



National Audit Office

Delivering successful IT-enabled business change: Case studies of success

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Delivering successful IT-enabled business change: Case studies of success

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John Bourn
Comptroller and Auditor General
National Audit Office

13 November 2006

The National Audit Office study team consisted of:

Theresa Crowley, Paul Dodimead, Alec Steel, Matthew Harris and Momodu Kawa, under the direction of Mark Davies

This report can be found on the National Audit Office web site at www.nao.org.uk

For further information about the National Audit Office please contact:

National Audit Office
Press Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

Tel: 020 7798 7400

Email: enquiries@nao.gsi.gov.uk

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INTRODUCTION



1 Featured in this volume are 24 case studies of IT-enabled business change (**Figure 1 overleaf**) that form the basis of the analysis of success that appears in Volume 1 of our report on the behaviours and activities that contribute to successful delivery. Often these form the core of a wider business change designed to provide new and better customer services or more choice, or are part of a journey to improve organisational performance.

2 From our thematic analysis, we identified three core principles:

- **ensuring senior level engagement;**
- **acting as an intelligent client; and**
- **realising the benefits of change;**

and ten activities that guided the behaviour of our case study organisations (**Figure 2 on page 5**).

3 The three principles were important for all of our case studies. The specific activities also, but different activities were brought to the fore in different types of business change. Some have been complex changes requiring the co-ordination of bodies with different corporate priorities and stakeholders with different needs. Their success derived from the time inputted by senior management to ensure that the complexity did not cause its managers to lose their way. For innovative transformations reliant

on leading edge technology, extensive testing may be needed of the technical viability of the project. Other transformations use “off-the-shelf” technology but, while not technologically challenging, required clear understanding of how to market the change to potential users to achieve the take up needed to realise the projected benefits of the change. All our case studies have realised benefits, but some have been particularly successful in finding ways to optimise the benefits. Optimising the benefits of IT-enabled change involves continual review of systems to develop new uses and services, to increase take up and to maintain system security in the face of ever more sophisticated forms of crime.









4 Our trawl of IT-enabled business change describes 24 examples drawn from the public sector internationally and the public and private sectors in the UK. These are not the subject of National Audit Office audits, but have been prepared in conjunction with the organisations in question, taking in their views of the ingredients for success. We do not comment on the wider performance of those bodies or their suppliers, focussing instead on the key principles and practices to emerge from the case studies. We offer these as having transferable lessons for departments undertaking major business transformations, from which they and other public sector bodies can draw lessons on how such change can be achieved.

1 24 case studies of successful IT-enabled business change

	Central government	Programme/project costs ¹
 DWP Department for Work and Pensions	Department for Work and Pensions The Payment Modernisation Programme has transformed the payment of benefits and pensions by paying entitlements directly into recipients' bank accounts.	£824 million
	Department of Trade and Industry Consumer Direct provides consumers with a single access number to free advice when problems arise when dealing with traders.	£34 million
	Department of Trade and Industry — Small Business Service Businesslink.gov.uk is a website providing support, advice and services to businesses in the UK.	c.£17 million
	Department for Environment, Food and Rural Affairs – Eaga Partnership For citizens at risk of fuel poverty, the Warm Front Scheme provides a package of energy efficiency and heating measures to install or upgrade insulation and heating systems in their homes.	c.£1 million
 Part of the Department for Work and Pensions	The Pension Service Pension Credit was a new entitlement that had less rigorous means testing and replaced the Minimum Income Guarantee.	£297 million
	Vehicle and Operator Services Agency Operator Self Service has modernised the approach to issuing Heavy Goods Vehicle Licences by redesigning the business process and IT support for the vehicle licensing business, enabling operators to carry out most licence transactions online at any time.	£9 million
	OGCbuying.solutions eSourcing provides secure collaborative tools used by procurement professionals and suppliers to conduct strategic procurement activities online, including tendering, negotiation, contract award and management, to deliver value for money procurement solutions to the public sector.	£2 million
	Environment Agency The Fishing Rod Licences project transformed a fixed-hours Post Office based service for 1.2 million transactions a year to a self-service system enabling customers to purchase fishing licences online at any time.	£200,000
	Other public sector	
	Transport for London The congestion charge was introduced to reduce traffic congestion in Central London by levying a flat rate fee upon drivers entering the congestion zone during the Monday–Friday working day.	£234 million

