

GOING BEYOND THE REGULATORY CHALLENGE

Can water companies meet the regulatory challenge and achieve sustainable business improvement which can be taken into the next price review and beyond?

EC HARRIS
BUILT ASSET
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Delivering the plan for 20% less - the first of many challenges

The water industry is undergoing a defining period that has probably not been seen since privatisation. AMP5 is witness to significant structural changes in the industry, such as United Utilities' sale of its non regulated business, Thames Water moving to a heavily outsourced business model, Welsh Water moving in the opposite direction and the impact of ownership changes. Water organisations and service providers are trying to respond to this moving landscape, and understand how they can deliver or play their part in delivering the 20 - 30% cost reduction challenges the industry has set itself.

Is this the start of a broader and more fundamental change in the industry?

Firstly, the infrastructure is changing. In addition to the major asset replacement programme being delivered by AMP5, operational control systems are being enhanced and the level of smart metering is set to increase. The intended transfer of ownership for privately owned sewers in England and Wales will also dramatically change existing sewerage companies' network - in some cases doubling it in size.

Secondly, the nature of the workload is changing. In the earlier AMP periods we experienced multi-million pound major capital projects, but as the asset base has been extended, recent AMPs have seen a bigger move towards a higher level of capital maintenance. The shift between AMP4 and AMP5 was the most significant and will increase even further in AMP6. This will necessitate change in the way programmes are delivered, requiring different skills and a different approach to supply chain management.

Thirdly, there is a possibility that the Cave Review may lead to full separation of the retail function of every major water company, and that competition will be extended further upstream, for example into wastewater treatment services. Price will not be the only determinant for the customer's choice. They will want to know what they will get for their money and business customers in particular will be looking to understand what impact their choice will have on their carbon footprint and whether their service provider interface brings more or less administrative overhead and accountability for the end outcome.

Combine this with the behavioural impacts that will come with the roll out of electricity and gas smart meters by 2020, and the landscape for the water industry could be very different when PR14 comes around.

The water industry - a changing landscape

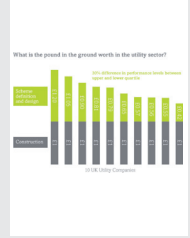
SECURITY OF SUPPLY

- Climate change
- Population growth
- Lifestyle and consumption changes.



DELIVERY

- Step change increase in capex out-turn requirements for AMP5
- Increased scrutiny on linking interventions to customer service outcomes.



REGULATION

- New incentive measures through Service Incentive Mechanism, Asset Management Assessment and Capital Incentive Scheme
- Increased role of EA, DWI and other bodies to tackle climate change
- PR'14 incentives and Walker review implementation.



CUSTOMER

- Demand side management through smart meters
- Extended 'Willingness to Pay' will influence abstraction, transportation, treatment and retail market segments.



STRUCTURE

- Asset owner - operator - service provider realignment
- Potential retail separation and competitive supply
- Supply chain response
- Private sewer transfer.



OPERATIONS

- Renewal and upgrade of Asset Management and Operational Control Systems
- Resilience will be tested by changing customer behaviours, industry structure and climate change.



Setting up for future success

Balancing the regulatory, environmental and economic challenges with those of customer expectations, security of supply and being organised for effective operations, will be the enablers for water companies to become set up for future success.

These challenges and more are encased in the government's review of the regulatory system which could lead to an overhaul of the water industry. Possibilities might include Ofwat extending AMPs according to how well the water companies perform. Asset Management Assessment and the Service Incentive Mechanism could be used as rankings, whereby granting the top two or three companies with an extension. Therefore continually seeking to reward the water companies that invest in innovation and improvement.

New capabilities that will be required to go beyond the regulatory challenge will be focused on four key performance drivers, namely; the constructing of programmes, the operating model adopted and the optimisation of overheads, who and what you procure and productivity.

What are companies doing and is it enough?

It is clear that benchmarking performance against historic solutions is not sufficient. Clients, consultants, contractors and suppliers need to get into the mentality of what programmes 'should cost.' The industry needs to believe in what 'could be achieved' as opposed to settling for what has been achieved in the past and trying to mirror the strategy of leading performers.

To see what exceptional performance looks like, many companies have turned to national benchmarks. Whilst those benchmarks do not show how some world-class utility companies are working at high levels of efficiency, what is surprising is the huge variation.

Comparing the water sector with other sectors like oil and gas and retail, the opportunity to improve performance levels becomes clearer. These industries consistently perform much higher than their equivalents in the water industry.

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The alarming variance in performance levels for a range of construction activities presents a huge challenge in both identifying the root causes and unlocking them. As an example in process (non-infrastructure) type projects, the performance difference between upper and lower quartile is 30% and for network (infrastructure) type projects, performance levels appear to be much closer with a differential less than 15%.

