ROTTERDAM SCHOOL OF MANAGEMENT, ERASMUS UNIVERSITY

- Finding the tipping point between financial and social incentives

 By Frank Hartmann
- ▶ Selling flowers with analytics By Eric van Heck
- The forces and factors influencing company longevity

Chris Murray talks with Hugo van Driel

Decision-making: are managers biased by their characters?

By Saeedeh Ahmadi

Managing the supply and demand of creativity

By Berend Wierenga, Niek Althuizen and Bo Chen

Individual creative ability versus group collaboration

By Yingjie Yuan







RSM DIPLOMA PROGRAMME IN GENERAL MANAGEMENT

ADVANCED
MANAGEMENT
AND LEADERSHIP
PROGRAMME

ERASMUS
EXECUTIVE
PROGRAMME
IN STRATEGIC
MANAGEMENT

The fast track for young professionals who move into the role of manager or supervisor for the first time. Acquire techniques and competences to run your team smoothly and effectively.

RSM.NI/DPGM

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

RSM.NI/AMIP

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

RSM.NI/FSM

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



Finding the tipping point between financial and social incentives

By Frank Hartmann page 05

How does one strike the perfect balance between incentives and threats when trying to motivate people to improve their performance? This is a perennial question for anyone in a position of management responsibility, whether it be a company chief executive, the head of a political party, a sports coach, a teacher or a parent.

Selling flowers with analytics

Bv Eric van Heck page 08

Much has been said about "big data" and its potential impact on the international commercial world. By itself, big data will not transform a business, let alone the global landscape. Ways have to be found to make it financially worthwhile to invest the time, effort and cash required to assemble and then mine significant volumes and varieties of data. Not everyone immediately sees the advantage in going down this exploratory route.

The forces and factors influencing company longevity

Chris Murray talks with Hugo van Driel

page 11

The paper company Stora Enso has a history dating back to the 13th century. Canada's Hudson Bay Company was founded in 1670, and Dutch textile manufacturer Royal Ten Cate was founded in 1704. These firms are still in existence. By comparison, according to recent figures, the average lifespan of Standard & Poor 500 firms is 18 years. How can some companies remain in existence for centuries, while many of today's largest firms might not see their third decade?

Decision-making: are managers biased by their characters?

By Saeedeh Ahmadi

Many studies have shown that psychology affects consumers' economic decisions. Indeed, almost everyone occasionally makes economic choices that don't quite make logical sense. It's tempting to think professional managers working for a business aren't as susceptible to this kind of weakness. Faced with technological opportunities, for instance, executives should base all their decisions strictly on the merits of each case.

Managing the supply and demand of creativity

By Berend Wierenga, Niek Althuizen and Bo Chen

CEOs frequently talk of creativity as among their top priorities and they are right to do so. Many of the world's most successful companies have forged their success on the creativity of their products, advertising or marketing strategies. Yet while creativity is something that every manager recognises as important, very few know how to manage or generate it.

Individual creative ability versus group collaboration

By Yingjie Yuan

page 20

When companies need to boost creativity to produce a more competitive end product or service, it is natural to assume that teamwork will be the key. That said, individual creative ability can often lead to the best collective outcome. How companies manage this delicate balance between utilising the best talents while keeping everyone feeling involved is more complex than just getting everyone to work together harmoniously.



Introduction



For business survival, an open mind is essential

The race for business success, it is often said, is won by the fast. This is not always true. Business is also won by companies that endure across generations. Through longevity, a continued presence embeds some firms in sectors to such a degree that they effectively develop an almost unassailable position.

One such example is Pakhoed, which merged with Van Ommeren in 1999 to become Vopak, a leading player in bulk liquid storage terminals. Pakhoed has a history stretching back 400 hundred years. Why, then, do some firms last when so many others fall by the wayside? Indeed, as reported in Dr Hugo van Driel's article on p11, the average lifespan of a Standard & Poor 500 firm is a mere 18 years. As the article explains, Pakhoed's longevity can be attributed its '...sense of identity, financial conservatism, and open management style...' While financial conservatism over generations is somewhat beyond the remit of most executives, understanding the value of identity (whether internally or externally) and being open-minded are contributing factors to business success.

Getting the best out of a firm's human capital is a continual challenge, one that is at the heart of the complex employer-employee relationship. The question of how to best motivate people, and whether a stick or carrot approach is more favourable, is discussed by Prof. Frank Hartmann in his article on p05.

Being open to exploring the potential of new ideas, and how it took Prof. Eric van Heck three years to convince the Dutch flower industry to see the advantages presented by "big data", is the subject of his article on p08. On p14, Saeedeh Ahmadi explores the psychological factors that can influence managers' motivations and biases when they are required to make decisions about whether their firm should embrace a new technology; something executives need to understand when assigning managers to such tasks.

Creativity is of exceptional value to firms, yet most senior executives do not know how to manage or encourage it. In their article on p17, Prof. Berend Wierenga, et al, discuss ways organisations can do so, and provide a framework through which this can be achieved. A further challenge when seeking to harness or boost creativity is whether managers should focus on the best individual talents they have or favour group collaboration. Yingjie Yuan outlines her research into this subject on p20.

The articles in this issue of RSM Discovery magazine make one thing is clear: executives need to take a flexible and open-minded approach towards employees and to managing their firms. If they do not, they just might find the timer against which their firm's longevity is measured is counting down just a little too quickly.

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

Finding the tipping point between financial and social incentives

By Frank Hartmann

How does one strike the perfect balance between incentives and threats when trying to motivate people to improve their performance? This is a perennial question for anyone in a position of management responsibility, whether it be a company chief executive, the head of a political party, a sports coach, a teacher or a parent.

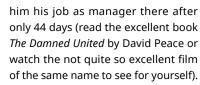
The fundamental issues are that most people need to work and most want to work well. It is the central job of managers to enable individuals to deliver good performance on a consistent basis. There is always a trade-off involved when deciding which incentives to deploy in managing well.

Hard line but ultimately unproven wisdom is that either (a) only offering money works or (b) a pat on the back and an arm round the shoulder will work. What has long been missing is firm evidence, something which no amount of management jargon can disguise. We need facts and fundamentals, rather than what amounts to incomprehensible verbiage and blind faith.

A recent study that I was involved in presents a new way to identify answers. The possibilities in terms of the breadth of potential answers are almost literally endless. What works for one manager or leader in one situation could fail dramatically in another. What works with one group of staff, aspiring politicians, sports professionals, students or offspring might be met with resounding sullen silence by others. The consistently successful manager identifies the right way to treat the group being managed and its individual members.

An excellent example can be found in the works of the highly successful British football manager Brian Clough. He (with his assistant Peter Taylor) worked wonders with players at Hartlepool United, Derby County and then Nottingham Forest in the 1960s, 1970s and 1980s using what can be summarised as a combination of praise, money, social incentives and derision.