	Other public sector <i>continued</i>	Programme/project costs¹
	Northern Ireland Criminal Justice Directorate The Causeway Programme links the case management systems of the six main Northern Irish criminal justice agencies.	£48 million
	Transport for London The Oyster® card is an electronic smartcard, introduced in 2003, as part of the Prestige Project, a private finance initiative to renew, operate and maintain all the Transport Authority's ticketing infrastructure.	£40 million capital cost
	Scottish Water "Promise to resolution" – an integrated customer management and field service programme – introduced a new customer service contact centre and work scheduling system to improve both efficiency and performance.	£14 million
 UK Transplant	UK Transplant The National Transplant Database provides a fast and accurate matching system to enable organs to reach patients as soon as organs become available for transplant.	Running costs part of annual budget of c.£14 million (2005-06)
	Cambridgeshire County Council The Council transformed its governance structures following the introduction of portfolio management.	£90,000 provided by the ODPM (now the Department for Communities and Local Government), plus internal staff and senior management time
	City of Edinburgh Council As part of its "Smart City Programme" to modernise the Council's back office systems and processes, the Council undertook a modernisation of its services of Planning and Building Standards to enable individuals, construction firms, architects and solicitors to submit applications electronically and to find planning related information online.	Part of wider "Smart City Programme" to modernise the Council's back office systems and processes
	International public sector	n/a
	United States Department of Defense The Identity Management Programme provides military personnel with a Common Access Card to improve identity assurance and reduce fraud.	
	New York City Mayor's Office The New York City 3-1-1 Citizen Service Center provides access to all government information and non-emergency services in the New York City area through a single telephone number. NYC 3-1-1 is available 24 hours a day, with operators providing services in over 170 languages.	US\$25 million
	City of Anaheim The Enterprise Virtual Operations Center brings together real time data from the City of Anaheim's emergency services and makes the data securely accessible via the Internet, enabling city officials to see what is happening on all the City's critical response fronts.	US\$1.2 million

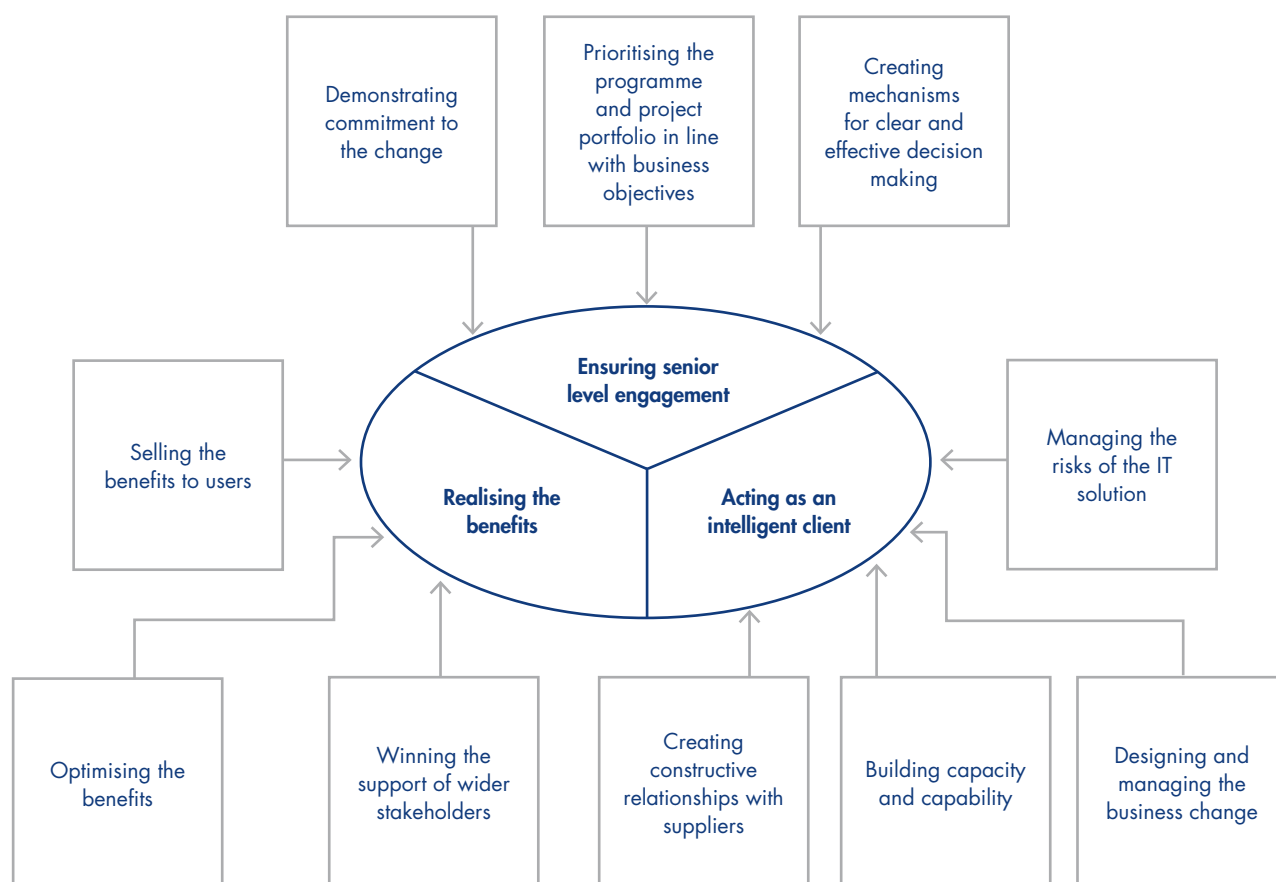
1 24 case studies of successful IT-enabled business change *continued*

