




## Efficiency Case Study


Local Authority	Cornwall Council
Region	South West
Sector	Highways
Theme	Lean Improvement
Benefits / Outcome	Initial cashable savings of £273k. Improved understanding of key relationships and working practices. Clear understanding of process inefficiencies. Increased productivity. Opportunity to develop new structures, processes and systems within an integrated approach to Highway Service delivery .
Publication Date	October 2010

## Key lessons

The service improvement and efficiency initiative, namely  **RightFirstTime** (RFT), has been developed to implement and support lean management within a service delivery context. The projects considered within the first tranche of RFT were part of the highways service which at the time was organised in two distinct service structures. As a result of working across service boundaries the following key lessons have been learnt:

- Commitment and ownership from the key 'Sponsor' (lead Senior Manager(s)) is essential to drive improvement throughout the programme;
- Access to data and information to understand the complexity of the issue(s) before exploring the process and designing a new approach is advantageous;
- Staff have welcomed the opportunity to learn of their colleagues' perspectives and challenges, and agree / design solutions together;
- Touch time (where an activity takes place and a change occurs) does not always add value;
- Some staff are inclined to try and build comfort zones (slack) into solutions;
- Momentum needs to be maintained during implementation phase;
- Specific visual measures need to be agreed and used to capture and sustain improvement;
- Benefits are derived from improved working relationships;
- Reduction in 'touch' time is a 'cashable' saving providing resources can be released;
- The application of a programme management approach has enabled us to release resources for redeployment across boundaries;
- Capacity and capability to undertake complex improvement needs to be built into the workforce, in order that continuous improvement takes place.

## Summary

 is a suite of principles, techniques and tools which support business improvement and efficiency savings. The initiative was piloted in 2007/08 within a range of Highway Services including planned maintenance, design and delivery of traffic schemes and Local Member supported schemes.

Based on lean management, the initiative:

- Seeks to put the right processes, systems, relationships, resources and measures in place, to deliver the right level of service, to the right customer, at the right time, at the right cost;
- Is evidence based using data and other information – not just gut feeling!
- Engages all levels of staff from the front line to the Director and across boundaries;
- Designs in solutions NOT problems, e.g. front load resources;
- Seeks to significantly reduce / eliminate waste, mistakes, irregularity and unpredictability (inc. incorrect sequences, redundant activities / movements, delayed / premature inputs, over production, and low value delivered to the customer);
- Places responsibility & authority for improvement within the workforce:
- Optimises supply chain management, creating relationship, technical and process efficiencies; and
- Supports Cornwall Council's transformation.

RFT enabled the services to achieve £273k cashable savings, plus other benefits in 2007/08.

The knowledge gleaned from the RFT lean management activities led to the integration of the highways consultancy and the contractor, saving a further £2.7m in 2008/09.

Cornwall became a unitary authority in 2009/10, and is now seeking the integration of all 'street scene' operational activities, including highways, waste and environment. RFT is now being used to ensure lean deployment is designed into the operational solution and secure sustainable business improvement for the future. It is anticipated that £1.4m efficiencies will be found initially.

## Background

In 2006/07 the highways and civil engineering elements of the Council (previously a rural, 2 tier authority structure), were organised as a consultancy and contractor (trading as CORMAC). The consultancy arm had a revenue budget of £24.8m and CORMAC's turn over was £53.1m. The service had been on an improvement journey for a considerable period of time, as shown below:

- Implemented & maintained Quality Assurance (1991-1995)
- Implemented & maintained ISO 9001 & 9002 (1996 - 2002)
- Developed and implemented an Integrated Performance Management System (2003-05), which incorporated the following registrations:
  - Quality Management - ISO 9001:2000
  - Environmental Management - ISO 14001:2004
  - Occupational Health & Safety - OHSAS 18001:2007
  - Investors in People
  - Chartermark
  - Sustainability Standard

- Developed an approach to 'lean management' (2006) in order to identify efficiency savings:
- Piloted lean six sigma  in 2007 within Highways and Environmental Services.

