IN SEARCH OF EVIDENCE

Steering clear of the 'sirens' in consulting and management[i]

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Like the seafarers of old, managers are constantly searching the horizon for dependable clues that can help them navigate often treacherous business environments. Consultants provide those navigational guidelines and pointers. They bring 'evidence' to bear, or so one would assume, in their efforts to help managers reduce the uncertainty they face when implementing change. When 'evidence' is hard to come by, insights based on 'providence' and 'eminence' may be useful, but must be added to the equation carefully and conscientiously.

Managing organizations is a difficult, risky and demanding 'trade' involving intricate, multi-dimensional and tough challenges. Small wonder that consultants are frequently called upon to contribute their presumably objective and experienced analytical perspective and thereby help managers see the wood for the trees when mapping a path for their organization. Consultants (and managers, too, for that matter) are often perceived as 'merchants of hope': people look to them for guidance. Many like to think they are indeed just that: armed with a broad and fresh perspective, promising alternatives and simple and effective solutions, they provide managers with a welcome 'can do' outlook on the business challenges at hand.

Managers tend to respond enthusiastically to the straightforward solutions of consultants, typically well-packaged and eloquently delivered. Relieved to see a way forward between a rock and a hard place, they eagerly jump into action to implement the recommendations (thus enhancing the market reputation of the consultants). After a while, however, much enthusiastically embraced advice proves to be little more than shallow 'uncertainty reduction' peddled by unscrupulous consultants whose elegantly presented solutions frequently address symptoms rather than root causes and sometimes only make matters worse for their clients. More worrying still is that managers and consultants may derive their 'solutions' from some 'successful and proven' management concept which they happen to have heard about, without asking themselves whether the recommendations in question fit the specific organisational context they are dealing with.

Consultants and managers alike have a moral obligation to investigate the specific context of the challenges they face; to develop possibly relevant insights based on the hardest facts available; and to translate these insights into fitting interventions and recommendations.

This is the 'evidence-based' approach, whereby managers and consultants develop their decisions and actions from the most reliable pieces of evidence they can possibly find, looking at findings from scientific research, their own carefully considered experiences and whatever they have available to them, as well as the specific characteristics and context of the organisation they serve. However, this evidence-based approach is often obstructed by 'providence-based thinking' (Schramade, 2006; 2014), that is to say, decision-making and actions inspired by popular beliefs or ideology rather than available 'evidence'. Providence-based thinking tends to manifest itself in the myths and misconceptions that exist in many professions and fields of expertise (Lilienfield, Lynn, Ruscio, & Beyerstein, 2010) – practitioners who refer to 'providence' typically justify their approach by citing a lack of quality 'evidence'.[1] Finally, in addition to 'evidence' and 'providence' as a basis for management intervention, there is the 'eminence-based' approach, i.e. thinking and doing based on the opinion of this or that authoritative figure or specialist rather than careful consideration of the available 'evidence'.

The purpose of this paper is to review the different types of support for management intervention. First, we explore why popular but rather poorly substantiated ideas tend to carry so much weight in the consulting industry – and in management in general. Next, we discuss and illustrate 'eminence-based' and 'providence-based' support for management interventions, testing each against available 'evidence':

- *'Eminence-based' support* – some of the most iconic pieces of management thinking have been found to rest on very flimsy grounds, including, for example, the ideas expounded in *Good to Great* (Collins, 2012).
- *'Providence-based' support* – similarly, two current examples of popular management interventions, the 'new way of working' and job/employee satisfaction surveys, illustrate how management ideas can develop traction without much, if any, substantive proof for their effectiveness.

As our review of 'eminence-based' and 'providence-based' thinking demonstrates, the ideas in question do not stand up against the available 'evidence'. Nevertheless, these are popular and influential ideas that many consultants and managers apparently subscribe to. We conclude our review with some reflections on 'evidence' vis-à-vis 'providence' or 'eminence' as a basis for moving organisations forward.

Why do fashionable ideas often carry so much weight?