Other public sector <i>continued</i>		Programme/project costs¹
 	<p>Office of the Revenue Commissioners</p> <p>The Republic of Ireland's Revenue On-Line Service (ROS) enables customers to both pay their taxes and file their returns online. The ROS Customer Information Service allows customers and their agents to view details of their Revenue Account.</p>	€40 million
 	<p>British Columbia</p> <p>Network BC is a dedicated project office within the Ministry of Labour and Citizen Services that works with British Columbia's remote communities and the private sector to improve citizens' access to the Internet.</p>	Leveraged existing government telecommunications spending of Canadian \$245 million (over 4 years)
Private sector		
	<p>APACS</p> <p>The UK payments trade association's chip and PIN programme is a new, more secure way to pay with credit or debit cards.</p>	£1.1 billion
	<p>Britannia Building Society</p> <p>The "Really Big Programme" involved replacing the Society's complete IT infrastructure to create a "single view" of each of its customers and their savings and investment accounts, mortgages, loans and other financial products.</p>	£60 million
	<p>Prudential UK</p> <p>The "Single View" customer service transformation programme was introduced to improve customer marketing and account administration by providing staff with an integrated view of all the products and services each customer has purchased from Prudential UK.</p>	£37 million
	<p>Norwich Union</p> <p>'Pay As You Drive'TM insurance uses Global Positioning Satellite (GPS) technology to calculate monthly insurance premiums based on how often, when and where people drive.</p>	n/a

NOTE

¹ Costs are those incurred by the programme/project in its life time, as provided by the case study body. They are not the subject of National Audit Office audits.

2 Core principles and activities that contributed to success



Source: National Audit Office

DEPARTMENT FOR WORK AND PENSIONS

Payment Modernisation Programme

The Department for Work and Pensions delivers support and advice through a network of services to people of working age, pensioners, families, carers and the disabled. The Payment Modernisation Programme set out to increase efficiency, reduce costs and improve quality of service to customers by paying benefits and pensions directly into recipients' bank accounts.

"The Payment Modernisation Programme faced a number of challenges including a conversion exercise on an unprecedented scale requiring a change of behaviour from millions of customers, many of whom had strong reservations. Success was achieved through strong and continuous support from the top, continuous and determined leadership, extensive stakeholder management and consultation, a strong focus on outcomes and success criteria, and aggressive risk management and assurance."

Department for Work and Pensions

Cost

£824 million (including one-off costs of £369 million).

Supplier

EDS – back office system development; Atos Origin – communications infrastructure; Vertex – contact centre operation; PA Consulting Group – client support.

Timescale

October 2002 – May 2005.

Current status

In 2000, the Department agreed a Public Service Agreement target of directly paying through electronic transfer (rather than order book or cheque payment) 85 per cent of customers by December 2005. By May 2005, 97 per cent of recipients were receiving their benefits and entitlements by Direct Payment.

Key components of success

- Top management gave strong commitment to the Programme, with clear governance arrangements, and making risk management a priority.
- A clear and comprehensive approach was taken to the identification of benefits and to engaging with customers and their representative groups to achieve the take up needed to secure the benefits.
- Senior managers of the agencies and units affected by the Programme were made accountable for delivering the benefits.

Aim

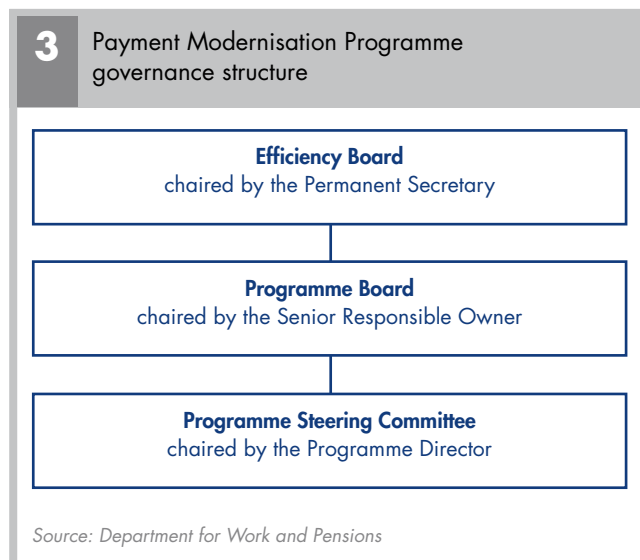
1 In 2002, only 42 per cent of 23 million pensions and benefit recipients were paid by Direct Payment. Most received payment either by giro cheque or by cash on production of an order book. This had major cost implications. Whereas order book payments cost 67 pence per payment and giro cheques £1.49, Direct Payment cost only 1 penny per payment.

2 The Department set out to modernise payment methods by moving away from cash and paper-based systems to a system centred on automatic credit transfer, with entitlements paid directly into customers' bank accounts.

Ensuring senior level engagement

Securing board leadership and oversight

3 The Programme's complexity and the number of agencies and business units involved called for a robust governance structure with top management scrutiny and oversight. To achieve this, the Programme Board was situated between the Department's Efficiency Board, chaired by the Permanent Secretary, and the Programme's Steering Committee chaired by the Payment Modernisation Programme Director (**Figure 3**).