### **Drivers for Change**

In 2006 it was recognised that whilst performance was, on the whole, improving within the Councils engineering services, it was necessary to reduce costs and increase value for money. This was driven by the need to find 2.5% efficiency saving year on year, in keeping with the Comprehensive Spending Review at the time.

As with many Councils, the authority had found many of its efficiency savings from relatively 'low hanging fruit', but had realised a more robust approach would be needed in the longer term. The RFT initiative was designed to find savings above and beyond the required 2.5%.

### **Improvement action**

Lean management was considered to be the appropriate methodology to embed in operational services because of its process orientation and its roots in manufacturing. It was essential that we developed techniques which fitted with the way our services functioned. The civil engineering part of our organisation was comfortable with process as a result of working within ISO9001 and other industry standards. Furthermore, CORMAC was subject to trading in the open market place, so readily understood the whole service delivery approach found in supply chain management. This was advantageous because lean seeks to 'pull' requirements down through the supply chain, ensuring the service delivers the customers requirement.

Having agreed with the Directorate Leadership Team that lean was the right approach for improving the highway services and achieving cashable savings, it was necessary to develop internal capability to support the programme. To this end, a series of training and development activities were put in place supported by a lean training consultancy and included:

- The Leadership Team underwent an 'Executive' introduction to Lean Management
- Lean events were held to introduce the philosophy and techniques with representatives from all levels within the service(s)
- The core business development team underwent intensive training in:
  - Lean Management training event
  - Lean Six Sigma 'Green Belt' course (6 staff)
  - Lean Six Sigma 'Black Belt' course (3 staff)

This investment amounted to a one –off £40k in the first year (Sept. 2006 – Oct. 2007).

During 2007 a number of lean events were held, which were facilitated by our Business Development Team and involved:

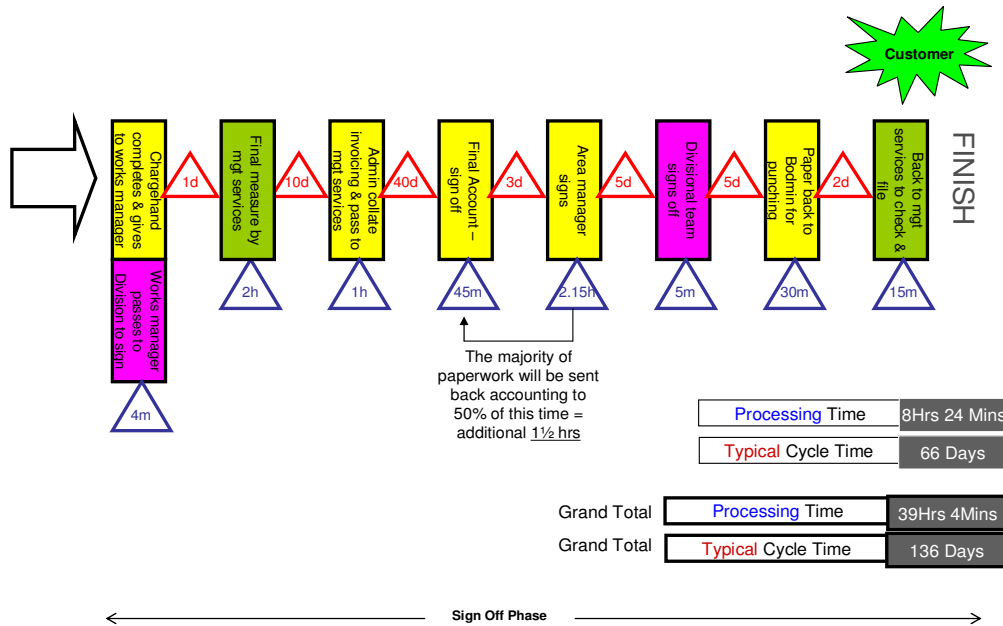
- the Head of Service (sponsor) introducing a 2 day workshop and empowering the participants to think innovatively and take the opportunity to build in solutions for their activities;

- engaging a cross section of staff (from Operational Managers to Workmen) involved in the 'typical' process under examination;
- Mapping the current state (as is) with our internal customers;

An example is set out below:

## Planned Maintenance – Current State

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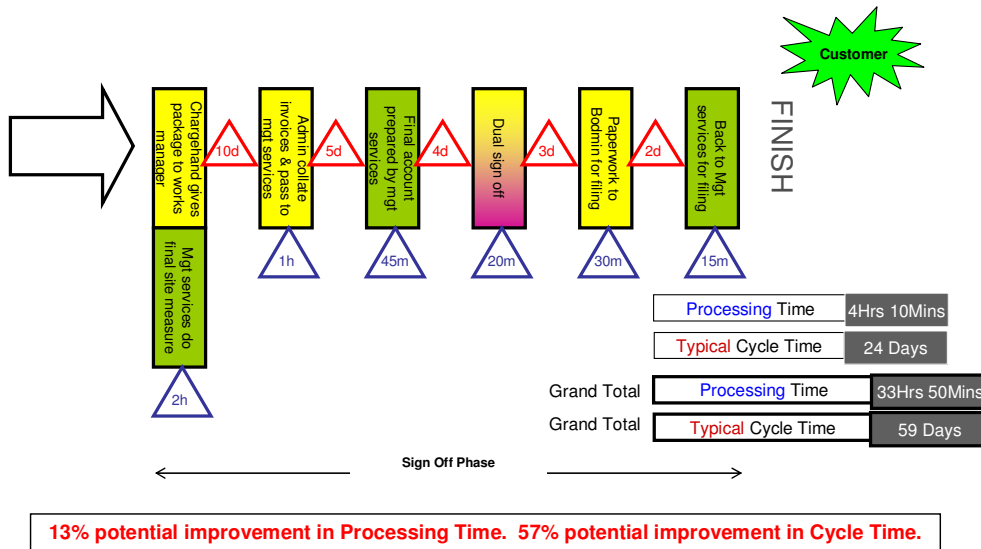
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Extract from 30 step process

In mapping out what actually happened (as opposed to what we thought might be happening), we identified issues which needed to be resolved. These issues may have been related to understanding the customer requirements, relationships within the supply chain, timeliness of decisions, IT limitations or mis-alignment, and / or wastage and inefficiencies within the process. The benefit of this interactive and 'live walk through' the process, is that the people involved are able to develop a shared understanding of the challenges and opportunities.

Having agreed opportunities for reducing wastage in the process and other customer orientated improvements, we mapped out our future state (to be):

## Planned Maintenance – Future State



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Extract from 22 step process

The future state seeks to eliminate wastage and build in solutions to the issues raised. To support the role out of the new way of working , an action plan was developed to pick up a whole range of necessary activities which have secured the effective implementation of the future state.

Also, simple measures were identified to ensure that continuous improvement was embedded. A project manager was appointed before the action plan and measures were signed off by the sponsor, at the end of the 2 day event.

The actions were then monitored and progress reported to the sponsor and other team members as the improvement projects were implemented. In the early projects measures were captured by assessments and audits, but as RFT developed measures were built into the solutions so that teams could see how they were improving their own processes on a continuous basis.

The RFT initiative evolved into 2 products:

Simple, quick fix improvement projects (2 to 8 wks):

- Investigate data (if available);
- Scope and undertake lean event (agreeing action plan and measures);
- Monitor implementation.

Complex transformation projects (3 to 9 mths):

- Collect and analyse data & info. to explore and quantify extent of issue(s);
- Develop a programme and communications plan
- Undertake value mapping to understand variables and relationships;

- Define indicators to test for process behaviour, capability and independence;
- Design solutions and test / select, make recommendations;
- Develop implementation plan;
- Identify monitoring tools, measures and management information;
- Define response plans.

These are now fully developed and deployed in a range of activities.


Importantly, the improvement journey has enabled service improvement and efficiency activity to be integrated and underpinned by industry standards. This has ensured that a robust management system feeds improvement activity, and allows for valuable data and information to be captured and used in decision making, as opposed to basing actions on gut feeling.

### **Barriers**

There were a number of lessons learnt as set out above.