Several factors may explain the popularity of one-sided, unproven or even demonstrably erroneous opinions and the professional actions inspired by them. First of all, reputable publishers can promote the distribution of pseudo-scientific management theories and models (Clark & Greatbach, 2004; Micklewaith & Wooldrich, 1996). The many books on General Electric and Jack Welch are a case in point. Secondly, there is the 'word of mouth' or 'social virus' phenomenon: flawed and sometimes downright folkloristic convictions are being distributed across professional and other communities, assuming a life of their own – and when they do, their familiarity is easily mistaken for credibility. One example of this is the oft-stated assertion that '70 per cent of all change efforts fail', a popular but nevertheless careless statement (Ten Have & Visser, 2004). A third explanation concerns the selectiveness of our personal perception and memory. Human perception of reality tends to be flawed; we perceive this reality through our own 'lenses', and these are skewed by our prejudices and expectations, producing a naive realism (Ross & Ward, 1996) which makes us unwittingly vulnerable to misconceptions. An example of the selectiveness of human perception and memory is our tendency to focus on 'hits', i.e., remarkable coincidences, instead of 'misses'. Many people, for example, will readily recall this or that greedy executive, while ignoring the existence of many decent managers as the latter do not fit their prejudice-informed expectations. Yet another example is the perception shared by most people that change is difficult or even painful, a view proposed by (the writings of) professionals such as therapists and management consultants whose working days are routinely filled with arduous and painful change efforts. Such professionals – and those consuming their views of change efforts – effectively rule out that other reality, which is that many people and organisations are in fact capable of realising greater and smaller changes in a natural and harmonious fashion, without suffering major traumas or emotional upheaval. Obviously, successful cases of do-it-yourself change have little to offer the protagonists of professional outside intervention for want of professional challenge, commercial opportunity, sensation, and culprits or victims. The fourth and last possible explanation for the popularity of thinly supported management interventions (other than the influence exerted by publishers, folklore, and the selectiveness of human perception and memory) has to do with the easy solutions or quick fixes alluded to earlier. People have a tendency to favour those solutions for their real or perceived problems as they require the least effort. Many dieting regimes, for example, are popular in spite of the fact that the overwhelming majority of adepts quickly regain their former weight once they stop following the regime (Brownell & Rodin, 1994). Similarly, many organisations are addicted to popular management approaches, applying one after the other – TQM, BPR, Lean – without ever achieving substantial and lasting improvement.[2]

The latter explanation highlights the deeply felt need which makes professionals embrace ideas, concepts, opinions and convictions which have little to do with either 'evidence' or the context of the specific organisation concerned. It is a tendency witnessed among solution suppliers and buyers alike. Solution suppliers tend to promise more than they can deliver, and their clients typically are all too happy to buy the promise. This dynamic is not exclusive to management and consulting, of course, it can also be witnessed in other professional contexts. In her newspaper columns, the Dutch writer Asha ten Broeke (2015) often discusses the practices of scientists and journalists. In her search to explain why these professionals and their 'customers' or audiences behave the way they do, she prefers looking for clues in the human condition and social dynamics to easily blaming malpractice on the inevitable 'rotten apples in the barrel' and the gullibility of the general public. Scientists and journalists are indeed looking for reliable glimpses of reality or the truth, she says, but they also have an innate desire to 'score'. Managers and consultants, too, want to score while searching for the reliable glimpses of truth that will allow them to get a grip on the reality of their organisational and business processes. Ten Broeke points to an important problem in this respect: truth is not easily captured because it is contradictory, complicated and messy. 'That is why solid scientific and journalistic research is so time-consuming,' she says, noting there is no ready market for 'slow messiness' and citing journalist Felix Salmon's observation that contemporary culture will only allow for stories that make sense from A to Z. Salmon has dubbed this the 'TED culture', after the annual Technology, Entertainment and Design (TED) meetings in California, where thinkers and practitioners are given 18 minutes in front of the audience to expound their ideas or experiences. In other words, we live in a world where everything is supposed to fit, make sense and function properly, owing to established or emerging 'thought leaders' and their 'ideas worth spreading'. Sagan's (1995) notion that 'Something which is too good to be true, usually is' is rejected in this 'TED culture'. Until their protagonists are found out, 'realistic-sounding fairy tales' appear to be the norm – whether they be spectacular research findings in psychology, astonishing revelations by journalists, stories of heroic acts, or the next trailblazing management concept.

Eminence vs. evidence

Many pretentious insights generated by managers and consultants have failed the test of closer inspection. When asked to cite inspiring management research, management students typically refer to the Hawthorne studies, Peters and Waterman's *In Search of Excellence*, Jim Collins's work and Geert Hofstede's cultural dimensions (1980). Although not entirely without evidence these studies primarily owe their attractiveness to the eminent names associated with them: their credibility is 'eminence-based'. Furthermore, they have in common that (a) they are all, directly or indirectly, about culture, and (b) that the data (and data analyses) and research support for the purported findings are, at the very least, open to question: in all these cases, the 'evidence' is limited or fragile.