4 The Department's Finance Director, a member of the Efficiency Board, became the Programme's Senior Responsible Owner, chairing the Programme Board of senior representatives from the seven delivery agencies, including the Pension Service, Veterans Agency, Jobcentre Plus, and the Disability and Carers Service, and important external stakeholders, such as the Inland Revenue and the Northern Ireland Social Security Agency. To increase confidence that the Programme was on track and that risks were being managed, Internal Assurance representatives sat on the Programme Board and on the Steering Committee to provide constructive challenge to all aspects of the Programme.

5 Another dimension to managing the Programme, provided by PA, was the ability to generate timely and accurate information for senior management and for the Programme's other key stakeholders such as the Inland Revenue. Three one-page "dashboards" were developed to communicate information on Programme performance, tailored to the needs of different levels of the governance structure:

- an executive dashboard showing the whole programme in a single view; and,
- a cheque payment dashboard showing the position on reducing cheque volumes in each business.

Good information combined with the clear layout of the dashboard assisted in identifying critical issues. In early 2004, for example, senior management were alerted that current plans would not achieve customer conversion targets and led to the decision to develop a further suite of conversion activities.

Prioritising the programme in line with business objectives

6 The responsiveness of the governance structure was tested in April 2002. A joint Office of Government Commerce (OGC) Gateway 2 and 3 Review identified risks to the Programme from the pressure on front line staff to absorb the various changes involved and competing priorities within other agencies and business units caused by other high profile business transformations such as the introduction of Pension Credit and major changes to Jobcentre Plus. The Gateway Review helped

the Senior Responsible Owner and Programme Director bring the problem sharply to the attention of senior management with the result that accountability for achieving the conversion targets transferred from the Programme Director directly to agency and business units. Jobcentre Plus, for example, launched initiatives to target individuals who only intermittently came into contact with the benefits system such as workers in the building trade.

7 In January 2005, the Programme received a “Green” designation in an OGC “Gate 0” Review. Reviewers commented that the governance processes had worked well, both for problem resolution within the Programme and for escalation of serious issues to the Department’s Executive Team.

Acting as an intelligent customer

Designing the business change

8 An overriding concern for the Department was that customers should not suffer from disrupted payments. This became a key focus for risk management and as part of governance procedures a schedule of internal gated reviews took place at every stage of the Programme. The reviews consulted with a wide range of stakeholders. For the design of the Cheque Payments project, for example, 36 internal stakeholders had the opportunity to challenge the robustness of the “Red-Amber-Green” assessments made by the project team against each of the project’s aims.

9 The Programme Director placed particular emphasis on aligning Programme milestones with risks and putting in place contingency plans. For introducing cheque payments, for example, the delivery team broke the process down into three capability milestones – the capacity to generate a cheque, print a cheque and distribute a cheque – each supported by a contingency plan. To ensure payments could be generated if the payment calculation system failed the system retained the previous six calculations so an average payment could be made. A second printing facility was stood ready in the event of printing failure. In the event of disruption to distribution, computer software was amended to enable entitlements to be sorted by postcode with a contract signed with a second mail distributor to deliver cheques to local post offices for customer collection.

Testing the viability of the IT solution and phasing roll out

10 Risk was further mitigated by implementing the Programme in a phased roll out, dealing firstly with long-term payments – war pensions and Child Benefit – whose recipients were not moving quickly on and off the system. Other shorter-term benefits, such as Jobseeker’s Allowance, were implemented later.

Building capability

11 The Programme team recognised early on that it did not have all the skills to manage such a large and complex business transformation and brought in PA to assist with preparation of the business case and the bidding documentation for the Customer Conversion Centre. PA also supported the Department in evaluating suppliers and in the contract award process.

12 Three separate consortia submitted bids. The Department, assisted by PA, carried out a careful scrutiny of each bid, including reference visits to previous customers and visits to the facilities of primary contractors and their subcontractors to evaluate their capacity and capabilities. During the site visit by senior management to Atos Origin’s subcontractor Vertex, for example, the firm was able to demonstrate capability by reference to its existing ability to handle large volumes of correspondence for utility companies. Senior managers were also able to satisfy themselves of the security of Vertex’s Valuable Receipt Room, which was particularly important given that some customers automatically in error sent in their benefits order book when they received correspondence from the Department.

Winning the support of wider stakeholders

13 To achieve its benefits, the Programme faced the challenge of changing the behaviour of 15 million people without incentive, compulsion or penalty. The challenge was considerable; beyond the Public Service Agreement target to achieve 85 per cent of customers in receipt of Direct Payment by December 2005, to meet the Department’s savings target, the business case identified that the Programme needed to convert 92 per cent of those recipients paid through order book or giro cheque. This required a clear strategy to manage the communications necessary to persuade customers, many of whom had no bank accounts and some of whom had poor credit histories, to forgo collecting benefits and pensions via Order Book and giro cheques, in favour of receiving money paid into an account.

14 To encourage as many customers as possible to take advantage of electronic payments, the Department worked with other organisations on the Universal Banking programme to establish a new type of basic bank account enabling account-holders to withdraw cash from a Post Office using a card and PIN, an option taken up by four million customers. This created the added complexity of ensuring that the roll out of the Payment Modernisation Programme was aligned with the Universal Banking programme. Other complexities included the need to set up a parallel system of cheque payments for “Exceptions” – customers unwilling or unable to open an account for Direct Payment.

