Ashridge Strategic Management Centre

Members Meeting

1st March 2018

Minutes of Meeting

In attendance

Paul Barrett	Babcock International
Tom Ford	Rolls Royce
Richard Horstmann	SBM Offshore
Chelsea McManus	Shell
Mark Meldrum	National Grid
Philip Meyers	ABF
Daniah Robertson	BP
Patrick Scherrer	Helvetica
Jordan Strik	SBM Offshore

From Ashridge Strategic Management Centre

Felix Barber
Stephen Bungay
Rebecca Homkes

Rebecca Homkes and Stephen Bungay: Mastering Uncertainty – How to Make Better Decisions in an Uncertain World

Stephen and Rebecca have been working on this topic with Anthony Freeling, who was unable to attend because of his duties as President of Hughes Hall, Cambridge. The frameworks and approaches have been discussed with a number of clients, some of whom have also put them into practice.

<u>The Nature of the Problem</u>

The word uncertainty is used to describe two quite different phenomena: a real state of the world, covering the totality of events which are uncertain because they have not yet been fully determined; and a state of mind, the 'feeling of uncertainty', which produces anxiety and which human beings therefore seek to avoid.

The former makes it impossible to make good predictions; the latter makes it hard to make good decisions. The issue is therefore how to make good decisions when you cannot make good predictions.

The specific problem is that people tend to react to uncertainty in one or both of two dysfunctional ways. They either ignore it and try to make predictions, which results in delusion; or they allow it to dominate them and fail to take decisions, which results in paralysis.

This can occur at the highest level in an organization. For example, Pfizer began developing the drug torcetrapib to treat heart disease in the 1990's. Early evidence suggested that it raised blood pressure, but trials continued and in 2001, CEO Hank McKinnell publicly described it as 'an enormous opportunity'. Manufacturing facilities were built in 2005 and in December 2006 his successor Geoff Kindler predicted at a press conference that it would be 'one of the most important compounds of our generation'. Just three days later, trials were terminated and Pfizer's value fell by $21bn. Bold predictions were combined with timid decisions.

Rebecca and Stephen suggested some underlying attitudes to uncertainty which should be challenged and gave some examples:

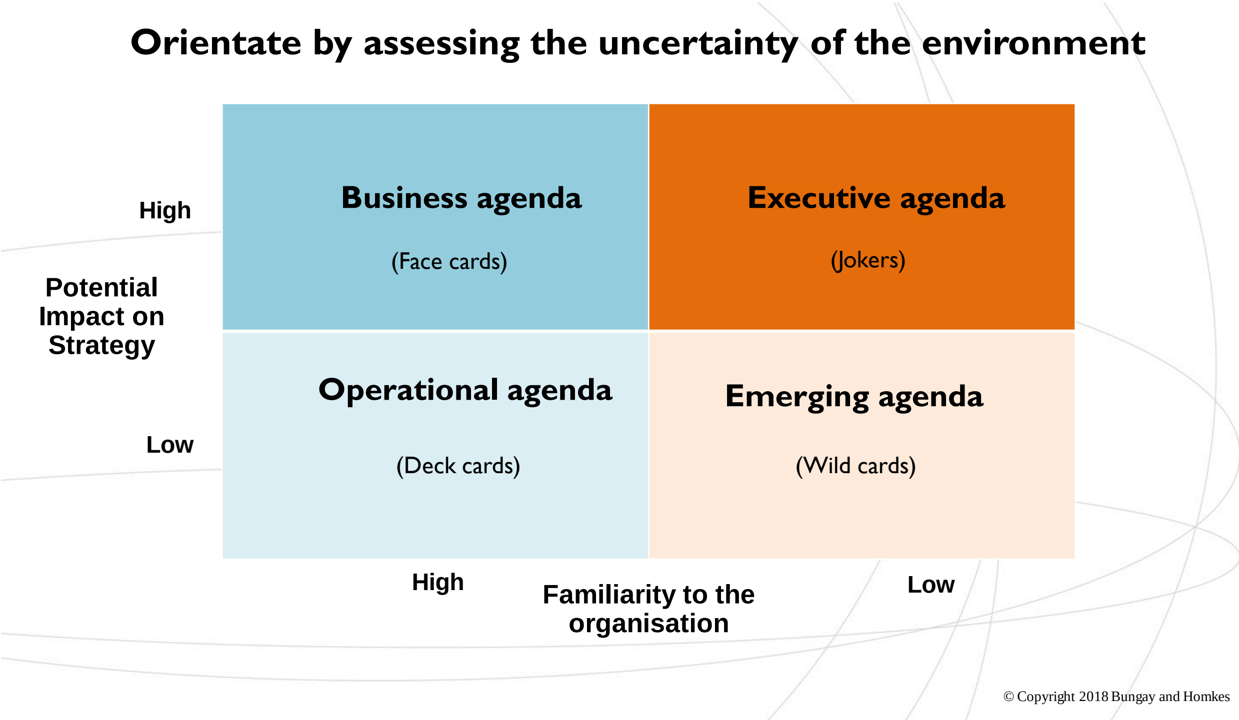
> It is not something which can be ignored, but a fundamental state of reality we have to take account of. Shell has recently made a public statement that it will abandon forecasting, consider a range of possible futures when planning and seek to 'minimise maximum regrets'.
>
> In itself, real uncertainty is neither good nor bad, but the totality of future events which may or may not occur. Unpredictable chance events can be exploited, as they were by IKEA at their largest store opening in Stockholm in 1965. With the store overrun by 18,000 customers, the store manager in desperation allowed customers to pick up goods directly from the warehouse and take them to the tills. When he apologized to Kamprad a few days, later, Kamprad decided to introduce customer warehouse access as a standard feature in all IKEA stores.
>
> Uncertainty is not something to adjust for, but should be placed at the centre of a progressive, step-by-step approach. When WH Smith realised that e-cards, though a very small percentage of the market, could be a threat to their card business, they began watching how new entrants developed and developing an understanding of how the business worked. After some time, they took a stake in the player who was not the leader but had the best technology. It became apparent that as the incumbent they had skills the new entrants lacked, invested more heavily and have since turned a potential threat into a successful business for themselves.
>
> Uncertainty is not something which can be dealt with later whilst optimizing for immediate results but a source of competitive advantage based on relative rate of learning. The Mercedes F1 racing team has institutionalised this principle and invested in learning capability. For example, they seek to be able to carry out more wind-tunnel tests in any given period than their rivals. Each season follows a learning curve of performance improvement, and so despite being behind Ferrari at the beginning of 2017, they caught them up and then surpassed them over the course of the summer, going on to win both championships.

Adopting practices such as these involves a change in mindset. There are costs and barriers to doing so which fall into three main categories: psychological, external pressures and internal processes. The approach is designed to address all three, but in practice this requires persistence over a long period of time.

Initial Orientation: Assessing Uncertainty

Most commentators agree that adopting the right approach depends on the nature of the uncertainties and suggest various ways of categorizing the environment (e.g. as complicated or chaotic, or according to its degree of predictability, or as requiring classical, adaptive, shaping or visionary strategies). This sounds eminently sensible, but the problem is that, by the authors' own admission, getting this diagnosis right is what managers find to be the most difficult step.

In looking for a more useful way of assessing uncertainty, Rebecca and Stephen suggested considering two dimensions: the *familiarity to the organization* and the *potential impact on strategy*, as shown in the 'uncertainty matrix' below:



Companies routinely deal with some kinds of uncertainty and have approaches and processes in place for dealing with them. Some are specific to the industry. Here, on the left-hand side of the matrix, the past can serve as a guide, relevant data is available and so strategy can *probabilistic*. Other uncertainties are posed by unprecedented situations or new technologies and represent discontinuities. Here, on the right-hand side, the past is not a guide to the future and there is no relevant data, so strategy has to be *exploratory*.

Of the many uncertainties companies face, some familiar ones are part of day-today operations, (e.g. updating oil refinery technology, testing pharmaceutical compounds) whereas others are less frequent and higher impact and so form part of the business agenda (e.g. drilling new wells, taking a compound to Phase Three). Of the unfamiliar ones, only some demand decisions now. Some are emerging and require a watching brief, others involve big bets, and should be on the executive agenda. The list on the right would include AI, the rise of China, driverless cars and social media. The matrix should be understood as dynamic, for all of these have been emerging, some (like China and AI) for decades and some (like driverless cars and social media) only for a few years. As it becomes clearer that their impact will be considerable - even though the nature of that impact may remain uncertain – they migrate up or across. In some businesses, using social media in marketing is becoming routine, in others it still has the potential to challenge the foundations of the existing business model.