Let us briefly look at each of them:

- *Hawthorne studies*

The original sources showed no systematic change in production levels whatsoever following any of the interventions studied (Franke & Kaul, 1978; McQuarrie, 2005).

- *In Search of Excellence* (1982)

The claim was certainly impressive: ‘excellence’ in performance allegedly could be traced back to, and explained by, eight specific organisational characteristics in particular. It seemed a blueprint for success – at least it was received as such, and the authors did little if anything to deny that it was. Here again, the lofty claim was in shrill contrast to the feeble underlying research and the limited and largely anecdotal ‘evidence’. The book contains 140 anecdotes, mostly about the heroics of specific managers. While the book and its message were hugely successful, the alleged excellence of the 43 companies featured in Peters and Waterman’s review left something to be desired. Only one in three outperformed the *S&P 500* during the first half of the 1980s. Most of the companies discussed suffered a decline in profitability, and one decade on were performing below the market average. In fact, 14 of the 43 companies were in serious trouble only a few years after the book came out. Tom Peters admitted the ‘fraud’ in the December 2001 issue of *Fast Company*: ‘This is pretty small beer, but for what it's worth, okay, I confess: We faked the data.’

- *The work of Jim Collins*

Jim Collins’s influential studies, among the most popular of the past 15 years in management, have been scrutinised by Rosenzweig (2007). Collins in essence wanted to find out why certain ‘ordinary’ companies managed to make the transition to excellent performance levels, while others did not. Rosenzweig shows that much of Collins’s data came from problematic sources: the general media and interviews with managers from the companies concerned, looking back on past achievements – i.e., ‘retrospective reports’, a type of source vulnerable to distortion and prejudice (Miller, Cardinal, & Glick, 1997). In his books, Collins primarily relates the views of specific ‘insiders’ and observers of the companies reviewed, offering no solidly founded assertions, thoroughly crafted answers to the central question, solid research, nuance, or adequate descriptions of the ‘limitations’ of the research employed.

- *Hofstede’s cultural dimensions*

Hofstede, too, is subject to considerable criticism. According to Schein:

‘*The problem with this approach is that it assumes knowledge of the relevant dimensions to be studied. Even if these are statistically derived from large samples of items, it is not clear whether the initial item set is broad enough or relevant enough to capture what may for any given organization be its critical cultural themes. Furthermore, it is not clear whether something as abstract as culture can be measured with survey instruments at all.*’ (1990, p.110).

Schein later (1996) added the following about Hofstede's research:

'*We have gone too quickly to formal elegant abstractions that seemingly could be operationally defined and measured, i.e., centralization-decentralization, differentiation-integration, power, etc., and failed to link these to observed reality. I say "seemingly" because in the effort to define such concepts, we often relied on further abstractions, i.e., questionnaire responses, and began to treat the abstractions as the reality. Not only does this create fuzzy theory and research that is made significant only by massaging the data statistically, but the results are often useless to the practitioner.*' (p. 232)

Work-related dimensions are deduced from 'lots of data' on the highly dubious assumption that '*cultures really are identifiable and exist independently of behaviour, so that behaviour is moulded in the "template" of the culture*' (Voestermans & Verheggen, 2007, p. 21). Further criticism of Hofstede's work concerns flaws in the design process for his five cultural indices, the fact that they cannot be replicated and the notion that his research probably does not touch on culture but most probably on socio-economic factors instead (Baskerville, 2003).

While typically astonished when first confronted with it, students and practitioners tend to respond with remarkable cheerfulness to such criticism of ostensibly leading management research. In the end, many seem to think, these studies are still a good 'yarn'. It reminds us of that famous Italian expression: se non è vero, è ben trovato – even if it is not true, it is well conceived. As one professor once put it: 'And yet, the Hawthorne experiments have opened up a new dimension.' Admittedly, there is some truth in that: an insight or idea can be tremendously valuable in science and daily practice, irrespective of the grounds for it. 'Not theory' (Sutton & Staw, 1995) – i.e., initial hypotheses, a set of intertwined insights, or a diagram – can often lead to research that produces solid (either confirming or disproving) evidence, and possibly the development of well-founded theory. The issues concerning the work of Collins and others would be less serious if their 'new dimensions' or 'not theories' had been presented as 'providence-based'. But they were not. On the contrary, in all the cases cited here, references to mountains of data, the scientific method and research constitute important elements of the story, creating the impression that the insights presented are based on solid, methodologically sound reasoning and, as such, high-quality 'evidence'. In short, studies like these are unethical in their approach and presentation, to say the least, and potentially damaging in those cases where managers and organisations decide to heed the recommendations provided.