The most challenging barrier was to gain continued support by the 'sponsor' who's role was to champion the improvement and ensure any barriers are removed to enable the project manager and other team members to deliver their solution. This was particularly challenging because we were working across 2 separate services and at the time there were 2 sponsors. Furthermore, neither sponsor had overall responsibility to implement the changes across the 2 structures. To resolve this, we introduced a programme management methodology which sets out a governance framework and process, establishes priorities for improvement, clear roles and responsibilities for all participants, appropriate templates for initial business cases, work programme and highlight monitoring reports. This is as simple as possible and is seen as an aid to setting up and delivering improvement and achieving savings (benefits realisation) across boundaries. This ensures that sponsors are working towards the same outcomes and are held accountable within a predetermined governance framework.

### **Outcomes**

The cashable savings achieved in 2007 through  amounted to £273k, plus other benefits, including improved understanding of working practices, closer working relationships, improved technical efficiencies by sharing systems and data, and end to end processes which focus on customer requirements.

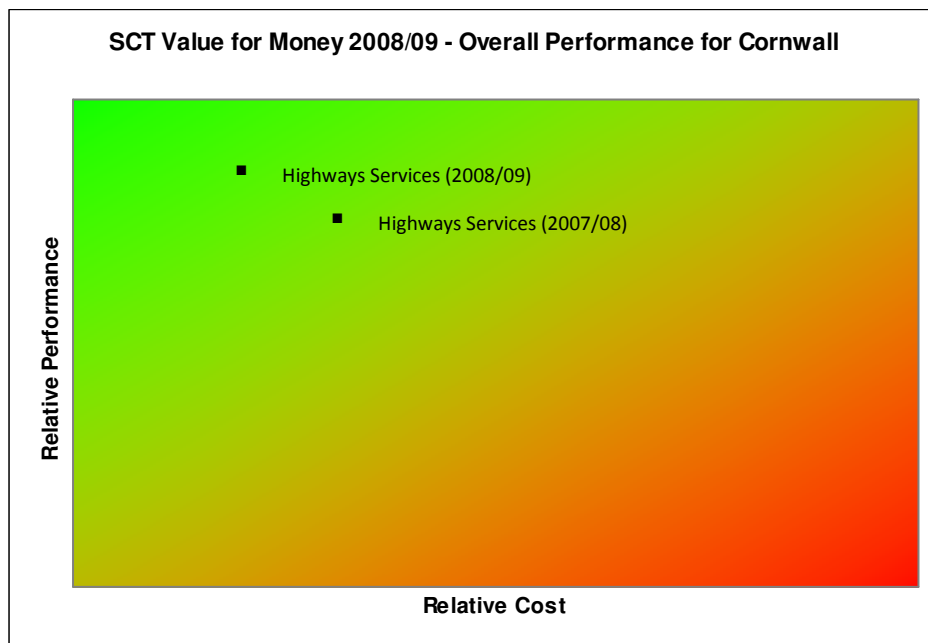
As a benchmark, we sought expert external expectations regarding process improvement as shown below:

- 50 – 90% improvement in cycle time; and
- 20 – 50% improvement in touch time.

In 2007, the RFT initiative was achieving:

- 48% improvement in cycle time; and
- 27% improvement in touch time.

The relative performance of the highways service (compared to the County Council family of authorities), has increased between 2007/8 to 2008/9, whilst costs have reduced as shown in the model below:



Source: Cornwall results from the 'Somerset Model', Somerset County Council (2008/09)

RFT was a finalist in the 2007 Six Sigma Public Sector Awards for the best continuous improvement initiative.

The evidence gleaned from these lean events in 2007 led to the integration of our highways consultancy and contractor in 2008/09 and saving a further £2.7m savings. This development is noted here but would be a separate case study in itself to explain the options considered and decisions taken.

Cornwall Council is now integrating the highways, environment and waste services and this requires a complex deployment of lean management in both operations and back office activities, to achieve a minimum of £1.4m savings and improve customer experience/satisfaction. The project will be undertaken from a programme office, but essentially the improvements and savings will be achieved by embedding lean techniques and visualisation of management information. The emphasis is on building in shared solutions and sustainable improvements across the street scene, or newly named Neighbourhood Services.

RFT is now being mainstreamed in 2010 as the approach to service transformation within Cornwall Council.

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