15 The Department commissioned market research to determine the attitudes to Direct Payment of customer groups, such as pensioners, the unemployed, people with disabilities and single parents. This identified significant concerns. A survey of pensioners found, for example, that while 20 per cent saw no difficulty with receiving Direct Payments, the majority had reservations. To address concerns, the delivery team set up an engagement programme with voluntary and community groups representing the Department’s customers and stakeholders and invited representatives to meet with ministers.

16 The input of voluntary and community groups was valuable in both addressing concerns and identifying how the Department’s contact centre could best approach and convert potential Direct Payment customers. After an initial round of correspondence, the contact centre approached customers by telephone. Voluntary and community groups advised on the content of the telephone scripts and how best to make the approach. Their knowledge improved customer conversion rates often by relatively simple changes, such as identifying the fact that pensioners, for example, preferred to be contacted by phone in the daytime rather than in the evening.

Realising the benefits

Optimising the benefits

17 In its “Gate 0” Gateway Review, undertaken in January 2005, the Programme’s approach to benefits realisation was found to be exemplary. The review team identified a clear linkage between the full business case and the benefits realisation plan including systems for tracking benefits to the end of the life of the Programme in 2009-10. As part of this benefits plan relevant officials from each delivery agency were required to sign certificates indicating benefits secured.

18 As of May 2005 when the Payment Modernisation Programme closed:

- 97 per cent of all recipients of entitlements and benefits were receiving Direct Payment;
- 95 per cent of recipients who had converted to Direct Payment were happy with the payment system;
- 790,000 customers, who would not provide bank details, had migrated to payment by cheque; and
- net savings of over £1 billion had been identified for the lifetime of the business case, which finishes in 2009-10.

19 Following the closure of the Programme, a Residual Issues Team has been put in place to track and promote further benefits; for example, by reducing the number of customers still receiving cheque payments.

20 The Programme has won a number of awards, including, in 2005, the Joint OGC/Cabinet Office Delivery Awards’ category “Mission Critical Project of the Year” and “Individual Project Manager of the Year”.



DEPARTMENT OF TRADE AND INDUSTRY

Consumer Direct

Consumer Direct is a helpline and online consumer advice service, funded by the Department of Trade and Industry and delivered in partnership with local authority Trading Standards Services. It provides consumer advice and information via a single national telephone number and is delivered through 11 regional centres.

"Consumer Direct has been a flagship delivery initiative for the Department of Trade and Industry. Successful delivery has been driven by strong Ministerial support, working with an experienced and highly motivated delivery team, and underpinned by strong partnerships with Trading Standards. The service is popular with consumers and is already fulfilling its business case objectives of increasing consumer redress."

Department of Trade and Industry

Cost

£11 million implementation (DTI), including regional implementation. Total spend over 2003-04/2005-06 £34 million, including ongoing operations.

Supplier

Department of Trade and Industry: Detica – IT architecture and design, project management; Sophron Partners – consultancy; Affiniti – telephony; various IT suppliers including Sigdev, Fujitsu, Knowledge Network, and Cardiff City Council. Each region chose its own partners for the implementation of its solution. For example, the first region, Scotland, used Hedra's consultancy services for help with stakeholder management and communication.

Timescale

The first regional call centre project was established in January 2004 and delivered in July 2004. The rollout of the remaining call centres took place in two subsequent waves, with the last region operational in February 2006.

Current status

The programme has completed service roll out. A post implementation review has been carried out with a closure report. A Gateway Gate 5 (Benefits Evaluation) Review is due in early 2007, following a year of Great Britain-wide operational service.

Responsibility for the ongoing operational management of the service has transferred to the Office of Fair Trading, effective from 1 April 2006.

Key components of success

- Breaking the rollout of the regional call centres into phases allowed learning, such as the best technology solution, to be incorporated into the plans for subsequent regions.
- By recognising that the regional and central teams were reliant on each other to successfully deliver, significant effort was used to develop and maintain partnership principles that removed barriers between the central Department team and the regional implementation teams.
- A tailored communications plan allowed the Scottish implementation of Consumer Direct to address stakeholders' concerns and help engender enthusiasm for the project.

Aim

1 The concept of a national consumer helpline was first outlined in the consumer White Paper *Modern Markets: Confident Consumers*, which signalled a step change in thinking about consumer empowerment.¹ Market research identified that half of consumers neither pursued complaints nor knew where to find consumer-related help and information. The unmet demand was estimated to be as high as 1.5 million cases each year. In 2000, three pilot projects demonstrated that a national consumer helpline was operationally feasible, would be valued by consumers and could deliver benefits that outweighed the costs. The evaluation of the pilots highlighted that the most effective way of delivering the service was through regional contact centres accessed through a single national number.

2 In 2002, a consultation paper inviting the views of local authorities, Trading Standards organisations and other advice services identified widespread support for a helpline service and for the concept of a single national number. The Department of Trade and Industry initiated a phased programme to implement call centres in eleven regions across Great Britain. The programme aimed to increase consumers' access to quality advice and information; to enable people to resolve matters themselves; to improve the quality of information for Trading Standards; and to provide referrals where further help is required or specialist advice needed.