Each quadrant of the matrix is characterised in terms of where the agenda should lie, and also has a name from playing cards. Rebecca and Stephen have found that clients can generally relate to these and find it easier to place the issues they face on this matrix than on those which have been suggested by others.

There were a range of comments from Members, which included:

- We are quite dependent on oil field economics and pricing. We run all kinds of models for the oil price from $20-80. We have a base case and track scenarios around it. At a price of $40-50 there are probably two projects for our equipment, at $60-70 maybe 6-7. Given this high variability we have also considered alternative uses of our skills to spread risk…but have gone away from this idea a bit now.

- We are much more diversified, which helps us. We are also in businesses like food that are pretty stable. Because of this we don’t get into the situation of betting the farm at the portfolio level. But we still have tough choices at the BU level and the BU’s have a hard time dealing with uncertainty.

- We try to identify plausible scenarios and plan against them.

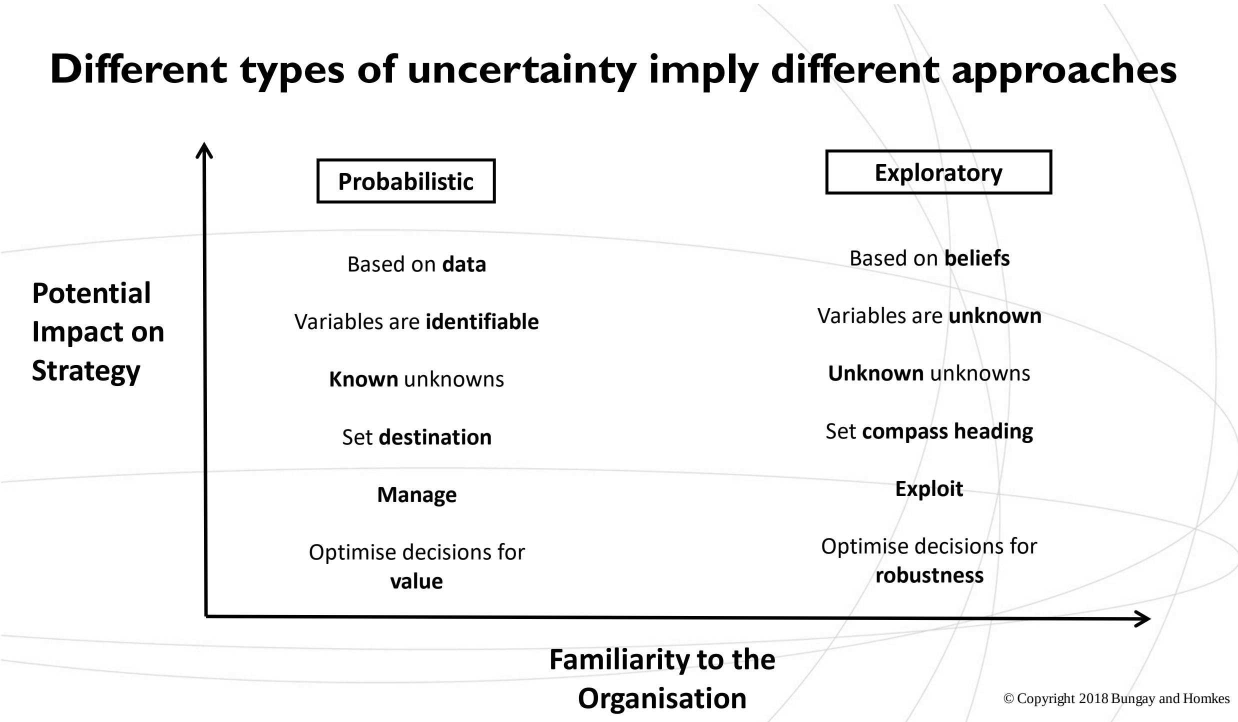
- In insurance there is a general shift from left to right. Part of our answer on the right is participations and joint ventures.

- On your matrix, we are trying to do so well in the bottom right that we move to top left without ever hitting top right. Are you suggesting that this is in fact the ideal?

- What is top right depends on who you are. For Shell $200 million is no big deal, but it will be for others. The idea of moving from bottom right to top left is interesting.