EC Harris has previously published articles on the overheads associated with placing an asset in the ground - now commonly referred to as ‘Pound in the Ground’ - which highlighted the 30% differential between clients. Recent studies have however shown that addressing the ‘Pound in the Ground’ alone would only account for around 20% of the current regulatory challenges which clients face. This confirms that there is a need to look beyond the overhead.

Commonly cited reasons for variance in programme and project costs include:

- Generally high costs due to uncompetitive nature of target cost setting
- Quality of data sets to validate target costs / actual costs
- Design principles are too high
- Control of design costs by contractor
- Potential lack of market insight / benchmarking used in target cost development / validation
- Lack of competition due to alliance relationships being too cosy
- Legacy vendors
- Alliance partners supply chain not robust enough
- Labour, plant and materials not sourced locally
- Non adoption of minimum asset standards.

What is clear is that often the focus is typically on downstream activities and there is not enough understanding or time spent on identifying and rectifying the root cause of problems. A wider approach is required for identifying and delivering performance improvement.

‘Should cost mentality’ enables financial challenges to be beaten and sustained

A more intelligent and integrated approach is essential if companies are not only to beat the regulatory challenge but to do so in a sustained manner.

We have identified four key performance drivers that are intrinsically linked and impact greatly upon one another:

1. How you construct programmes of work and what they entail.
2. How you operate and optimise the overheads you attract.
3. Who and what you procure and how you reward.
4. How you enable and manage productivity on site.

We are finding that around 70% of potential improvements are often linked to the above being integrated and executed efficiently. It is only by getting on the front foot and addressing these that the industry will be able to move towards confining the cyclical and daunting regulatory challenges to a thing of the past.

Understanding where the opportunity lies

The source and amount of money to be saved varies on the nature of the sub-programme. The industry obviously works on live regulatory programmes where delivery is usually ‘king,’ providing limited windows of influence. Quickly understanding what programmes ‘should cost,’ the size of the prize, the key enablers and blockers and the available window to influence, is critical.

Likewise, getting the balance right between continued programme delivery and performance improvement is paramount. Resource, time and energy are not infinite and therefore we should prioritise areas which create maximum impact by demonstrating what is possible. It should then create a pull within the organisation, setting them up for sustained performance.

With this in mind our four key performance drivers are providing clients with a blueprint to drive reductions to capital programmes in excess of 20%, underpinned by a commercial approach to programme management.

1. How you construct programmes of work and what they entail

This is the fuel that feeds the 'delivery machine' and as with any machine, ineffective fuel results in sub-optimal performance. It is critical to get this right. That said, how often are we crystal clear about what we are asking people to do, when it really needs undertaking, and what the true parameters and constraints are?

Programmes are often constructed without really understanding the optimum balance between desired delivery targets and those factors which set the supply chain up for success. Even though bundling is widely undertaken, this tends to be basic and fails to deliver to its true potential.

There is a diminishing law of returns around re-engineering and value engineering to the nth degree. As an industry we frequently deliver perfect solutions but at what time and cost? Effective value management can also be patchy and the difference in this to value engineering is misunderstood. This is a key enabler to the current affordability challenges and requires addressing urgently.

Achieving excellence in defining programme 'need, response and solution' is not enough. Effective programmes require clear execution strategies at the outset and without effective programme and project controls in place it will be difficult to make informed business decisions.

2. How you operate and optimise the overheads you attract

There is no one-size fits all operating model. It has to be tailored to reflect the specific needs of each organisation.

There is currently a lot of aspiration across infrastructure industries to become an 'Intelligent Client.' Achieving this is seen as a key factor in driving performance. Whilst there is conjecture about what this entails two factors are critical. Firstly, this needs to sit at the head of the value chain with a person who makes the asset base decisions. Secondly, they need to be empowered through information to make key business decisions. Therefore effective programme management is a success factor in delivering to Intelligent Client goals.

Who undertakes the various functions within each operating model should be the person best placed to unlock value and mitigate risk. The industry needs to be a bit smarter about this as recent benchmark studies suggest there is little difference between overall insource/outsourced overheads.

Recent projects show that whilst there are significant opportunities to reduce overhead and the time taken to get to site, the impact goes far beyond this. By its very nature getting the operating model right impacts the entire lifecycle and is a key enabler for improved performance delivery.

3. Who and what you procure and how you reward

Great performance requires effective supply chains. But when such basic tensions exist within clients such as - who decides what the supply chain needs to provide, entail and who manages it - how are we enabling them to provide great performance?

However, even when the client body is completely aligned there seems to be a lack of understanding of how contractors and suppliers actually make their money. This is critical if we want people to perform.

