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Tips can bring rewards

A 'tip sheet' for prioritising savings in local highways authorities can help transform them into high-performance organisations, as **Duncan Ferns** reveals



ntil recently, most government departments have had annual savings targets which could be achieved through 'continual improvement', often emanating from staff suggestions. Meanwhile, every local authority in the country has endured years of change and efficiency initiatives to the point that change fatigue has often set in.

efficiency

The Comprehensive Spending Review introduced a whole new meaning to change. The UK has been thrown into its most severe public spending crisis since the 1920s. Every departthe same challenge - how can we make even more savings?'

'Transformational change' is the latest buzzword, although in reality, this involves implementing similar types of change based on deeper investigation, and managing it in a structured, prioritised programme of work.

Consulting and business services group, Mouchel, has extensive experience helping its local authority customers implement change in their back office - finance, IT, and HR, and operational departments - highways, revenues and benefits, and education, through its work as outsource partner with a number of authorities, to design and implement efficiencies.

This paper brings together Mouchel's experience of helping clients to reduce costs into a single 'tip list' to help highways organisations prioritise savings and evaluate components of their transformation programmes.

Tip I – apply LEAN or Six-Sigma methods to implement business process engineering (BPR)

Business process engineering is about stream-

lining processes, minimising process handovers, and having clear work order management which prioritises workflow to meet customer and business demands. There should be a check to ensure every process provides added value to the customer, or is critical to manage the business. Formal methods, such as LEAN and Six-Sigma, encourage analysts to get to the root causes of issues and develop sustainable solutions.

It is critical to link streamlined processes with whoever conducts the work and where the work is done. This can lead to new ways of working – for ment and local authority in the country is facing example, hot desks and flexible home working which lead to a reduced office space requirement and enable estate rationalisation, thus creating further savings. If new ways of working are introduced without a review of business processes, it will not deliver the same degree of benefits.

> The new ways of working should also consider combining roles by cross training staff in

Bridge inspections, regarded as dangerous, and so requiring two inspectors, were reduced to one inspector by improved staff training and the issue of personal safety

new disciplines, such as inspections for different purposes, and optimising staff utilisation by grouping management functions and delayering management.

Tip 2 – undertake a supply chain review

A thorough bottom-up assessment of how money is spent, led by category managers who have expertise in their areas, is a key starting point to understanding how savings can be made by reducing the number of suppliers and, where appropriate, increasing the range of competitive

tendering. Economies of scale should be introduced on large-ticket items through collaborative procurement, either with regional procurement hubs, county/district/borough collaboration, or collaboration with local public sector services - emergency services, and the NHS. The backoffice systems and transactions can be reduced by sharing technology through shared services and e-auctions.

Tip 3 – counterbalance cost cutting with revenue

The loud mantra of 'cut costs' can also be counterbalanced by 'raising revenues.

It is important to consider such questions as, when car park and street parking charges were last reviewed, and whether civil enforcement officers are efficient in the way they implement fines compared with other authorities. In addition, one can look at whether revenue from hoards and websites is being optimised and whether any transport service charges can be increased or free travel permit conditions changed to increase revenue?

Authorities dealing with small claims from citizens suffering as a result of pothole or uneven pavement accidents should also efficiently reclaim, where possible, from utility companies which may have caused the uneven surfaces due to their previous works.

While the policy to reduce the number of speed cameras is respected, there can be a case for increasing the monitoring of other minor traffic offences which could be done using increased spot-monitoring vehicles, such as driving while using a handset.

Many authorities are not used to setting up

new revenue streams and, as a result, the ongoing costs of generating extra revenue have not been optimised and can be reduced.

Tip 4 - use outcome-based contracts through intelligent asset management

Contracts which stipulate that a supplier carries out a specific work or inspection schedule, or uses a particular material, will cost more than those contracts which focus on output-based key performance indicators (KPIs) which safeguard service to the customer.

Examples of this might include KPIs to prevent flooding, for example, replacing a fixed schedule of fixed-period gulley inspection and cleaning, or KPIs on road surface resilience measured in mean-time-to-failure (MTTF), that is, replacing a specification of a particular road surface aggregate.