These observations prompted some discussion of the dynamics implied by the matrix. There is no intention to suggest that there is one best way, but there is a natural pattern for things to be identified as bottom right, some of these to move upwards, and then to move left, whilst others may fall away. In some cases, emerging issues that were identified early have been resolved and have moved from bottom right to top left and are now moving down to bottom left as the learning is embodied in operations. This changes - or at least modifies - the business model, but in a non-disruptive way. Sometimes a fast-learning incumbent can establish advantages over a potential disruptor and then also exploit them against their existing competitors.

One implication of the matrix is that it is necessary to have the organization and managers trained up for deck and face cards, but they need different custom processes for unfamiliar uncertainties. The differences across the X-axis could be summarized as follows:



Approaching Uncertainty: Sets of Practices

The next session focused on what to do if you find yourself on the unfamiliar right-hand side. Rebecca and Stephen call this ‘exploratory strategy’ because the approach is similar to that used by explorers in the age of sail: they took rough bearings, set a deliberate compass heading and pace, followed that course for a set time and then took new bearings before setting a new heading and speed. By repeating this process they were able to get a remarkably accurate view of where they were and where to go next, despite using basic instruments. A key to this was the skill with which they used them.

The overall approach to exploratory strategy has four main aspects:

Approaching uncertainty: practices

1. Start by orienting yourself and assessing the situation: What do you know? What do you believe? And what assumptions are you making so you can move forward?

2. Being directionally correct is better than heading straight in the wrong direction, but you DO need alignment. So agree on compass heading and pace

3. Don't waste time predicting the future – instead focus on avoiding the killers and looking for kickers

4. You've got options: Choose a stance, take action, observe the effects and reappraise

1. In using the uncertainty matrix to get an initial orientation, you need to distinguish between what you know, what you believe and what assumptions you making. Although you will not know everything you would like to know, you are not completely ignorant and you should muster what facts you can. However, facts do not in themselves create understanding. As simply extrapolating past data is inappropriate, understanding has to be reached by creating a set of beliefs about what is happening, your position, how competition will unfold and what is likely to drive success. It is important to debate these and write them down. If that is not done, beliefs are likely to be conflated with facts. Beliefs are not items of faith, but plausible hypotheses which can be tested and are subject to revision. The resulting beliefs inform the specific assumptions made in planning the next move. One example of a company which adopts this approach is Spotify, which embodies its beliefs in a set of 'North Star' goals which are translated into 2-year goals and realised by placing a set of 10-12 'bets', which are projects. The 'bets' are reviewed every quarter, the 2-year goals every year and these reviews can lead to a re-appraisal of the 'North Star' goals and beliefs.

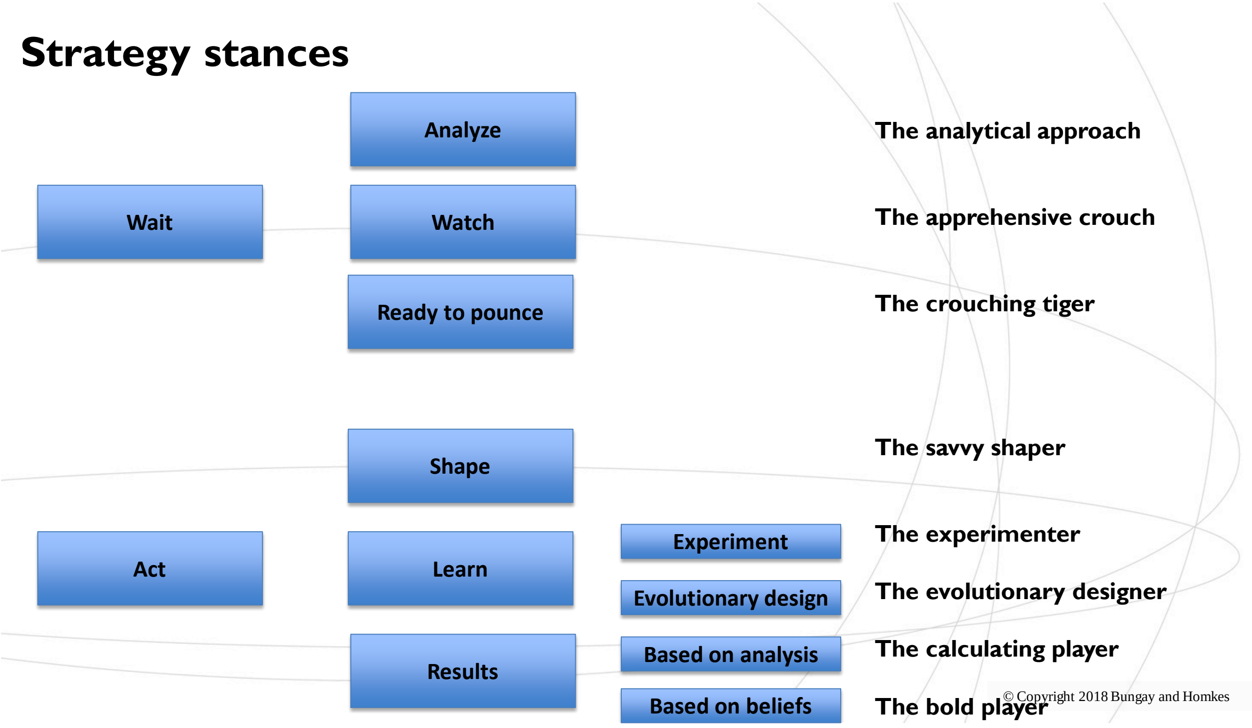
2. Each move has to be directionally correct rather than precise, but to make purposeful progress you need alignment. The way to set direction is therefore not to create a long-term vision of a future destination, but to