Using the same style at Leeds United (without the balancing influence of Peter Taylor) famously cost



Sir Alex Ferguson, the hugely successful long-term manager of Manchester United Football Club, is one of the highest profile managers in any industry in the world. In a managerial career that began in 1974 at East Stirlingshire FC in Scotland, he repeatedly demonstrated an ability to persuade highly talented individuals, some with a monstrously developed self-esteem, to work to his instructions while remaining creative.

A short passage in a book by journalist Oliver Holt about Ferguson and Bill Shankly, the late great Liverpool FC manager, illustrates the point well: 'Shankly loved footballers,' writes Holt. 'Just like Ferguson. He studied them, knew them, understood them, muttered in their ears like a horse whisperer. Kicked some, patted others. Encouraged some, scolded others. Nurtured some, exiled others. He devoted himself to them. Which is why he was such a good judge of them and why he was able to do what so few managers ever achieve and build not one, but two, great sides at Anfield.' Bill Shankly resigned from his job at ▶



"The consistently successful manager identifies the right way to treat the group being managed and its individual members."



Finding the tipping point between financial and social incentives (continued)

By Frank Hartmann

Liverpool unexpectedly in 1974, and died in September 1981, aged 68. Many commentators suggest that his decision to resign was premature and contributed to his relatively early demise. If they are right, it is clear that retirement can be extremely bad for your health. Managers worth their salt should carry on managing for as long as they can.

The book *If you're second you are nothing: Ferguson and Shankly* was published in 2006 by Pan Macmillan. As a summary of the essence of good, instinctive, people-specific, intuitionand knowledge-based management, it would be very hard to beat that single brief paragraph. No jargon. No waffling, just managing.

At this point, I would ask readers to forgive the extensive football analogies but I am a passionate fan of the Dutch football club NEC. Identifying means to incentivise this team helps motivate a good deal of my research.

Even more so since my own 12-yearold son Julian recently began to play for the club at under-13 level. Striking the right balance in terms of incentives to keep him focused on academic as well as sporting development is educational in itself.

Changing times

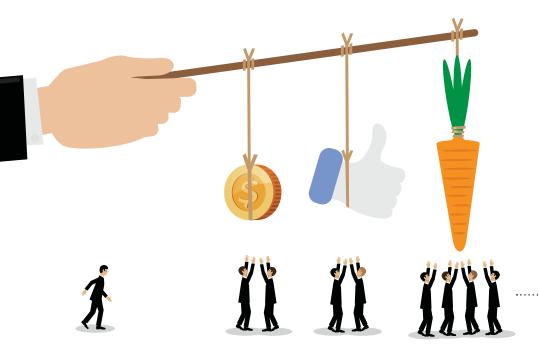
The results of the experiment that the team I worked with carried out as research have convinced me of two things. One, that readers who work in the field of social sciences need to be prepared to face, and welcome, significant change over the next decade or so. The testing, selection, recruitment, development and retention of personnel could be affected in the future as awareness grows of behavioural connections.

Two, finding the tipping point between financial and social incentives is a highly important issue. Economists will stress the financial element. Psychologists will stress the social element. There is no single correct answer that can be applied to each and every situation. It is striking the right balance in the right situation that is the key. Making incentive systems work is vitally important for the overall functioning of organisations and society.

In our experiment, we tested 47 subjects performing the AX-CPT (continuous performance) task to compare the activation of cognitive control modes under social pressure and monetary incentive beyond mere instructions to perform better. We identified three elements that help boost performance in a given task involving qualities such as concentration and effort. The first is simply instructing people to perform better. The second is offering a social incentive. The third is offering a financial incentive.

Our study provided the first known direct comparison of the effects of social pressure and monetary incentive on behavioural performance. Surprisingly, whereas the results showed the two incentive conditions to be comparable in their effect, much of the effect seems to be generated by the presence of explicit instructions to improve behaviour and accompanying monitoring of behaviour.

Our goal was to understand how two prominent formal control mechanisms – social pressure and monetary incentives – affect cognitive control strategies to enhance performance beyond the effect of issuing a simple instruction to perform better. Our results indicate that instructing participants to



improve their performance does lead to proactive control and performance improvement. Both monetary incentive and social pressure lead to further improvement. The best performance in terms of the highest accuracy and shortest reaction times is achieved under monetary incentive. But financial incentives do not work better than social incentives.

Not rocket science

What next? There is clearly much work still to be done in identifying the tipping point between carrot and stick and this study forms part of a wider set on which we are still working. We believe that some points are emerging clearly which could be of practical benefit to managers of all kinds in daily work, and life.

First, get rid of jargon-ridden clichés, banalities and platitudes. Second, think about fellow workers rather than focus on yourself. Third, identify the fundamentals in your industry, your business and your colleagues. The often arrant nonsense that we see repeated and repackaged as new wisdom only confuses management issues. Good management is not rocket science. We achieved it largely by using a very elementary contrived situation, which is a concentration task.

In the course of events, we established, proved and demonstrated that social pressure is as effective as monetary incentive. Even with a task typically used to underline the effectiveness of monetary incentive systems, we showed that social pressure works as well.

"...our findings provide an avenue to start reconsidering the essential role of social pressure and monitoring in organisations, countering prevalent reliance on monetary incentives to enhance performance."

> In this context, I cannot resist using another extract from the Shankly canon of anecdotes. Oliver Holt relates how a journeyman footballer called Jim McCann of Nottingham Forest had a two-day trial with Liverpool. He could not recall meeting Shankly and the trial was not a success, writes Holt. A couple of seasons later Shankly brought Liverpool to the City Ground (where Nottingham Forest play).

> McCann stood in a group of apprentices watching their visitors stride towards the dressing rooms. Shankly caught his eye as he marched past and said 'Afternoon, James'. McCann felt 10 feet tall because the legend that was Shankly had remembered him and had spoken to him. I think the managerial implications are clear here. Treating people well is an essential ingredient of good management, not an option-

> Given the current debate in companies and society about the problems of increasing monetary incentives, our findings provide an avenue to start reconsidering the essential role

of social pressure and monitoring in organisations, countering prevalent reliance on monetary incentives to enhance performance.

The relative effectiveness of monetary incentives versus social incentives is a big theme in management. Traditionally, there are many opinions. Equally traditionally, there is little in the way of fact. With our experimental work, we are providing fact. ■

This article draws its inspiration from the paper The Impact of Social Pressure and Monetary Incentive on Cognitive Control, written by Mina Ličen, Frank Hartmann, Grega Repovš and Sergeja Slapničar, and published in Frontiers in Psychology 7:93. DOI: http://dx.doi. org/10.3389/fpsyg.2016.00093

Frank Hartmann is Dean of Executive Education, and Professor of Management Accounting & Management Control, Department of Accounting and Control, Rotterdam School of Management, Erasmus University.