This may require contractors to invest in new technology, such as adding a knowledge base to the asset-management system to 'learn' which gulleys block and which stay clean naturally, due to flow conditions.

The supplier then develops a risk-based model to inspect and clean gulleys in a manner that will prevent flooding, and which links to a geographic information system (GIS). The condition status of an asset can be programmed to determine the work required, and an intelligent new work order processed.

The business case can often be made to recover technology investment costs within a short time.

Tip 5 – ensure you are utilising your assets most

If valuable assets are not highly utilised, for ex-

Jet patching for surface dressing of potholes prior to surface dressing uses a material 'blasted' at the surface to fill potholes and other surface problems reduces cost. time spent, the amount of material used and the amount of material which requires off-site disposal. Contracted as part of a co-ordinated surface dressing programme using jet patching in place of individually issued works orders and traditional patching, savings of £500,000 were made for one county authority.

ample, used for 80% of the working week, then can better planning can help to ensure that assets are utilised more effectively?

Some examples of this include:

- vehicle utilisation fleet cars/vans/specialist vehicles. Often, vehicles - and drivers - are not used optimally, relative to comparative benchmarks. Using vehicles for more than one purpose, changing booking policy and systems, rationalising the fleet, selling surplus capacity and outsourcing the operation are all options to consider
- passenger transport management especially minibuses/taxis for social needs and home-to-school. Even legislative duties are interpreted differently by different authorities, with some providing personal transport solutions - taxis - while others provide minibuses. Booking and routing systems support and outsourcing are options to consider
- supply and maintenance depots are often located where they are by historical accident. Rationalising depots and offices based on journey time modelling and stock management are key considerations
- ICT infrastructure is increasingly shared through cost-effective shared services opera-

tions centres and cloud computing architecture solutions

Tip 6 – think of innovative designs

Many innovations in road infrastructure and streetscape management can be used to reduce costs and deliver, essentially, the same service. Authorities can either specify the innovation or provide specifications which encourage suppliers to respond with innovative solutions.

Tip 7 - save energy and contribute to a low car-

Some transport-related assets can be used less

Three design innovations from Mouchel that have delivered substantial savings:

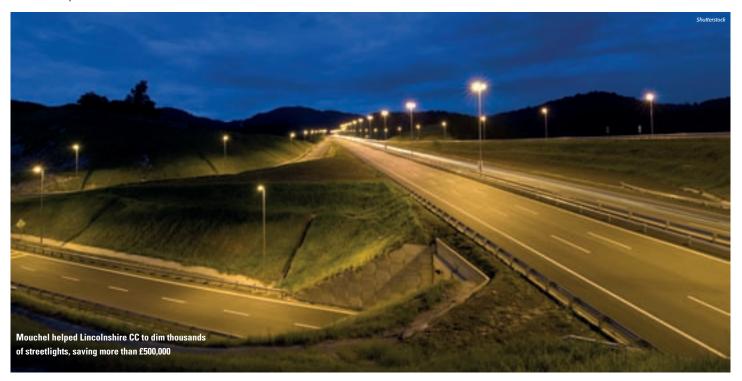
- dual purpose streetlight and traffic light columns have saved costs, and reduce street clutter
- patterned asphalt imprinting is considerably cheaper than using paving or brick paviers on pedestrian and traffic control areas. It is a long-lasting, low-maintenance alternative, guicker to install and has none of the heavy manual handling and cutting issues associated with slabbing and paving
- new bridge-strengthening techniques. Mouchel helped develop the technology of FRP (fibre reinforced polymer) materials for both strengthening existing bridges. Strengthening a bridge is generally a lower-cost option than replacement, and it minimises disruption to the travelling public as well as any associated costly services diversions - gas, water, communications and electricity. CFRP plate bonding has been shown to be a viable alternative to steel plate bonding, giving savings in both cost and time. Mouchel has strengthened/rehabilitated more than 50 structures using CFRP, leading to a collective saving of more than £10m.

to save money. The obvious ones are lighting and heating in offices, schools and leisure centres.

