



"It's not good enough just to have the best boat...": Picture credit: Reuters

'Behavioural innovation' will help the UK Water Sector meet AMP7 challenges

As the UK Water Sector enters the planning process, Professor Anthony Conway and Garry Sanderson argue that insights from behavioural science can be applied to help with the competitive challenges ahead.

The water sector in England and Wales is globally unique, with privatised companies providing water and sewerage services to over 50 million consumers, under the watchful eye of a set of regulatory bodies. Since privatisation in 1989, these companies have invested more than £130 billion in their assets, through tightly planned and controlled 5-year investment programmes, known as AMP cycles.

Last week, Ofwat, the economic regulator, published their draft methodology for the 2019 price review – outlining how companies should plan to serve (and charge) customers in England and Wales for the AMP7 period, from 2020 to 2025. The industry will now be focusing on the near 300 page report, and considering the ways in which they will respond to Ofwat's drive for benefits to customers in 4 key areas:

- great *customer service*
- long-term *resilience* in the round

- **affordable bills** for all
- **innovation** and new ways of working

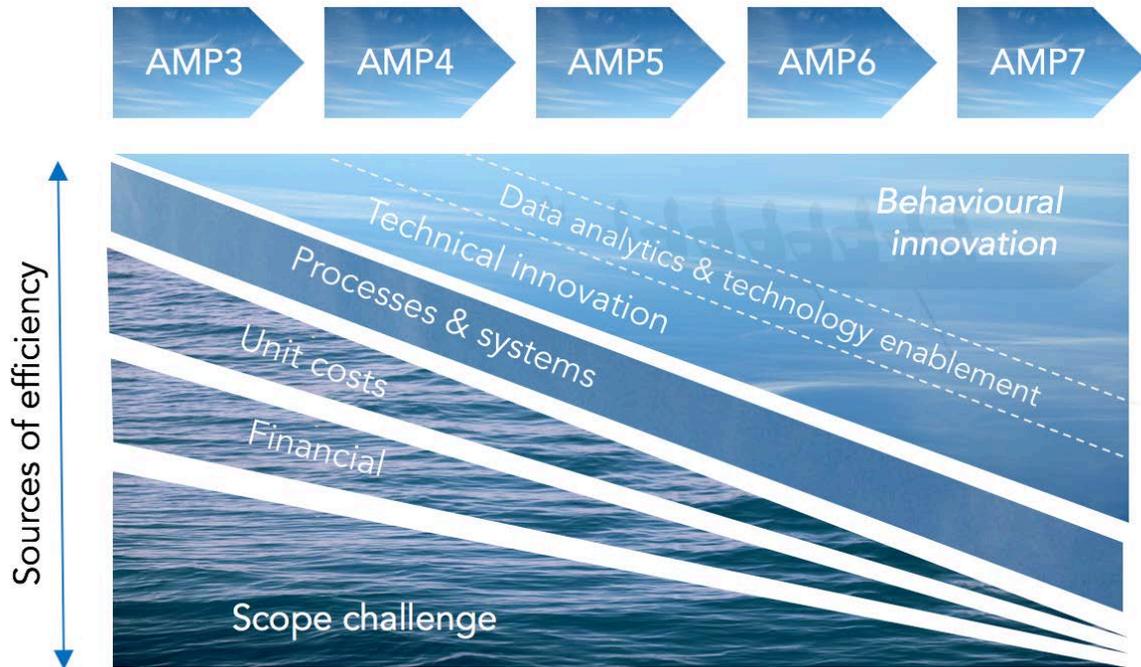
From our perspective, the first three of these areas are the desired outcomes of the fourth. Indeed, **innovation** is mentioned **115** times in the document, laying down a strong challenge to an industry that is often perceived as slow and conservative with regard to innovation and change. Interestingly, **behaviour** is also mentioned often, mostly in the context of understanding and seeking to influence change in customer behaviour. Changes in ways of working within the companies, and with their partners and stakeholders, is also encouraged.

The UK water sector has been very successful since privatisation, yet is facing a period of unprecedented change, and not just driven by Ofwat's agenda. As well as the global trends of climate change, new technology and social connectivity, there much uncertainty and volatility within the political and economic environment. As in many areas of our lives, the volume of information, and the pace of change, is challenging our ability and willingness to adapt.



The case for behavioural innovation...

In planning for each 5-year regulatory period (we are currently in AMP6, preparing for AMP7), water companies have contended with an ever more challenging landscape, with the achievement of efficiency, productivity and customer service targets becoming increasingly demanding, as illustrated below.



In earlier days, there was significant opportunity to achieve efficiency through the 'low hanging fruit' of scope challenge, value engineering and highly competitive tendering reducing unit costs throughout the supply chain. However, there is only so far that the costs of concrete, or the hourly rates of engineers, can be reduced. The water companies have continued to seek efficiencies through reshaping their business models, changing structures, processes and systems. Yet the benefits of change can be lost in whole or in part, unless the people involved are fully engaged and bought in.