Providence vs. evidence

For an examination of 'providence-based' advice and interventions, we will now take a closer look at two specific examples of management practice: the ‘new way of working’ and employee satisfaction surveys – both based on the premise that the recommended approach enables organisations to improve performance by making staff happier, more committed or more inspired.

The ‘new way of working’

Many organisations have by now embraced the ‘new way of working’, typically heeding consultants’ advice or enlisting their support in the implementation of the approach, whereby individual and confined work spaces are replaced by open-plan offices and flexible work stations. It is a modern layout, and authoritative consulting firms say it produces results. As the number of organisations adopting the approach swells, it increasingly becomes the obvious act to follow for organisations with mounting financial challenges or ambitions – and little or no time for reflection. Very few indeed ever seem to inquire whether the presumed effectiveness of the ‘new way of working’ stands up in the face of hard scientific research. Similarly, rarely if ever do organisations seem to take the time to investigate specific dimensions of the intervention, for example under which types of conditions the approach has proven effective, and whether there are undesirable side effects. The same probably applies to the consultants who propagate the ‘new way of working’, as to do so would be contentious and would open a can of worms. However, available scientific research does indeed point to undesirable side effects. A meta-analysis of 49 existing studies showed as long as 10 years ago that the introduction of open plan offices resulted in a sharp increase in the number of interruptions to people’s work routines. Also, a considerable body of research has shown that such interruptions undermine performance, particularly in knowledge work. For example, every single interruption, even when lasting only seconds, has been found to double the risk of mistakes. It also typically takes more than 20 minutes on average before work on an interrupted task is resumed (De Croon, Sluiter, Kuijer, & Frings-Dresen, 2005). In other words, if the ‘new way of working’ amounts to no more than creating open plan offices, there is a more than even chance that cost savings owing to a reduction in the required floor space are undone by a drop in worker productivity. To what extent are the consultants who propagate the ‘new way of working’ familiar with these research findings? Will they openly share the risks and possible side effects with their clients? Managers may still decide to implement the ‘new way of working’, even when told about the risks and side effects, as they may well conclude that the expected benefits outweigh those disadvantages. Also, a proper understanding of possible drawbacks or downsides should inspire preventive measures or carefully crafted risk management. The potential damage of providence in this example is caused primarily by consultants who unscrupulously *sell* the ‘new way of working’ without appraising or employing the available knowledge and contraindications.

Measuring employee satisfaction

In our second case example of ‘providence-based' management thinking and doing, we look at the practice of measuring employee satisfaction, which, over the past two decades or so, has grown into a multi-million dollar industry of management consultants who conduct annual job or employee satisfaction surveys for corporations. When asked why they have their employee satisfaction measured each year, executives and HR managers tend to respond with indignation, arguing that employee satisfaction is an important indicator and therefore must be measured at regular intervals. But when asked to probe more deeply and explain what this 'important indicator' stands for exactly, the initial indignation gives way to hesitation and, after some prodding, the answer typically includes a reference to 'performance'. That is also the stated claim on the websites of many consulting firms who 'do' employee satisfaction surveys: happy workers are productive workers. Many executives and HR managers seem to accept that statement at face value. Also, they seem to think, many other organisations measure employee satisfaction and so it must be worth the effort. But why, precisely, should happy workers put in a greater effort than unhappy ones? Also, how exactly does employee satisfaction relate to productivity? Is there a linear relationship? In other words, if satisfaction, expressed on a scale from 1 to 10, drops by one point, does that imply that productivity drops by 10 per cent? Or is there a threshold value involved – for example, productivity will only start declining once employee satisfaction has fallen below 6 on a 10-point scale? And conversely: if managers or frontline supervisors make their staff happier still, will the latter also try even harder? More fundamentally, is satisfaction really the most important indicator for worker performance? Or are there other, more powerful indicators? Consultants tend to shy away from such probing questions – and so do their clients. Neither does anyone ever ask about the scientific evidence for the assertions published on consultants' websites. Executives and HR managers would do well, however, to ask these questions and take the trouble of personally appraising the available scientific literature. Even in a review of the topic 'job satisfaction' on Wikipedia (2015), it is noted that:

'[…] *job satisfaction has a rather tenuous correlation to productivity on the job. This is a vital piece of information to researchers and businesses, as the idea that satisfaction and job performance are directly related to one another is often cited in the media and in some non-academic management literature.*'