EMAIL fhartmann@rsm.nl



Selling flowers with analytics

By Eric van Heck

Much has been said about "big data" and its potential impact on the international commercial world. By itself, big data will not transform a business, let alone the global landscape. Ways have to be found to make it financially worthwhile to invest the time, effort and cash required to assemble and then mine significant volumes and varieties of data. Not everyone immediately sees the advantage in going down this exploratory route.

A number of colleagues and I are, however, currently closely involved in an ongoing project that is doing exactly that. Big data is making a noticeable different to the Dutch horticultural sector, where the buying and selling of flowers at auction is worth an estimated €4.5 billion a year.

The interest in big data hasn't happened overnight. It took around three years of coaxing to persuade the powers that be in the industry to allow my colleagues and me to carry out essential initial field experiments. By contrast, the field experiments themselves took a mere three weeks.

When we examined the results harvested in those three weeks and compared them with what happened during the weeks before and after, and data from a control group from an auction elsewhere, we found that prices were more stable and sometimes higher than in the control groups. Working together closely, we have devised an analytics solution that is commercially positive.

As a result, the way in which the Dutch flower industry works is changing dramatically. A traditional market

place with sellers and products assembled on site is becoming a 21st century market space. Pictures on screens are replacing the physical product and bidding is taking place remotely and electronically rather than in an auction room.

Growers who are members of the auctioning co-operative movement are achieving more stable and sometimes higher prices. And buyers are happy too. Buyers prefer more stable prices and even though they sometimes are paying higher prices than has been customary, they are seeing spin-off benefits that more than compensate for their higher purchasing costs. The industry is achieving genuine price discovery for its fresh products in a way that was previously unimaginable.

Many advantages

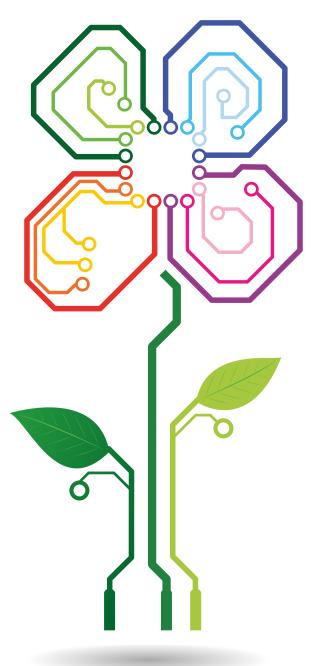
A lot of work has already taken place out of sight to transform procedures and practices in the complex world of flower auctions. I have personally been involved with the flower industry for over 20 years. Much remains still to do in an ongoing project, called the i-Flow project, that will continue until

December 2019. The Dutch horticultural sector has long worked with the traditional Dutch auction at its core. Some readers will already know that the Dutch auction works in a very different way to what, for the sake of simplicity, we will refer to here as the English-style auction.

In an English auction, prices start low and will be expected to increase as competing bidders emerge to push up the price. The lot goes to the highest bidder, however long it takes for that bidder to be the last one left standing. In a Dutch auction, the auctioneer proposes a higher starting price per stem, drawing on extensive experience and market knowledge. The price then drops until a buyer emerges. The first person to make a bid for the lot on offer (or portion of the lot) wins the contest.

This has a number of advantages over the English auction, not the least of which is sheer speed. An experienced auctioneer can launch and execute a new transaction every few seconds. This is of great importance in a sector where the products are so perishable and where we can see 120,000 transactions on 36 auction clocks in six different locations. An entire auction can start at 6am and be finished by 9am. The English equivalent might literally take all day.

A second advantage is that it is very difficult for bidders to collude with one another to distort the price. One cannot signal a willingness to bid because in the Dutch auction there is only one bid, the winning bid. In a Dutch auction there is little or no exchange of information taking place. A third ad-



vantage, as I indicated earlier, is that the auction process delivers genuine price discovery.

Understanding bidders

A major challenge for the auctioneer in the new market space is the inability to see bidders in the room. However, our experiments and advice have started to help them become more aware of the new online and digital technologies and how to make the best use of it. Big data and analytics can help improve the auctioneer's decision-making in a very high-speed environment.

At any one time, the auctioneer observes both sides of the market to create a stable price discovery process.

research had previously been done on the online bidding behaviour of buyers. We now have a data set covering thousands of transactions. We analysed when bidders were bidding and how many times they were bidding. We looked at their time of entry and time of exit on the day and used advanced clustering techniques.

We identified five types of buyer: conservative early bidders; conservative opportunists; conservative analysers; forward-looking early bidders, and forward-looking opportunists.

Our analysis has helped paint a picture of different bidding behaviours, affected by considerations such as budget constraints, appetite for in-

"Working together closely, we have devised an analytics solution that is commercially positive.""

One, there are thousands of growers putting their products into auction. Two, there are thousands of buyers. The role of the auctioneer is to get the best price. One way of doing this, paradoxical as it might sound, can be to split a large lot into a number of smaller lots. This can increase the number of potential bidders and deliver more stable prices.

Another consideration is the type of bidder taking part in an auction. No dividual products and whether the bidder was online or on-site (online bidders are not able to inspect the physical flowers in the warehouse before the auction takes place). The auctioneer is thus able to form an overview of who is participating in an auction and fine tune the setting of minimum purchase quantities. Setting minimum purchase levels low in the morning, for example, will help the auctioneer to achieve more stable prices. It helps



attract smaller buyers and therefore a more mixed portfolio of buyers.

A further twist is that we experimented with withholding the identity (ID) of winning bidders. Prices were more stable and sometimes went up. Why should that be so? We think one element might be that a bidder's ID acts as a signal to other bidders who know each other well. If, for example, they see a major high street retailer buying roses in unusual bulk, they might deduce that the retailer in question is planning a major rose-based sales campaign. They can then decide whether to jump on the bandwagon. Or not.

Another element is that most bidders today are wholesalers, but some retailers can see the results of online auctions. If they know a wholesaler has paid 30 cents a stem they will guery a price offered to them as retailers that is set significantly higher. If a buyer's ID is withheld, retailers do not know what the individual wholesaler paid.

It is a classic win-win situation. The growers in the co-operative get more stable prices and could receive more money for their products. And while the wholesalers might pay a higher price, their own customers will have reduced leverage to challenge prices if they do not know what the wholesaler paid.

This article draws its inspiration from the paper Exploring bidder heterogeneity in multichannel sequential B2B auctions, written by Yixin Lu, Alok Gupta, Wolfgang Ketter, and Eric van Heck, and published in MIS Quarterly, (40:3) pp.645-662. DOI: http://dx.doi. org/10.25300/misq/2016/40.3.06

Eric van Heck is Professor of Information Management and Markets, and Chair of the Department of Technology & Operations Management, Rotterdam School of Management, Erasmus University. EMAIL eheck@rsm.nl

"It is a classic win-win situation. The growers in the co-operative get more stable prices and could receive more money for their products."