Meeting the efficiency challenge and bridging the efficiency gap must, almost by definition, be achieved by **innovation**. Technical innovation of core assets, e.g. new treatment processes, has historically been perceived as slow and conservative. However, the consequences of failure can be severe. So, we need to find a way of accelerating technical innovation whilst addressing the risk of failure. Increasingly, as in all sectors, digital, data driven technology is being applied to automate and enable assets to be operated and maintained more efficiently, offering game changing benefits.

However, we believe that technical innovation alone is not enough to achieve efficiency expectations. The most successful companies are fundamentally innovating *how* they engage and interact with their customers, stakeholders, partners and their own people. *Behavioural innovation*, informed by *behavioural science*, can help.

What is behavioural science?

Behavioural science (or behavioural economics) is a blend of economics, psychology and neuroscience, focusing on how we make choices, decisions and judgements. In short, behavioural scientists seek to understand *why people do the things they do*, rather than the things they say they'll do (or even the things they *think* they'll do).

We are all unconsciously influenced by internal biases and external cues. These affect our judgements and actions. We often make choices that are not 'economically rational', for example we pay for expensive, unused gym memberships, yet fail to save for retirement. There has been much recent discussion regarding how we may follow our 'heart', rather than our 'head', in major decisions and are therefore vulnerable to messaging that is emotionally charged, yet factually questionable.



Behavioural scientists research our systemic departures from rational behaviour, seeking to understand how we are **predictably irrational**, and then design interventions to **nudge** us in the desired direction. The goal of these nudges is to achieve a meaningful shift in the behaviour of an entire population.

Importantly, we are free to work it out for ourselves and make our own choices, albeit within a context that has been designed to influence us in a desired direction. Behavioural science can help organisations understand how to help their people engage positively with programmes of change.

Behavioural science has been successfully applied in public policy, in particular by the UK Government's Behavioural Insights Team. A seminal example is the achievement of a significant improvement in tax collection, through simple wording changes in HMRC letters. To gain a good understanding of the application of behavioural science in public and private organisations, we recommend listening to the excellent BBC Radio 4 Series - [Learning from Life and Death](#).

We believe that the powerful tools of behaviour science can be exploited to enable change in the UK Water Sector, through *behavioural innovation*.

What is behavioural innovation?

Behavioural innovation is the practical application of behavioural science to improve people focused processes for strategy, innovation and change.

There are four key principles at the core of behavioural innovation:

- ***people have to work things out for themselves***... they can't just be told
- people are susceptible to influence from unconscious biases and external cues
- individuals are unpredictable as to how they will react to any 'intervention', yet populations are normally distributed in their reactions
- scientifically founded experimentation can determine which interventions have the greatest effect on the population in question

These principles are applied within facilitated, engaging processes for strategy, innovation and change, learning from evidence based insights from applications in other sectors and contexts.

Traditional change processes involve a roll out of a new 'thing' (e.g. strategy, system, process or structure) accompanied by messaging from management intended to explain why it has to be done and how to do it. An alternative approach was used at Royal Mail, for their modernisation plan that was fundamentally changing the long-established way of working of 125,000 postal workers. This approach used *Dialogue Tools*, a behavioural process, through which the staff engaged in discussion and were able to *work out for themselves* why the new delivery methods were needed and how the new approach would work practically.

A great example behavioural innovation being applied within the UK Water Sector is by [Advizzo](#), who are combining behavioural science with data science and social technology to *nudge* customers of several companies to be more water efficient.

The opportunity and challenge of PR19

This is an exciting time for the sector. It must change, and change provides exciting opportunity for many. Indeed, there is much innovation and change already happening in

water companies and their delivery teams and alliances to meet the challenges implicit in PR19 and AMP7.

However, the fundamental human reaction to any change is the stress response – preparing us for fight or flight. The companies best adept at managing their *human* dynamics, rather than just their assets, processes or systems, will be placed for success.

Consider the analogy of an Olympic rowing team - to be successful it is not sufficient just to have the best boat. Individual and collective attitudes, skills and co-ordinated performance are critical. We believe that the application of cutting edge behavioural innovation is critical to compete and win.



“It’s not good enough just to have the best boat...”

Picture credits: Reuters / Sports Illustrated

About the authors:

[Professor Anthony Conway](#) is a former Executive Director of United Utilities and is a Visiting Professor at the University of Sheffield Water Centre where he chairs the Twenty65 Leadership Board and pursues research on the innovative, integrated, optimised water utility. He advises organisations across the water sector on strategy, innovation and transformation, and works with 6-Group helping companies bring about change.

[Garry Sanderson](#) is Director of Visualyze Solutions Limited, with more than 25 years of experience in the global water sector. Visualyze specialises in highly visual and engaging strategic processes, informed by behavioural science, to help clients with *adaptive growth strategy, accelerated innovation* and *collaborative transformation*. Garry is a chartered engineer, a graduate of Harvard Business School and is researching Behavioural Science at London School of Economics.

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