All clients spend considerable time constructing and procuring supply chains. We often experience a disconnect between what has been procured and the skills and services which are required to unlock programme value. In some circumstances this results in outcomes such as delivery partners acting on programmes where they not only add little value but actually increase hidden costs which the client organisation could have avoided.

Establishing clear programme execution strategies right at the outset will negate this and sets the nature of value which needs to be generated by the supply chain.

To drive sub-programme performance clarity is required on matters such as:

- The extent and nature of partnering (if appropriate)
- When contractors and suppliers should be engaged
- How they should be incentivised (if at all)
- Where the risk sits
- Who unpicks the value in 2nd/3rd tier supply chains.

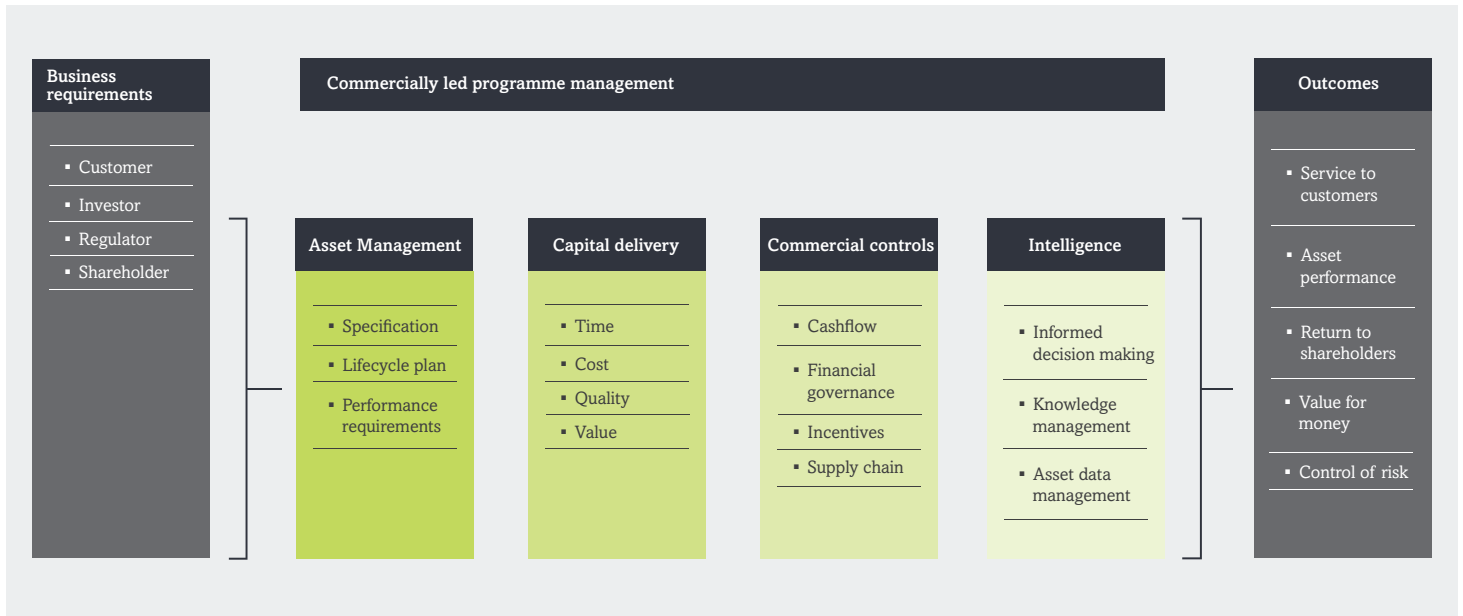
As the nature of our programmes moves towards capital maintenance we need the supply chain to evolve in order to deliver the challenges. We have the skills; we just need to be a bit smarter about deploying them.

4. How you enable and manage productivity on site

Given this is where the vast majority of costs manifest themselves, productivity presents one of the biggest areas of opportunity. If we are going to rise to the challenge, the 'should cost' mentality needs to run right the way through from strategy to delivery on site.

Repeatedly we experience a major disconnect between contractor utilisation and value-added time. In some cases even though 100% utilisation is achieved, value-add time is less than 20%. Getting smarter around measuring outputs, and understanding and addressing the root cause of poor productivity, requires a change in approach to deliver the required benefits.

Commercially led programme management - to effectively deliver the next five years and beyond...



Previous comments have highlighted multiple strategic imperatives for success that need to be considered in an integrated and sustained manner. In short, clients need to have everything in control. A commercial approach to programme management underpins the successful delivery of the four key performance drivers.

Commercially led programme management enables business benefit and cost reduction through the transformational restructure of assets, processes, resources and supply chains towards the delivery of defined business needs. It is 'commercially led' because those business needs will have a direct impact on share price or stakeholder value.