Learning from incremental rollout

3 The decision to introduce the service in waves allowed the project team to learn from each region's implementation. The first wave, of four regions, provided lessons that informed the financial assumptions and the technology decisions for future waves. For example calls had been predicted to last an average duration of eleven minutes but in reality the average time was nine minutes. This knowledge allowed the Department to improve its financial negotiation of the wave 2 implementation contracts with each region by better understanding the resource effort that would be required to deal with incoming calls. The Department also learned technology lessons and decided to procure a standard case handling system for all regions rather than allow individual regions to purchase their own systems. This improved understanding of the project in practice allowed the project team to refine the business case assumptions and, ultimately, improved the delivery of the programme.

Developing a delivery partnership

4 The Department team identified that successful partnership was required between the central programme and the regional teams and set about creating the right type of relationship from the outset. To ensure that regional concerns were addressed, the Department implemented a sustained programme of stakeholder engagement. This included a significant amount of face to face contact to demonstrate that the Department wanted to deliver in partnership rather than work at arm's length. For example the Department undertook stakeholder analysis for all the regional implementations and senior staff attended meetings where their presence helped to clearly demonstrate commitment to partnership working in the programme.

Analysing and communicating effectively with stakeholders

5 The need for strong stakeholder management was also identified as key to the success of the regional implementations. The first region to implement the service used Hedra, a change management specialist, to assist with the development of a structured stakeholder and communications plan. The stakeholder plan identified how influential a particular group was and their level of awareness of the project. This analysis was used to plan engagement with individual groups by identifying stakeholders that were concerned about the project. For example, front line trading standards staff were worried that they would either have no job or that their job would change beyond all recognition.

6 Communication strategies were created to change people's perceptions of the programme. One means employed was a benefit sheet that listed the changes that the new service would bring and how the change would affect that stakeholder group. For instance the trading standards officers were told how the new service would take 80 per cent of the routine calls away from their workload and allow them to improve the standard of service they offered the public and make best use of their expertise by focussing on the more complex cases.

¹ Department of Trade and Industry (1999) *Modern Markets: Confident Consumers*, Consumer White Paper, Cm 4410, July. London: The Stationery Office.

Realising the benefits

7 The business case for Consumer Direct was built on the consumer benefits of an improved information service and the prediction that there was unmet demand for advice. Benefits from each call centre have been monitored as each one has gone live and the last performance survey was conducted in November 2005. This survey measured the outcome of each enquiry with Consumer Direct broken down by region. The data identified that the service had made good progress in meeting unmet demand. For example, 81 per cent of people using the London service, 79 per cent in Scotland, 77 per cent in East of England and 73 per cent in South West had never previously sought consumer advice.² In most regions, over half those contacting Consumer Direct were able to resolve their consumer problem. Significant sums of money were involved. A typical value, for example, of the goods or services on which consumers used Consumer Direct's East of England service to resolve their problem was £115, with queries ranging from transactions involving single figures to over £100,000. In London, the typical transaction was higher at £268.

8 The roll out of the service has been marketed to optimise the benefits. By measuring the increase in calls in response to different marketing campaigns, household leaflet drops were identified as the most effective marketing method. This information has been used to target those households that, demographically, are least likely to possess or look for consumer advice but would benefit most from it. The Department predicts that this approach will help continue the trend of widening access to consumer advice.

² November 2005 regional customer satisfaction surveys, <http://www.consumerdirect.gov.uk/project/operations.htm>.



SMALL BUSINESS SERVICE

Businesslink.gov.uk

The Department of Trade and Industry's Small Business Service is an executive agency responsible for fostering enterprise and providing small businesses with the support needed to enable them to grow. Businesslink.gov.uk is a web portal dedicated to providing small and medium sized enterprises with easy access to the web services of government departments and agencies.

"The Businesslink.gov portal is more than just a web-site. It is becoming a primary access channel for small and medium sized businesses to Government. It is a complex facility – with over 16,000 pages, 30 specific tools (like the business support directory), and 30 decision trees to help firms develop solutions to the challenges they face in growing and developing their businesses.

"www.businesslink.gov.uk attracted 5.7 million unique visitors in the 12 months to March 2006. Our research shows that a significant number of these visitors are going beyond simple information-seeking and are using tools, like the Business start up organiser."

Small Business Service

Cost

circa £17 million set up costs 2002-2004 (part of wider ongoing costs estimated at circa £50 million between 2002-03 and 2005-06¹).

Supplier

(major contractors during set up): web development and hosting – BT; service launch – Opta; web content – Sweet & Maxwell.

Key components of success

- From the outset the Programme's major stakeholders were actively involved in the decision making and oversight of the Programme.
- The Programme team created a culture of shared ownership across the organisations providing content for the site.
- The Programme's leaders successfully created a collaborative working environment between its own team members, suppliers and consultancy staff, which gave the team ready access to expertise.

Timescale

June 2002 – April 2004.

Current status

The Businesslink.gov.uk service was launched on 4 May 2004. It now provides access to the services of seventy departments and agencies.

¹ National Audit Office (2006) *Supporting Small Business*, Report by the Comptroller and Auditor General, HC 962 Session 2005-2006, 24 May 2006. London: The Stationery Office.