In support of this view, reference is made to a meta-analysis (Judge, Thoresen, Bono, & Patton, 2001) reporting very weak correlation between employee satisfaction and performance. In fact, in this particular meta-analysis (based on 254 studies comprising a total sample of over 54,000 workers) a correlation of no more than 0.3 was found. In other words, a mere nine per cent of organisational performance can be traced to employee satisfaction – the remaining 91 per cent being attributable to other factors. Moreover, the authors correctly point out that there may well be an inverse relationship, i.e., that high performance possibly results in high satisfaction instead of the other way around. For more than 30 years now, scientific research has found a weak relationship at best between employee satisfaction and performance, and in fact no such relationship at all when outcomes are corrected for variables such as personality (Bowling, 2007). The same goes for other factors which are often measured in organisations, such as ‘commitment’ or ‘involvement’. For these, too, correlations of no more than 0.2 or less have been found (Riketta, 2002). At the same time, high correlations with performance – notably among knowledge workers – have been found for certain other factors which are rarely, if ever, measured in organisations, one example being social cohesion, for which a correlation of 0.7 has been found (Chiocchio & Essiembre, 2009). In spite of all these findings, organisations continue to spend large sums of money each year on employee satisfaction and commitment surveys. Once more, one wonders to what extent the external providers of such surveys are aware of the available scientific evidence. Do they tell their clients, professionally and honestly, about the limited added value of this annual ritual? Or do they merely collect the proceeds of ‘providence’ eagerly embraced by needy clients?

Evidence vs. eminence and providence

‘Providence’ and ‘eminence’ can be important and useful alternatives in those instances when little or no evidence is available to those seeking to address the challenges they face. ‘Providence’, ‘eminence’ and ‘evidence’ can also reinforce and supplement each other. By way of illustration, let us contrast ‘eminence, providence and evidence’ with ‘ethos, pathos and logos’. ‘Ethos’ involves an attempt to convince one’s audience by referring to an authoritative source. ‘Pathos’ involves an appeal to the audience’s emotions or its affective dimension by presenting an image, a conviction, a perspective or a metaphor. ‘Logos’, then, is about rational reasoning, employing facts, knowledge and findings from research in combination with the reliability of the sources referred to. Proposals for employing specific therapies or management interventions may, conceivably, fail to appeal to and convince the target audience when the argumentation is entirely based on ‘logos’ and ‘content’ – particularly when the proposed therapy or intervention has a bearing on human interaction and the social environment. The proposed intervention may be more readily accepted when proposed by someone of authority who is credibly linked to its content. The effect may be stronger still if content and authority are coupled in an appealing manner, so that the ‘content’ and the solution are connected (in honest fashion) with the target audience’s feelings and deeper needs, for example a desire to be guided forward and being able to ‘believe’ in something. In short, ‘eminence’ and ‘providence’ can strengthen the presentation of ‘evidence’ – but without evidence, they risk being a toxic pair.

The issue, therefore, is not that 'evidence' is admissible whereas 'eminence' and 'providence' are not, but rather that corrupt or unscrupulous manifestations exist, not least in the world of management and organisations, causing those in need of guidance to embrace 'authorities' and 'broadly shared views' resting on flimsy or contentious grounds at best. There is also the possibility of 'eminence' and 'providence' being called upon to support assertions which have already been put to rest by powerful evidence. That would always be an unprofessional act, whether committed wittingly (a case of unscrupulous practitioners) or unwittingly (amateurs). The norm should be to make a professional commitment to a conscientious and 'evidence-based' approach – in the interests of the client, other stakeholders, the profession at large, and one's own professional and personal integrity or 'wholeness'. This is no mean ambition, for it could sound the end of entire 'industries', for example the employee satisfaction measurement community. Major interests, sums of money and 'players' are at stake. Whistle-blowers face potentially devastating consequences, as Rosenzweig can confirm: according to reports, he has been receiving far fewer invitations to management gatherings since his debunking of popular misconceptions about companies.

Notes

1. 'Evidence' tends to be in short supply for emerging methods or technologies, for example, or when circumstances change rapidly. Barends, Rousseau and Briner (2014) point out, however, that it would be wrong even then to assume that there is nothing one can do, or that one has no option but to 'rely' on 'providence'. Under such circumstances, the way forward is instead to 'learn by doing' in the most structured fashion possible, constantly experimenting and systematically assessing the outcomes of experiments, and critically studying what works and what does not. This way, organisations create their own 'evidence'. Pfeffer & Sutton (2006) even regard this sort of 'prototyping' as the essence of evidence-based management.
2. For a more extensive overview of explanations, see Lilienfeld et al. (2010).

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