The upshot of this ongoing work is that we finally convinced the Dutch flower industry to experiment and we are confident that it is on the right track to become a fully fledged datadriven analytics operation. Other businesses might care to experiment in collaboration with RSM researchers.

The challenge with big data and analytics is to use them to create business value. We firmly believe that we have shown it can be done

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

The forces and factors influencing company longevity

Chris Murray talks with Hugo van Driel

The paper company Stora Enso has a history dating back to the 13th century. Canada's Hudson Bay Company was founded in 1670, and Dutch textile manufacturer Royal Ten Cate was founded in 1704. These firms are still in existence. By comparison, according to recent figures, the average lifespan of Standard & Poor 500 firms is 18 years. How can some companies remain in existence for centuries, while many of today's largest firms might not see their third decade?

In a Business History journal article entitled, A co-evolutionary analysis of longevity: Pakhoed and its predecessors, a team of researchers from Rotterdam School of Management, led by Dr Hugo van Driel and Professor Henk Volberda, explored this question through an in-depth case study of Rotterdambased warehousing and tank storage company, Pakhoed.

Co-evolutionary perspective

As explained by the authors, there are two dominant theories or perspectives related to firm longevity. One perspective credits longevity to organisational characteristics; the other focuses more on environmental forces. Thus, the authors explain, some argue that a company survives because its managers are able to adapt to environmental forces; others argue that corporate structure and core competencies are more-or-less fixed, and that environmental forces are the principal drivers of long-term company survival.

According to the authors, both of those perspectives add value to the discussion but are not, by themselves, sufficient to explain how a firm like Pakhoed stays alive. A better theory of

longevity, they write, is a co-evolutionary theory in which both the company and its environment evolve over time. As the team writes, 'An organisation that is optimally equipped for longterm survival is likely to be one that is adaptive and that maintains a dynamic fit with its changing environment."

This co-evolution between a company and its business environment over time is, the authors believe, the key to achieving a balance between exploitation and exploration, which is the fundamental requirement for longterm survival. Exploitation is focused on 'the current range of activities,' they write, and involves such initiatives as expanding existing markets, improving existing competencies and seeking efficiency gains. Exploration, on the other hand, involves experimentation and risk. Exploration activities, the authors say, 'create new paths or alter existing paths, and are radical and discontinuous.'

In their article, the authors focus on the three firm-level characteristics that along with environmental forces 'determine the balance between exploitation and exploration and thus the longevity of forces.' These three characteristics are:

- 1) A strong sense of identity.
- 2) A tolerant management style and decentralised structure.
- 3) A conservative financial policy.

As the authors explain, 'While a tolerant management style and decentralised structure will induce exploration, a strong sense of identity will guide and channel innovation and ensure that exploitation activity is not infringed upon too much. In addition, financial conservatism both serves as a buffer in bad times and provides the slack needed for exploration.'

Lessons from the Netherlands

In a recent interview, assistant professor van Driel explored in greater depth these three organisational character-

"If the company needed money, the members were more or less obliged to supply it. So the chance of going bankrupt was very low."



The forces and factors influencing company longevity (continued)

Chris Murray talks with Hugo van Driel

istics, basing his comments on the case study at the heart of the Business History article: the story of Rotterdambased tank storage company, Pakhoed.

As described in the article, the roots of Pakhoed are found in three companies: two Amsterdam-based co-operative transport and warehousing companies, founded about 1600, called Blaauwhoedenveem and Vriesseveem: and a Rotterdam-based warehousing company called Pakhuismeesteren van de Thee founded in 1818, whose name was shortened to Pakhuismeesteren in 1850. In 1917, Blaauwhoedenveem and Vriesseveem merged into a company eventually called Blaauwhoed. In 1967, Pakhuismeesteren and Blaauwhoed merged to form Pakhoed. Although Pakhoed itself merged with Rotterdam-based Van Ommeren to form the world's largest independent tank storage company in 1999, the new company - called Vopak - is a clear continuation of Pakhoed.

Strong sense of identity

A strong sense of identity is one of the clearest factors related to longevity, according to van Driel. Both Pakhuismeesteren and Blaauwhoed draw their strong sense of identity from their long histories.

For nearly two centuries starting in 1600, the firm's original companies, Blaauwhoedenveem and Vriesseveem, were part of a small group of co-operatives (in Dutch veem, with plural vemen) with a near-monopoly on the local transport of general goods. In the mid-1800s, the two companies were part of an even smaller group of cooperatives given the newly outsourced warehousing work from the Dutch Trading Company.

The origins of Pakhuismeesteren are found in the warehousing masters of the Dutch East Indies Company (VOC), which existed from 1602 to 1799. Thus, it seemed that by operating in the old warehouses of the VOC, Pakhuismeesteren in Rotterdam was simply continuing the legacy of the VOC. But most important was the fact that the warehouses were in limited supply; by taking over the VOC warehouse, Pakhuismeesteren benefitted from owning the scarce resources on which they could build their warehousing business.

In sum, says van Driel, 'the co-operative identity of the vemen was very strong, and for Pakhuismeesteren it was the same: serving the customer and being an accredited warehousing company gave them a strong identity. And in Pakhuismeesteren, we have the additional factor of being a family firm.'

sponded to the new petroleum industry with a crucial move: it diversified into oil storage. This oil was first stored in barrels and from 1887 in tanks. In retrospect, this was a turning point in the survival of the firm.

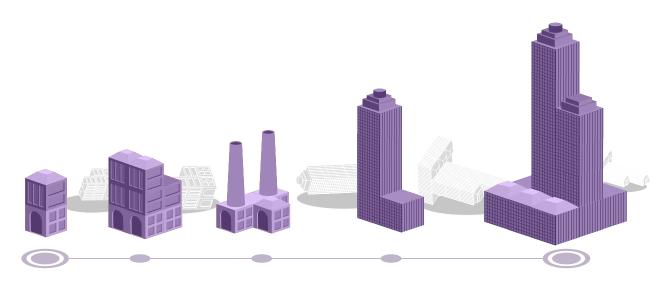
One of the reasons that Pakhuismeesteren was successful is that it moved immediately into the business, thus acquiring precious tank storage capacity in the port. 'The scarcity of tank terminal capacity in Rotterdam has been a major factor in the success of Pakhoed and its forerunners,' van Driel says.

About a century later, Blaauwhoed would also somewhat change its core identity. In the 1950s, Blaauwhoed started converting many of its warehouses into real estate developments - a response to a falling warehousing business and a booming real estate market, especially for industrial conversions. About the same time, the company changed its name from Blaauwhoedenveem-Vriesseveem, as the company had been known since

"...their openness is derived from the fact that they were co-operatives, and that they had an egalitarian structure."