Aim

1 In June 2002, the Small Business Service began researching how Government could better support small and medium sized enterprises. It found that small businesses regarded government services as fragmented and lacking in customer focus. Companies had difficulty understanding who they should be dealing with for different regulatory activities and where they should go to get information from Government.

2 In response to the research, the Small Business Service published a policy framework² setting out a vision for a more coherent engagement between the whole of Government and the small business sector. Among the initiatives announced was the creation of a single web portal for small business. The portal would provide an integrated overview of government-related information and services for small and medium sized enterprises, and would act as a gateway into the various e-services provided for business by departments and their agencies.

3 Given the Small Business Service's existing role as the champion of small business and the synergy with its existing Business Link operation, Government decided the delivery and support of the new Portal should be the responsibility of the Service and that the Portal should serve as the main electronic channel, replacing www.businesslink.org.

Ensuring senior level engagement

4 For the Programme team, the web portal itself did not present a particularly difficult technical challenge. However, the team faced considerable organisational complexity in having to deal with a large number of government departments and agencies whose support for the initiative was essential, and whose confidence in the new portal had to be gained before they would allow use of materials from their own websites, or for Businesslink.gov to make use of their logos.

5 Approximately twenty government organisations were asked to participate in the initiative. This involved nominating a representative to sit on the Programme Board, who would be of sufficient seniority to champion the Programme within his or her organisation. Such

appointments were typically at Civil Service Grade 3 or above, and included a number of chief executives. Commitment was further strengthened by representatives agreeing to sign up to a Memorandum of Understanding, which defined the role and responsibilities of the Board including a clear statement that *"the Programme is not carried out on behalf of, but by, participating departments and agencies"*. Collective responsibility was reinforced by rotating the role of Chair among the partners on a bi-monthly basis.

Winning the support of wider stakeholders

6 The web was developed in response to customer needs and built around a number of themes such as taxes, health and safety, and employment. To create a comprehensive information resource, the Programme team seconded senior managers from the relevant departments making them "theme" directors. Seconded staff sat alongside Programme staff to help design the Portal and to identify the best ways of getting customers to the relevant area on individual departments' websites as quickly as possible. Such secondments were important in reinforcing the collective ownership of the Portal, and within the departments themselves, in helping to overcome any reluctance to allowing the Portal to "deep link" directly into information held on a Department's own website, without having to first visit the relevant home page.

7 In advance of Board meetings, the Programme Director had one-to-one discussions with each member. These "bilaterals" were confidential and gave the Programme Director the opportunity to brief each member about progress, and to discuss privately any departmental concerns about the Programme. The sense of trust built up at these meetings also allowed Board members to share with the Programme Director internal departmental sensitivities, which they would have been reluctant to air at a Board meeting. For example, during discussions with one Department it emerged that internal budgetary issues were causing a reluctance to commit to the Programme. By adjusting the timing of some of the project milestones to provide greater financial flexibility, the Programme Director was able to keep the Department on board.

2 *Small Business and Government – the Way Forward*, The Small Business Service, (Dec 2002).

Creating constructive relationships with suppliers

8 The Programme team built collaborative relationships with suppliers with members of their staff operating as an integral part of the various project teams. This ensured that suppliers saw plans early, could offer constructive challenge, and could advise management of any significant flaws or vulnerabilities in the Programme or, alternatively, where there might be scope to make greater use of innovative technology.

9 In terms of skills, the Programme team sought the most able staff from both suppliers and the Small Business Service, making appointments on the basis of merit rather than seniority. This meant that mixed teams of civil servants and suppliers were set up, overseen by those best placed to manage the tasks in hand. Specialist contractors also led projects within the overall Programme. For example, the specialist consultancy Opta was engaged for its expertise in formulating the customer proposition and its experience in launching businesses. It shared its launch protocols with the team, when the site was ready to go live.

Realising the benefits

10 In 2004, Businesslink.gov.uk won the International Visual Communications Association's Gold Award for best business communications in its website category with the judges' citation stating:

"The site has clearly put the needs of the user at the heart of its architecture, design and execution. It is clear, comprehensive, accessible, clean, fast and highly usable with outstanding navigation and powerful tools. It should provide a platform to provide more services and updated content in the future and should be considered a model for public sector websites."

11 In August 2005, the United Nations judged the Portal the best e-content application for business in the United Kingdom.

12 In the twelve months to March 2006, Businesslink.gov.uk had 5.7 million unique visitors, and by July 2006 was attracting over 500,000 unique visitors per month. Repeat customers have also increased from seven per cent in January 2005 to 20 per cent a year later.

13 In the period between March 2005 and March 2006, the site's online tools were used 2.68 million times, with the Grant and Support Directory used over 554,000 times.

14 In a survey of a thousand users, which took place between September and November 2004, 60 per cent of respondents found the website either extremely useful/relevant or useful/relevant and 89 per cent said they would recommend the Portal to others.