The implementation of smart metering is a

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efficiency



key factor to enable these savings. Several authorities have implemented schemes to switchoff and/or dim streetlights between midnight and the early hours of the morning, making sav-

Mouchel led the business case and supported public consultation for Lincolnshire CC to dim thousands of street-lights across Lincolnshire, saving more than £500,000. The authority is considering dimming and, in some cases, switching off its 62,389 streetlights, 10,850 illuminated signs and 147 vehicle-activated signs. We estimate carbon emissions would fall by 2,715t if all the county's streetlight bulbs were replaced with energy-saving bulbs. Replacement of fluorescent bulbs in road bollards with low-energy LED arrays created an energy saving of around £30,000 a year. Replacing temporary festive lights with LEDs also delivers significant savings.

ings of several hundred thousand pounds. Low-carbon vehicles (LCVs) – either electric, hybrid or hydrogen-powered – are becoming viable alternatives for an increasing number of fleet vehicles owned or leased by authorities. Authorities looking to replace vehicles should consider the business case for LCVs.

Tip 8 – smarter travel savings contribute to a low-carbon economy

Fewer car journeys will result in less road wear and congestion, and reduced maintenance requirements, which will ultimately reduce expenditure on traffic management and maintenance

To successfully achieve this the focus must be on changing behaviours. For example, authorities should prepare smarter choices travel information packs which promote the benefits of walking, cycling, car-sharing and sources of public transport information.

Citizens should be encouraged to ask whether a journey is really necessary, and then ask if, rather than use the car, they could walk, cycle or use public transport?

Authorities providing this information through a variety of channels – the Internet, pamphlets, and presentations, among others, will encourage this behaviour change at a faster rate than those which do not.

Tip 9 – third sector service delivery partnerships

Third sector organisations (TSOs) offer partnerships with many authorities to deliver opera-

Mouchel has prepared smarter travel packs – in printed and website format – for a number of authorities, and supported them with launch campaigns to spread the message that citizens also get personal health and cost saving benefits from adapting smarter travel.

tional services which reduce authority costs while enhancing community services and the lives of the contributing volunteers.

The Government's Big Society agenda will stimulate this area of delivery. Housing associates are a good example, but there is an increasing number of examples in the transport sector. Authorities must offer training to volunteers and often supervision and/or inspection to ensure that services have been delivered.

The sponsorship of verges and roundabouts for planting and maintenance costs can attract both TSOs and local commercial companies. Specialist volunteers from wildlife trusts and nature conservation bodies often support ecology surveys and verge management for authorities.

Tip 10 – simple cost reduction

The simplest, although least palatable savings, are

Essex CC's transportation and operational services has a partnership 'Special roadside verge project' with Essex Wildlife Trust. Volunteer verge representatives inspect the verges and report on general condition, the plants that grow there and advise on future management. More than 100 sites and 50km of verges are protected in the project.

the financial cuts that simply tighten the screws on supplier profit margins, cancel investment in projects, and reduce benefits for employees.

One must consider whether supplier costs can be reduced, so reducing their profit margins but still enabling suppliers to be sustainable, whether employee benefits, such as mileage rates, can be reduced – if above the Revenue and Customs benchmark – or if analysis of the portfolio of development projects demonstrated that all projects continue to deliver the promised benefits? Those which fail should be cancelled, saving the investment costs.

Summary

Change won't just go away – it is continuous. But sometimes, the annual continuous improvements based on local initiatives are just not enough.

Authorities need to take a comprehensive look across their organisations and determine whether their organisation has transformed into a high-performance culture.

Every government department and local authority has made some progress against many of the tips presented above, but few have made progress in all areas, and fewer still have taken a co-ordinated approach across all activities which, in our experience, delivers far greater savings. Hopefully, these tips will prompt further action.

A 'transformational' approach will consider each of the above tips, and prioritise a programme of work under the management of one accountable programme director. They will also consider the interaction between the savings, and the cultural issues of adopting the changes so that they are introduced effectively, deliver as promised and that improvements and savings are quantified and reported.

Investment in this co-ordinated management approach really does pay dividends, as it raises the issues above the local interests of line managers, who naturally tend to protect their teams and current ways of working.

A transformation programme director will bring together all 10 tips identified here – and ensure that each is full explored to deliver maximum savings.

• Duncan Ferns is a director at Mouchel Consulting