give a compass heading and pace (i.e. ‘Go West’ rather than ‘Go to Los Angeles’). The compass heading could cover what capabilities we need to build, no regret moves we could make to open up future options and any other steps that need to be taken or initiated now in order to be competitive in any plausible future. For example, when Reuters began its turnaround in 2002, debates within ExCo over the future shape of the company (e.g. as a focused specialist or broad generalist) proved to be unresolvable. Reuters therefore stopped trying to articulate a vision and launched a change programme to reduce cost, rationalise the IT landscape, introduce a new product set and improve customer service in order to drive revenue growth, without prejudicing where that growth might come from other than in the near term. By 2005, revenue began to grow and profits rose 28%.

3. Rather than trying to make single-point predictions, focus on avoiding what could break you – ‘killers’ – and expose yourself to what could make you – ‘kickers’. In an uncertain environment, outcomes are likely to be determined by unpredictable, unlikely, but high-impact events – Nassim Taleb’s ‘Black Swans’ or Donald Rumsfeld’s ‘unknown unknowns’. Whereas in a familiar environment the best option may be the one giving the highest value, in an unfamiliar one the best option may be the one that is most robust. A robust option is one which is not disastrous under any scenario, and may offer a bonus under one fortunate one. The practical implications may be illustrated by contrasting the attitude of Citigroup’s Chuck Prince who in the summer of 2007 announced that the bank would maintain its enormous portfolio of CDO’s ‘until the music stops’ with Goldman’s Lloyd Blankfein, who claimed to spend 98% of his time worrying about the 2% worst contingencies. In late 2007 Citigroup lost $20bn and 30% of its market value, whereas Goldman, which had unraveled its CDO position in 2006, enjoyed its most profitable year ever, earning $17.6bn. What prompted Goldman to do so was not a better ability to predict the future but an awareness that if CDO’s went sour, it was vulnerable. It acted to reduce that vulnerability before it became exposed. At the other end of the spectrum, kickers can be invited by playing in serendipity-rich environments, where there is high uncertainty creating potential opportunities. Pfizer’s development of its biggest-selling drug Viagra was down to a decision taken in the early 1990’s to explore the role of nitric oxide because it was a ‘sexy’ compound involved in various bio-chemical pathways about which not a lot was known.

4. Having set a compass heading and pace for a certain period of time, re-appraise the situation based on new information from the environment and take the decision to adopt a specific stance. A ‘stance’ is a decision to wait or act. One may choose to wait in order to analyse, watch or get ready to pounce by building the capability needed to take action. One

may choose to act in order to shape the environment, learn or get results. Success would be measured in different ways – Shell, for example, accepts a lower RoI on investments in which it is acting to learn. Stances will evolve over time. A waiting stance design to watch and analyse new developments may then change to acting to learn by taking a stake in another player or carrying out experiments, and finally change into acting to get results based on an analysis of what has and has not worked. See the table below:



Members had a number of comments:

- We have been moving away from developing a vision. It is all very well to have one, but a vision without a value against it is not helpful. We are moving towards identifying 'no regret' moves to ensure we do not pursue visions without value;
- Supportive of the idea of accepting a lower RoI on exploratory investments;
- There is an old joke: "How do you recognise a pioneer?" - "By the arrow in his chest". Experimenters remind me of that. I like the idea of having a range of stances and that you may just want to wait instead of taking action. I also like the idea of exploring "hot areas", like your "sexy compounds" in pharma, to find a winner there. So maybe the formula is "pick where you are a good parent within the hot area". Incumbents have very interesting advantages such as power of infrastructure;

- Learning investments are a good idea. The way you have laid out the stances shows you have to be clear why you are doing something – or not doing something.

Identifying and managing barriers

Finally, Rebecca and Stephen briefly returned to the subject of barriers and costs. They have observed that although much of what they are suggesting can be found in the literature and the tools available to help are not new, the required mindset is rare and it is not common to find the practices adopted. They believe that there are good reasons for this. Managers face a number of barriers to thinking and acting in this way, and organisations face costs if they do so. Part of the answer therefore lies in identifying the cost and barriers and either managing them down or accepting them, and the trade-offs this entails.

Psychological barriers can be addressed by using evidence from outside experts, and allowing traditional methods to break down by confronting people with the impossibility of forecasting; by creating a decision portfolio, formulating strategy as an intent, and creating scenarios.

Process barriers can be addressed by building incentives around long-term value creation, sharing risk and return with suppliers and partners, reducing the costs of trialing, taking minority stakes and creating a learning budget.

External pressures can be countered by building closer relations between corporate communications and strategy, restricting forecasts to short-term financials, communicating the principles and rational for strategy to build a case for long-term investment case, and discontinuing EPS guidance.

However, moving in the direction suggested is a long-term process and needs persistence. The attitude of the CEO is a major factor, and the CSO can help by acting as a Chief Uncertainty Officer and insisting on strategy reviews every year instead of every 3-5 years.

Round the table comments

- There are a lot of good things to think about in dealing with my issues – it is a useful way of framing them;
- Getting beliefs on the table is useful. We need to establish a common language for communication;
- We have the benefit of having a diverse portfolio of businesses facing a different range of issues. It may not be sensible for us to use the toolkit at the corporate level but it might well be useful in individual businesses;

- It's useful to see examples of what to do at different points in time, e.g. WH Smith. The shift between quadrants seems to be happening faster than before, and that has an impact on which stances to take. We would like to understand more about what to do ahead of the adoption curve and what to do when we are almost there and adoption is starting to take off;
- I'm afraid we are quite a long way away from this. Perhaps a start would be to avoid getting a false sense of security from being "on plan" in an uncertain environment when what really matters is what is going on around us;
- Uncertainty is at the heart of strategy - with no uncertainty a plan would be enough and you would not need a strategy. I think you need different approaches for different levels of uncertainty. It seems a bit like the approach of start-ups is "fail fast, learn fast, then you don't need strategy". We can't afford to do that.
- Orienting by laying out beliefs and assumptions and testing them is key. Unfortunately to some degree, we are quite good at weathering storms not because we are particularly clever and fast at adapting but because we are such a large, heavy slow-moving ship.

Future meetings

Rebecca reminded Members that following the success of the Strategy Bootcamp held last year, another has been scheduled for 17th – 20th September 2018.

This four-day Bootcamp is aimed at people in the strategy or business development function at either at the corporate level or in a business unit. It is geared towards those who want to refresh or supplement their current strategy skills, but also accommodates those who have not received much training in how to use strategy tools and analysis.

In the course of the four days, we will cover a fairly comprehensive range of topics for the strategist, including (but not limited to): developing strategy; strategic and financial tools for designing business strategies; understanding value creation, value propositions, and competitive advantage; portfolio strategy tools; communicating strategy; strategy under uncertainty; and strategy execution.

Members are invited to reserve places, and can contact Angela Munro for further details including prices.

The next Members' Meeting will be held from 13.00 – 17.30 on 21st June 2018. Note that this is one week later than originally scheduled.

It will take place at the same venue, The Royal Horseguards Hotel, 2 Whitehall Court, Whitehall, London SW1A 2EJ.

The topic will be 'Holistic Value Management' and will be led by Neil Monnery.