Changing identities

Van Driel notes that a strong sense of identity does not mean that identity has to remain completely fixed during the entire history of the company. In the 1860s, Pakhuismeesteren rethe 1917 merger, to Blaauwhoed. 'We see that the sense of identity becomes weaker,' van Driel says, 'because they removed the suffix veem from the name of the company, which, from a symbolical point of view, was very important.' The



clear message was that warehousing was no longer the focus of the company.

Financial conservatism

Financial conservatism, van Driel says, includes maintaining a low debt and keeping as much money in the firm as opposed to paying it out - 'although,' he adds, 'it depends a bit on what happens with the money after it has been paid out.' For example, he says, 'In some sense, the vemen had a high payout, because 100 per cent of the profit was paid out as part of the co-operative system.' However, the individual members of the co-operative were also responsible for any risks or losses. As van Driel explains, 'there was no money borrowed, no debt for the company. If the company needed money, the members were more or less obliged to supply it. So the chance of going bankrupt was very low.'

Likewise, the family owners of Pakhuismeesteren also tended to keep money in the firm. 'If you look at the Pakhuismeesteren, they had a high payout in the 19th century, formally, but they left the money in a company on a separate account,' van Driel says. 'So, that would qualify for me also as a low payout.'

Open management style

An open, tolerant management style and decentralised structure is also vital to longevity, says van Driel, and the history of both sides of Pakhoed, in different ways, has reflected this openness. 'When you look at the vemen, the oldest forerunners of the warehouse companies, their openness is derived from the fact that they were co-operatives, and that they had an egalitarian structure,' van Driel says.

The origins of the founding of Pakhoed also contributed to its open management style, although for different reasons. As noted in the article, when one of the two VOC warehouse masters died just when Pakhuismeesteren was being formed, the commission agent H.C. Voorhoeve and the Dutch gin manufacturer E.P. de Monchy picked up the torch. However, they also continued with their other businesses, which, says van Driel, gave them a more decentralised approach to the management of the company.

Recent explorations

The research of van Driel and his team makes clear that the key to longevity is that these firm characteristics - sense of identity, financial conservatism, and open management style - help to balance the safety of exploitation and the risk of exploration. Achieving this balance is not always easy. After Blaauwhoed merged with Pakhuismeesteren in 1967, the management of the newly formed Pakhoed

had three core businesses: tank storage, dry goods transport and storage, and real estate. The dry goods sector never brought Pakhoed substantial returns, real estate was discontinued in 1985, and tank storage became even more the backbone of the company.

However, van Driel says, 'there was a vague feeling in the Pakhoed management that they needed to have more than one pillar of the company.' After unsuccessful attempts to find the elusive extra pillar, the company – only in around 2000 - came to the conclusion that: "Well, we are a tank storage company, and that's it." But it took several decades of experimentation and learning to come to this insight.'■

A co-evolutionary analysis of longevity: Pakhoed and its predecessors, written by Hugo van Driel, Henk W. Volberda, Sjoerd Eikelboom & Eline Kamerbeek, is published in Business History Vol. 57, Iss. 8, 2015, Pages 1277-1305. Published online 27 May 2015. http://dx.doi.org/1 0.1080/00076791.2015.1026261

Dr Hugo van Driel is Assistant Professor, Department of Organisation and Personnel Management, Rotterdam School of Management, Erasmus University. EMAIL hdriel@rsm.nl



Decision-making: are managers biased by their characters?

By Saeedeh Ahmadi

Many studies have shown that psychology affects consumers' economic decisions. Indeed, almost everyone occasionally makes economic choices that don't quite make logical sense. It's tempting to think professional managers working for a business aren't as susceptible to this kind of weakness. Faced with technological opportunities, for instance, hyper-logical and highly experienced executives should base all their decisions strictly on the merits of each case.

While their decisions might look that way when outlined on a PowerPoint deck, in a recent study, my colleagues and I have found that middle managers are as susceptible as the rest of us to making decisions that are influenced by personal predisposition and organisational context. In two experiments, my colleagues Luca Berchicci, Justin Jansen, Saeed Khanagha, and I found that experienced managers make decisions about adopting a new technology at their company in the same way most of us buy cars: partly on the merits, partly on their own gut instincts (which in turn depend to an extent on the motivation systems that guide their decisions), and partly through social pressure.

Before these experiments, little was known about how managers' internal motivation systems guide their decisions to explore new technological opportunities. Our research suggests that managers who are more promotion-focused (ie, concerned about positive outcomes such as growth and advancement) than preventionfocused (ie, concerned with negative outcomes such as failure and loss) tend to be more open to deviate from cur-

rent practices, and start experimentation with a wider range of alternatives. By contrast, the prevention-focused managers are highly biased toward their current products and not willing to tap new knowledge or change current routines. The prevention-focused were also affected by their organisation's opinion if it was also more sensitive to losses than gains.

Trade-offs

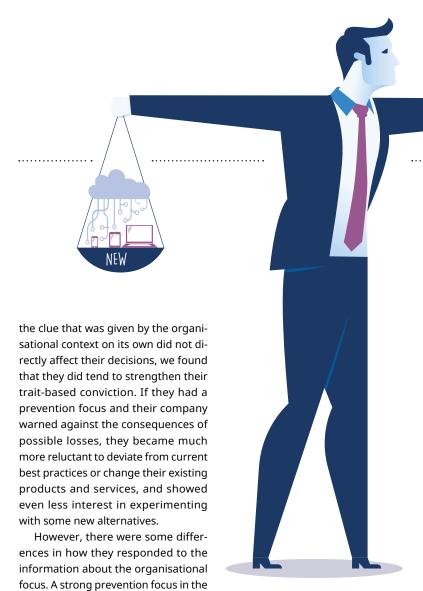
Our research consisted of two experiments that study the trade-offs managers encounter when they face a new technology. We asked managers and management students to simulate decisions about how their company should pursue cloud computing technology.

In the first experiment, we asked 142 experienced product managers at a large multinational telecom company to evaluate a highly complex project with many interrelating factors and uncertainties and a simpler project, both of which involved shifting some IT operations to the cloud.

First, we measured the promotion and prevention-focus of participants with a questionnaire. Next, we put them in two different organisational contexts. They were told either that they worked for a hypothetical organisation that emphasised the consequences of success and possibility of achievements and growth (promotion-focused context) or an organisation that often warned against possible losses and emphasised consequences of failure (prevention-focused context). We then asked them to make some decisions about how they would approach the new technology.

Managers with a stronger prevention focus were biased toward sticking to current processes, products and services. They were more hesitant to experiment with new technology and try new alternatives than managers with a stronger promotion focus. Although

"If executives think it is time to explore a new technology and experiment with different alternatives, they might want to assign a promotion-focused optimist..."



that a promotion focus and concentration on a complex situation both involve analytical left-brain activities, and as a result, these effects reinforce each other. In a complex situation, the promotion-focused manager whose left brain is already very involved may look for more information from the environment to make sure that they are making the correct decision. If they find the organisation's motivational context matches the desires of their own growth-oriented personality, this will further encourage them to engage in a broad search for new alternatives.

