bringing a ray of hope, results further indicate that managers could avoid this negative effect of their own power by focusing first and foremost on the responsibility of their own actions. As was the case with the exploration of the time taken to make decisions and the temporal unfolding of counterproductive work behaviour, the cognitive process whereby a manager decides what would be a morally right or wrong action to pursue evolves over time and is not a static frame of mind.

Fight the power?

The methodology adopted for the first two studies was considered especially relevant to the temporal and dynamic process that shapes and influences the

behaviour of managers and workers because it accounts for fluctuations in behaviour as it unfolds in real time and within the workplace. Given the nature of interactions between colleagues of the same and different hierarchical level, this is key to appreciating that behaviour does not only vary between individuals, but also within each of them.

Trying to make the right decision at the right time, launch operations over the correct period, and deal with less motivated elements of a team or company, whilst taking the right approach to one's power with the hope that others will follow the example are key challenges faced by each and every manager. “Power” has come to assume negative connotations. However, when “power” adds up to responsible management, knowing when to take and apply decisions and how to deal constructively with employees' counterproductive behaviour, the term need no longer be frowned upon. Time is of the essence. ■

This article draws its inspiration from Laura Maria Giurge's PhD thesis, *A Test of Time – A temporal and dynamic approach to power and ethics*, which is published as part of the ERIM PhD Series Research in Management. It may be freely downloaded at [WEB https://repub.eur.nl/pub/98451](https://repub.eur.nl/pub/98451)

Laura Maria Giurge is a hospitality member, Department of Business-Society Management, Rotterdam School of Management, Erasmus University.

EMAIL giurge@rsm.nl



RSM DISCOVERY - live links to authors and departments

Linda Couwenberg

PhD Candidate, Department of Marketing Management

- Email: couwenberg@rsm.nl
- Personal homepage
- Department of Marketing Management

Erwin van der Laan

Associate Professor of Logistics & Operations Management, Department of Technology and Operations Management

- Email: elan@rsm.nl
- Personal homepage
- Department of Technology and Operations Management

Marcel van Rinsum

Associate Professor of Accounting, Department of Accounting and Control

- Email: mrinsum@rsm.nl
- Personal homepage
- Department of Accounting and Control

RSM DISCOVERY

2nd Quarter 2017

RSM Discovery is published by Rotterdam School of Management, Erasmus University

EDITOR-IN-CHIEF

Prof. Henk W. Volberda
(hvolberda@rsm.nl)

EDITOR

Russell Gilbert
(editor@englisheditors.nl)

RSM POLICY DIRECTOR

Wilfred Mijnhardt
(wmijnhardt@rsm.nl)

ERIM EXECUTIVE DIRECTOR

Monique van Donzel
(vandonzel@rsm.nl)

MARKETING DIRECTOR

Willem Koolhaas
(wkoolhaas@rsm.nl)

MEDIA & PUBLIC RELATIONS MANAGER

Marianne Schouten
(mschouten@rsm.nl)

DESIGNERS

UNIT20.

ISSN

2214-5079

© 2017 Rotterdam School of Management, Erasmus University.
All rights reserved

Jan van Dalen

Associate Professor of Statistics, Department of Technology and Operations Management

- Email: jdalen@rsm.nl
- Personal homepage
- Department of Technology and Operations Management

Pursey Heugens

Professor of Organization Theory, Development, and Change, Department of Strategic Management and Entrepreneurship

- Email: pheugens@rsm.nl
- Personal homepage
- Department of Strategic Management and Entrepreneurship

Bas Koene

Assistant Professor, Department of Organisational Change and Personnel Management, and Director, RSM Case Development Centre

- Email: bkoene@rsm.nl
- Personal homepage
- Department of Organisational Change and Personnel Management
- RSM Case Development Centre

Laura Giurge

Hospitality Member, Department of Business-Society Management

- Email: giurge@rsm.nl
- Personal homepage
- Department of Business-Society Management



Rotterdam School of Management, Erasmus University

A top-ranked international business school renowned for its ground-breaking research in sustainable business practice and for the development of leaders in global business. Offering an array of bachelor, master, doctoral, MBA and executive education programmes, RSM is consistently ranked amongst the top 10 business schools in Europe.

www.rsm.nl

Erasmus Research Institute of Management

ERIM is the joint research institute of Rotterdam School of Management, Erasmus University and Erasmus School of Economics (ESE) at Erasmus University Rotterdam. Within ERIM, over three hundred senior researchers and doctoral students are active in a diverse range of research programmes. From a variety of academic backgrounds and expertise, the ERIM community is united in striving for excellence and works at the forefront of creating new business knowledge.

www.erim.nl