Frontier performers will build their programmes using the four key performance drivers. Project cost and commercial controls should be designed to empower the Programme Management Office (PMO) which will have the ability to proactively manage and measure productivity, and track progress. Nevertheless, under-investing in planning and scheduling coupled with a silo mentality, too often results in sub-optimal performance.

Clients that utilise commercially led programme management business models will realise:

- Visibility and ownership of the plan by all
- Treasury management - cash utilisation and cash flow
- Projects, programmes and targets aligned to business outcomes

- Challenge to conventional wisdom in delivery e.g. labour productivity
- Standardisation, particularly in design
- Procurement and contracting strategies aligned to performance requirements
- Leverage of scale across the business
- Understanding of the difference between price and cost, which links back into risk and opportunity management
- Maximum efficiencies from an effective supply chain and greater economies of scale.

Commercially led programme management does not reduce the dependency on good management. Quite the opposite, it gives senior managers and business leaders the toolkit to make more informed judgements based on a better understanding of the likely outcome.

Recent benchmarking analysis we have undertaken combined with considerations on what programmes 'should cost', shows there is still some way to go in efficient planning and driving better performance through a commercially led programme management function.

The influence of operating costs

Any approach to driving business improvement would clearly be incomplete without understanding its impact on operating costs and any solutions delivered as a result of the above, need to reflect the operational needs of the business. In reality, the only real way of optimising both long run and short run average cost curves is to bring together both Capex and Opex under an intelligent commercial programme with a Total Expenditure (Totex) budget. It is our experience that once Totex can be effectively measured, a more integrated end-to-end approach to business management can be adopted.

What this allows, aside from accruing previously mentioned benefits from the PMO (aligned assets, processes, resources, and supply chain) is the alignment of capital and operational delivery around a singular set of objectives. In addition to this, it also starts to address one of the key inhibitors to operational excellence, access to quality and robust data.

What can be learnt from other industries?

Other sectors have gone through similar transitions. Major retail roll outs and major oil and gas schemes have moved to programmes of work that are heavily biased towards capital maintenance. This has seen positive changes in the type of supply chain and the capturing of standardised data in order to develop an accurate cost base and to build future maintenance programmes. We also see a high level of programme and project controls.

These experiences are crucial with an eye on the next price review which should be setting companies up for long term success. We need to fully understand what this will entail and how it will impact on organisation size, skills, the data required, the supply chain and consider how other sectors have responded. When the next price review starts there will be a need to be on the front foot and demonstrate to the regulator what delivery will entail and that there is control.

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Achieving sustainable business performance through performance transformation

We believe sustainable positive outcomes can only be achieved through genuine performance transformation across all aspects of the business operating model and this is what will deliver the step change improvements the industry is seeking.

The changing industry landscape and the significant variance in performance across the sector will require water companies to focus on the root causes, going beyond traditional areas of focus in downstream project and programme activities. As an industry, this is the time to take the lead with a ‘should cost’ mentality, and a belief in what can be achieved.

Four key performance drivers that are intrinsically linked and will impact upon business performance will make the difference; right from how programmes are constructed, the operating model adopted and the optimisation of overheads, to procurement and achieving optimal productivity.

Going back to basics and having everything under control from the onset will also be key. An enabler for this will be the embedding of commerciality to programme management, resulting in business benefit, cost reduction and added value for stakeholders.

Only then will water companies meet the regulatory challenge and achieve sustainable business improvement which can be taken into the next price review and beyond.

About the authors



Terry Povall

Partner, Head of Water

e terry.povall@echarris.com

Terry has over 35 years of experience in the utility sector, encompassing all commercial and contractual aspects of the planning and delivery of major Capex and Opex investment programmes. He combines his expertise in capital investment strategies with first hand knowledge of the regulatory process, developed through several regulatory reviews, to provide business improvement solutions to clients in meeting their performance challenge.



Jim Sheerin

Partner, Water Sector

e jim.sheerin@echarris.com

Jim currently leads Strategy and Transformation for the firm's water clients where he is responsible for developing solutions to improve business performance and outperform regulatory targets. He has a unique blend of strategic thinking coupled with a practical knowledge of implementation and programme delivery. He brings considerable cross sector insight and expertise having previously provided strategic advice to clients in banking, rail and aviation.



Mathew Riley

Partner, Head of Cost & Commercial

e mathew.riley@echarris.com

Mathew is a recognised industry expert in providing insight on how to balance the commercial judgement on major capital investment programmes to maximise returns, right from business need through to project performance. He has in-depth experience in both running a major business operation and managing the supply chain to significantly improve operational performance.

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