This might in turn benefit the organisation because some of these new and far-reaching alternatives could result into very novel outcomes.

In the second study, 137 master degree students in a management programme at a large business school took a survey similar to the one we gave the experienced managers in the first experiment. We had relatively similar results despite differences in age and experience.

Motivations as a tool

The results of these experiments suggest that executives should envision the desired outcome when assigning managers to a project. If executives think it is time to explore a new technology and experiment with different alternatives, they might want to assign a promotion-focused optimist to survey the terrain. On the other hand, if the company is concerned with the reliability of a process, they may want to look for someone with a stronger prevention orientation, a manager more sensitive to failure and more focused on fulfilling the obligations. They should also be mindful of how different sets of motivations might function under different circumstances. For instance, a prevention-focused manager who is highly sensitive to failure may be too >

focused managers. The prevention motivation system guided the behaviour in both complex and non-complex projects in the same way. When we looked at the effect of the promotion system, we found out when the project was very complex, the context played a more vivid role in motivating the promotion-focused managers to embrace

organisation extended prevention-fo-

cused individuals' bias against explora-

tory activities. However, the complexity

of the task did not seem to intensify the

lack of interest of highly prevention-

Why might this be so? We believe our finding may be related to the fact

risk-taking and experimentation.



"Managers with a stronger prevention focus were biased toward sticking to current processes, products and services."

reluctant to make necessary changes if the organisation is also sensitive to losses. Similarly, a promotion-focused individual may respond quite differently depending on the level of complexity of a given task.

Thinking about your own motivational system is also a good task to set yourself before you apply for a job, take responsibility for a project or pursue any goal. All of us have both prevention and promotion tendencies, but some of us lean more toward one of the two motivational systems. Exactly which one takes the lead in a specific situation depends on factors such as how strong that trait is in our personality or which context we are in at the time of action, etc.

In fact, we are not bound by our traits, and traits can be encouraged or discouraged by the larger cultural tone of the organisation. However, choosing an organisation where the dominant tone matches our own motivational predisposition may make it easier to serve the company usefully even as we achieve our own goals.

A source of strength

None of this should be interpreted to mean that all cautious managers ought to be rooted out. There is no "right"

temperament in business. Instead, a combination of personality, task nature, and organisational context shape our decisions and behaviour. Sceptical managers often perform extremely useful roles.

Further, I hope managers draw from this research not just that they are as susceptible to biases at work as they are at home - although they are but also the fact that if we understand our own and our subordinates' biases and don't run away from them, we can make them a source of strength, not weakness. Understood and deployed correctly, our innate preference for promotion or prevention can be used to help us achieve more rather than less.

Of course, there is still a lot we don't know. What impact does organisational structure and authority have on the choices we make? How do prevention and promotional foci interact within individuals? Although we have designed the experiment to suggest that these foci operate independently in a group, people sometimes have both a high prevention and a high promotion focus, or neither focus. Do individuals who are high on both scales employ different strategies at different points of time? How do they confront a tradeoff between two sets of motivations? Fortunately, I tend to be somewhat promotion-focused, so I'm hoping to find answers to these questions.

This article draws its inspiration from the paper Are Managers Motivated to Explore in the Face of a New Technological Change? The Role of Regulatory Focus, Fit, and Complexity of Decision-Making, written by Saeedeh Ahmadi, Saeed Khanagha, Luca Berchicci, and Justin J.P. Jansen, and published in the Journal of Management Studies, 54: 209-237. DOI: http://dx.doi.org/10.1111/ joms.12257

Saeedeh Ahmadi is a doctoral student, Department of Strategic Management and Entrepreneurship, Rotterdam School of Management, Erasmus University.

EMAIL ahmadi@rsm.nl

RSM Expertise

The Department of Strategic Management & Entrepreneurship at RSM offers unparalleled expertise in a wide range of areas of importance to managers and scholars. These areas are grouped under the themes of strategic management, strategic entrepreneurship, and global strategy.

More information about the department and its work can be found at:

WEB www.rsm.nl/sme



Managing the supply and demand of creativity

By Berend Wierenga, Niek Althuizen and Bo Chen

CEOs frequently talk of creativity as among their top priorities and they are right to do so. Many of the world's most successful companies have forged their success on the creativity of their products, advertising or marketing strategies. From the powerhouses of the digital age like Google and Apple, to the "old economy" companies like Unilever, creativity is a leading point of differentiation and competitive edge. Yet while creativity is something that every manager recognises as important, very few know how to manage or generate it.

Few companies have the resources in place to facilitate and support creativity. Employment practices rarely include tests for it in candidates, and the high-tech creativity support tools often available in organisations are underutilised. These neglected resources are the lifeblood of an organisation's creativity - the untapped supply of its creative ideas. And that's a problem.

Research reveals the importance of creativity. But as a relatively new field, most insights centre on how to achieve highly original ideas in products and advertising. We know from experience that the most original idea does not always win the race. We also know that creativity is important across the entire marketing mix, not merely in products and advertising. The questions remain therefore: how is a manager to know how best to stimulate creativity in their organisation; which types of creativity should be fostered, and for which element of the marketing mix?

Our paper, Managerial Decision-Making in Marketing: Matching the Demand and Supply Side of Creativity connects what we know about creativity in marketing to provide managers with practical, decision-making advice for managing creativity across the entire marketing mix.

Different shapes and colours

Creativity and innovation are often used interchangeably, but they are distinct concepts. Creativity is the act of thinking up an original idea to tackle a problem, and is the earliest stage of the innovation process. It is also consists of two distinct elements: originality and usefulness, with varying weight attributed to each. An advertisement for instance, might use a creative idea that has a high level of originality to cut through competitive clutter. A new product might use a creative idea that makes novel combinations of existing features, making it low on originality but highly useful in terms of satisfying consumer needs.

When creativity is understood as a diverse concept that must fulfil different needs across the full marketing mix, one can see that highly original ideas could be counterproductive in the wrong context. Managers must therefore not only know how to stimulate creative ideas but also how to stimulate different types of creative ideas - a sliding scale from more original to more useful - and how to match them with the right marketing needs.

Three main processes are used to produce creative ideas: fluency, persistence, and flexibility. Fluency is the process of generating a large number of ideas, in accordance with the theory that "quantity breeds quality". Produce enough ideas, and some are bound to be brilliant. Japanese car manufacturer Toyota, for instance, allegedly generates over two million ideas per year.

Persistence involves an in-depth exploration that doesn't deviate far from the original idea category, but reaches novel concepts by virtue of digging deeper (using "within the box" thinking). An example is the IKEA hackers >

"Managers must therefore not only know how to stimulate creative ideas but also how to stimulate different types of creative ideas..."



Managing the supply and demand of creativity (continued)

By Berend Wierenga, Niek Althuizen and Bo Chen

community, who make small innovations to existing products. These ideas are most likely to be useful as well as original.

Finally, flexibility involves switching between idea categories and perspectives with out-of-the-box thinking. These ideas are best for radical innovations as they tend to be highly original.

Matching supply and demand

Managing creativity begins with framing the challenge as a supply and demand situation. On the demand side, managers have to deal with marketing requirements across the marketing mix of the four Ps - promotions, products, place and price, each of which reguires variety in their creative ideas. On the supply side, managers must identify and manage all the individual and organisational resources that can generate creative ideas, from the creative capacities of staff and employment practices to managerial support.

- 1. Choosing between originality and usefulness. Does your marketing need require a creative idea that is more original or useful? Consider this carefully before choosing the process through which you will generate your ideas. Which marketing domain is it - advertising or pricing, for instance? What are the specifics, constraints, and objectives? Is it a utilitarian product or hedonistic? What is your budget?
- 2. The right process for the desired outcome. In the early phases of a project, the fluency process is a good option for generating a wide range of interesting ideas, some of which could be explored further. When incremental innovations are sought, the persistence process will deliver original yet useful ideas. For radical innovations, opt for flexibility: focus on breadth, use acrosscategory idea generation for the most original ideas.

"Managing creativity begins with framing the challenge as a supply and demand situation."

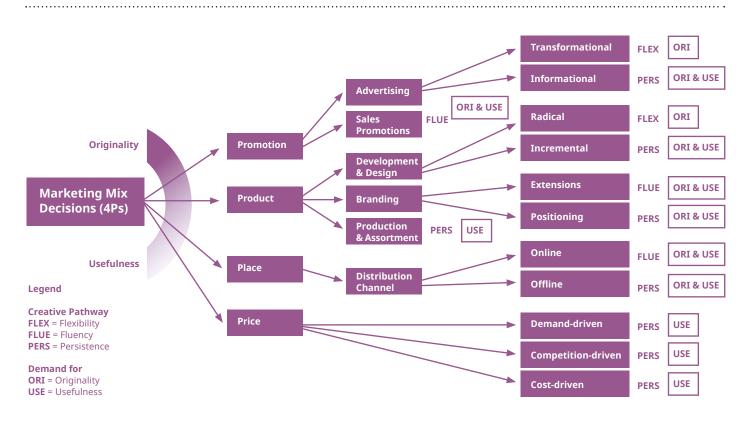
So what steps should they take to stimulate creativity, and when? Fostering creativity is not a science. We do know, however, that the following basic principles can be found in many of the most creative organisations and that their impact has been proven in multiple studies.

3. Allocating individual resources to the task. Recruit creative, experienced, and motivated individuals to take on the task. Ask to see a creative portfolio, or use creative ability tests such as the Torrance Tests of Creative Thinking. You can also outsource the task to specialist agencies or consultants, or solicit creative input from consumers. Boost the creative performance of existing employees with creativity-enhancing practices, such as exposing them to creative employees, or through creativity training programmes.

4. Tackling creative tasks with teams.

When a task requires in-depth exploration of an ideas category (persistence), compose your team of individuals with substantial expertise within the target domain or analogous domains. When a task demands a large numbers of ideas (fluency) or a considerable breadth of diverse ideas (flexibility), compose your team of individuals with diverse backgrounds and expertise.

- 5. Choosing the right creativity-enhancing practices and tools. Offer creativity training or workshops for employees who want or need to strengthen their creative thinking skills. Depending on the task, more domain-specific training may be offered. If individuals are not intrinsically motivated, motivate them extrinsically with a reward system that recognises individual contributions. Carefully chosen input constraints (time, money, materials, etc.) can stimulate a deeper exploration of the idea space (persistence pathway).
- 6. Adopting the best management style. Employ a supportive and encouraging management style without engaging in close monitoring, which could stifle employee creativity. Empower employees by tolerating failure, encouraging risk taking, and letting them do their job in an auton-



omous manner. Feedback should be developmental and creative co-workers can serve as role models.

7. Selecting the right IT-enabled tools.

IT-enabled creativity support systems have been spurred into existence by our demand for creative ideas. These use various stimulation tactics to deepen or broaden an individual's search for ideas. The best tools should offer support for knowledge activation as well as idea production.

8. Assessing the outcome(s) of the creative task. Evaluate the creativity, originality, and usefulness of the generated ideas with the help of two to

three domain experts or a survey of target consumers. Pilot test the best ideas within the organisation or within a consumer focus group. If a creativityenhancing technique has been used, assess its effectiveness in terms of idea quantity and quality. If necessary, adjust the procedure used to obtain the ideas. Assess the likelihood of success and potential resistance for highly original ideas. Where ideas have been implemented, document the results in terms of sales and profitability. ■

The paper Managerial Decision-Making in Marketing: Matching the Demand and Supply Side of Creativity, written by Niek Althuizen, Berend Wierenga,

and Bo Chen, was published in the Journal of Marketing Behavior, 2016, 2: 129-176. DOI: http://dx.doi.org/ 10.1561/107.00000033

Berend Wierenga is Professor Emeritus of Marketing, Department of Marketing Management, Rotterdam School of Management, Erasmus University. EMAIL bwierenga@rsm.nl

Niek Althuizen is Associate Professor, Department of Marketing, ESSEC Business School. EMAIL althuizen@essec.fr

Bo Chen is Assistant Professor of Marketing, Sungkyunkwan University. EMAIL chenbo@skku.edu



Individual creative ability versus group collaboration

By Yingjie Yuan

When companies need to boost creativity to produce a more competitive end product or service, it is natural to assume that teamwork will be the key. That said, individual creative ability can often lead to the best collective outcome. How companies manage this delicate balance between utilising the best talents while keeping everyone feeling involved is more complex than just getting everyone to work together harmoniously.



In industries where there is an incessant need to innovate in order to beat off competition, having the right creative resources in-house is essential. IT and telecommunications are just two examples of sectors where a company cannot afford to stand still for long existing products have to be renewed, rebooted, rethought and relaunched to quench the thirst of consumers for the latest version while staying ahead of market rivals.

Some of the most famous examples are inevitably associated with the original brains behind the idea - for Virgin think Richard Branson, for Apple think Steve Jobs, for Microsoft think Bill Gates, for Facebook think Mark Zuckerberg... There is no denying the pivotal role that the creative genius of such individuals played from the outset. However, what companies looking at such examples need to grasp is how to juggle outstanding talents with the more subordinate members of their creativity teams. In short, how to balance team workers and flair players?

Team creativity goals

Businesses seek to generate what is known as the "capital of creativity" with several objectives in mind - to revolutionise existing industry standards, raise public expectation, make a profit, and extend their long-term reputation. This is achieved via successful teamwork, as opposed to individual efforts or an all-encompassing corporate approach. If all goes to plan, successful in-house collaboration between team members will give the companies in question a competitive advantage

over their rivals, create jobs to achieve these objectives, become more financially stable, receive higher levels of income, and enjoy longer-perspective financial prosperity. No one is claiming the process is easy. Executive decisions have to be made in terms of existing resources, how best to invest in them, and what additional resources need to be brought in to pull off such a plan.

One of the first questions that senior managers and HR professionals should be posing themselves is as simple as the above strategic plan - do we plough our money into individual creative brilliance or pool our resources by managing and strategically planning teamwork? If creative ability does not already exist within a company then it can be recruited, so what this question underlines is that the generation of the capital of creativity is ultimately an organisational issue.

Team creativity has to be nurtured over a period of time in order to devise an innovative product, service, process, strategy or idea. This involves a collective sharing and elaboration of information to achieve certain business goals. However, "collective" does not necessarily mean that everyone enjoys the same level of input into and contribution towards the final outcome.

Most valuable players

Whether it is senior managers investigating how to allocate existing resources or HR heads trying to identify new talent, both face the same dilemma. The company wants to achieve a collective result but to what extent is the process collective or based on individuals? To

use a sporting analogy, do you prioritise your "most valuable player" or do you opt for a more balanced group effort?

Eric Cantona, the famously gifted and charismatic French footballer of the 1990s, was widely viewed as the most naturally talented of his generation. However, he was eventually evicted from the national team, which subsequently went on to win the World Cup in 1998 under the dour but effective leadership of Didier Deschamps, who Cantona had famously labelled as a "water-carrier", meaning a player with no defining talent. On that occasion, the pooling together of resources proved more successful than reliance on individual brilliance. On the flipside, the same Cantona transformed a struggling Manchester United and

that this can only truly be carried out based on an "additive" model, where everyone's contribution has some impact on the final decision. This is all very well for companies that operate 24/7 via brainstorming but this cannot be the reality of day-to-day business.

At some point someone has to sift through the various ideas being shared and reach a decision. Above all, it is unrealistic to assume that all members of a team share the same creative ability. It is for this reason that greater attention needs to be paid to an alternative mode - a "disjunctive" model, where the creative "star" has the most say in the final outcome. However, the wisdom of such a model needs to be tested by taking into account the conditions in which a company is working.

"...it is unrealistic to assume that all members of a team share the same creative ability."

undoubtedly contributed significantly towards their success during his time with the team. Clearly, there is no onesize-fits-all solution to creativity in any type of professional organisation.

Whether one is operating in corporate, sporting or other circles, there exists one common denominator. Before a final creative decision is taken, information and ideas have to be generated, shared and elaborated.

Research into this aspect of teamwork in business has so far assumed

Level playing field?

A recent study into resource allocation options for companies seeking to boost creativity approaches the issue from a number of angles. An empirical study focusing on sales teams of 75 bakery stores from one company in the central part of China was conducted via surveys sent to team leaders and sales members, as well as corporate assessments obtained from the company's HR department. The objective? To establish the link between the level >



Individual creative ability versus group collaboration (continued)

By **Yingjie Yuan**

of information generated, elaborated and shared at a lower level before being passed up the ladder and the resultant impact that the "creative star" has on the final outcome. The second phase of the study, conducted via a systematic review of team creativity studies, was designed to understand how much the professional conditions (namely the level of task demand and the technical level of the industry in question) influence the final choice of additive or disjunctive working model.

Different ball game

The first clear signs to emerge from the study regard the creative star-versusteam player dynamic. In short, the lower the extent to which information is created and elaborated from beneath, the higher the chances that the creative stars behind an initiative will produce results. This is by no means to say that all businesses should put all their money on one individual, hence the second phase of the study that investigates the quandary at task and industry level. The key to the study is to identify, according to set-up and conditions, whether the additive or disjunctive model will provide a business with the most accurate means of predicting their creative potential.

Of the various results to emerge from the second phase, it is clear that companies operating in lower-tech in-

First-choice team selection

The issue deserves continued exploration, especially regarding what type of contribution individuals can bring to the team process. Are we talking purely in terms of original ideas and resources or innovative ways of working? The latter should certainly not be overlooked as the whole root of the problem for any business is how to get their human resources working together, regardless of to whom they eventually give the whip hand.

However, one thing is clear. Business practitioners in industries where creativity is crucial need to get into their minds that the issue is, above all, one of resource allocation. Having the talent is one thing. Knowing how to organise and structure it and get all those elements of differing abilities to work together is another ball game entirely. But a careful choice between involving all in the process and giving the final word has to be made, once the industry- and task-specific conditions have been factored into the equation. A first-choice team does not always comprise just the top talents but also those who work together the best.

This article draws inspiration from Yingjie Yuan's PhD thesis, *The Emergence of Team Creativity: A social network perspective*, published as part of the ERIM PhD Series Research in Management. It may be freely downloaded at

Will https://repub.eur.nl/pub/100847

Yingjie Yuan is Assistant Professor, University of Groningen. MAIL yingjie.yuan@outlook.com

"It is in the higher-pressure, more technical spheres of business that greater reliance should be placed on individual creative brilliance..."



dustries (where the level of task demand is lower) can be much more confident when opting for a more allround "team effort". It is in the higher-pressure, more technical spheres of business that greater reliance should be placed on individual creative brilliance rather than consensus project management.

RSM DISCOVERY - live links to authors and departments

Frank Hartmann

Dean of Executive Education, and **Professor of Management Accounting** & Management Control, Department of Accounting and Control

- ► Email: fhartmann@rsm.nl
- ► Personal homepage
- **▶** Department of Accounting and Control

Eric van Heck

Professor of Information Management and Markets, and Chair, Department of Technology & Operations Management

- ► Email: eheck@rsm.nl
- ► Personal homepage
- ► Department of Technology & Operations Management

Saeedeh Ahmadi

PhD Candidate, Department of Strategic Management and Entrepreneurship

- ► Email: ahmadi@rsm.nl
- ► Personal homepage
- ► Department of Strategic **Management and Entrepreneurship**

RSM DISCOVERY

3rd Quarter 2017

RSM Discovery is published by

EDITOR-IN-CHIEF

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

EDITOR

Russell Gilbert (editor@englisheditors.nl)

RSM POLICY DIRECTOR

Wilfred Mijnhardt

ERIM EXECUTIVE DIRECTOR

Monique van Donzel

MARKETING DIRECTOR

MEDIA & PUBLIC RELATIONS MANAGER

Marianne Schouten

DESIGNERS

ISSN

© 2017 Rotterdam School of All rights reserved



Hugo van Driel

Assistant Professor, Department of Organisation and Personnel Management

- ► Email: hdriel@rsm.nl
- ► Personal homepage
- ► Department of Organisation and Personnel Management

Berend Wierenga

Professor Emeritus of Marketing, Department of Marketing Management

- ► Email: bwierenga@rsm.nl
- ► Personal homepage
- ► Department of Marketing 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

www.erim.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.