15 At the core of the businesslink.gov.uk development process is a rule that each product and service on the site should be usability tested by an independent agency before it is launched to the live site, and amendments made as necessary. Such an exercise typically involves six or seven volunteers drawn from the small and medium sized business community being given a set of tasks to perform using a new product. Their reactions, problems and successes are observed and reported to Businesslink to help identify any required changes. Over 40 of these sessions were run during the site's development, involving more than 250 small and medium enterprise owners and managers. Feedback is taken seriously – in one case a major tool incurred an additional two month delay and rework to make sure it was fit for purpose.

16 The Small Business Service and the Programme Board have recently agreed a new Strategy for Businesslink.gov taking it forward to 2011. This is designed to support the Government's wider IT strategy *Transformational Government, Enabled by Technology* including the creation of a Gateway into Government for Business. The Business Link Portal will continue to act as the primary online entry point for business, joining together information and guidance and business support. Over time, the service will be increasingly personalised to the needs of the user.

17 The Programme will also deliver a range of new projects including "The Transactions Framework" (TxF) designed to allow departments to make transactions within the Businesslink.gov portal itself. The programme will also deliver the "International Trade Single Window" project; to create an expert service for online information and guidance and transactional capability between international traders and Government.

18 In December 2005, the management of the Programme and specialist suppliers was outsourced to Serco plc.



DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS

Eaga Partnership: Warm Front

Eaga Partnership is a private company established in Newcastle in 1990 to lead efforts to improve the housing conditions of vulnerable people living in cold, damp and energy inefficient homes across England. Warm Front is a government funded programme for tackling fuel poverty, administered by the Eaga Partnership.

"The successful delivery of new IT systems was essential for the introduction of the new phase of the Warm Front Scheme from June 2005 significantly increasing capacity and efficiency for clients and partners".

Department for Environment, Food and Rural Affairs

Cost
circa £1 million.

Timescale
January 2005 – June 2005 and on-going.

Current status
The introduction of new systems to support the new phase of Warm Front was completed successfully in June 2005.

Key components of success

- The programme was sponsored and led by senior management. This ensured it was assigned the appropriate priority as its initial objectives had to be achieved within six months, a deadline set by the Department for Environment, Food and Rural Affairs (Defra).
- A well defined benefits realisation plan was developed that closely tied key performance indicators with the achievement of the Government's Public Service Agreement on the eradication of fuel poverty in vulnerable households in England by 2010.
- A culture of continuous stakeholder engagement maximises the take up of the service, and continually drives improvements to business processes.

Aim

1 In November 2001, the Government published its UK Fuel Poverty Strategy, which set a target of ending fuel poverty in vulnerable households (the elderly, families with young children, the long term sick and disabled) by 2010 in England.

2 Targets have also been established for the eradication of fuel poverty in all households within each of the countries in the UK by 2016-18. (A fuel poor household is one where more than 10 per cent of income is spent on fuel to heat the home to an adequate standard of warmth.)

3 The Warm Front Scheme, launched in 2000, was identified as one of the key ways to tackle fuel poverty, through the provision of a range of insulation and heating measures to vulnerable households.

4 The management of the Warm Front Scheme across England was divided into four regions with the Scheme being managed in each region by a private company under contract to Defra. The Eaga Partnership delivered Warm Front assistance in three of the regions while another provider delivered the scheme in the fourth.

5 In 2004, following a number of reviews, Defra announced plans to revise the Warm Front Scheme and the Department re-tendered the contracts for the role of Scheme Manager. In February 2005, the Eaga Partnership won the contracts for all four areas of England, and underwent an IT-enabled business change enabling it to deliver the Scheme's additional requirements and to build the new capacity to support the additional area.

6 Changes introduced as part of the new phase of Warm Front included increases to the size of the grant available. Eligible residents could now receive an increased grant up to the value of £2,700 (or £4,000 for oil central heating) up from £1,500 or £2,500 for the over 60s. Also, whereas under the old system any sums allocated were made on a one-off basis, Warm Front now permitted eligible residents to return for further funds if their first award was less than the full grant for which they are eligible. This, along with winning the contract for the other areas of England, meant Eaga Partnership's systems had to store greater amounts of more complex customer data for longer.

7 Following the contract win, senior management took the decision to increase Eaga's IT systems' flexibility and capacity in order to respond to the demands of the contract and to enable the company to respond to any additional customer requirements. The decision was therefore taken to replace all existing IT infrastructure with more modern and powerful systems.

Ensuring senior level engagement

8 Eaga Partnership's programme to transform its systems to support the new phase of Warm Front was led from the top of the organisation by the Chief Operating Officer acting as programme sponsor, who galvanised the organisation and ensured that the programme was assigned the appropriate priority. This proved invaluable as the team delivering the IT-enabled business change had only six months to make the changes required to support the revised Warm Front contract.

Winning the support of wider stakeholders

9 Eaga Partnership's IT-enabled business change incorporated into its design strong support for Warm Front's stakeholder engagement, which is essential for the efficient operation of the scheme. Eaga's systems support a team of third party installers, in-house assessors, inspectors, networkers, contact centre and back office employees, in total a team of circa 1,000 people. The systems provide these stakeholders with real-time web-based Portal access to relevant data in a secure environment which enables them to service the needs of Warm Front customers effectively, efficiently and in a timely manner.

10 Eaga Partnership's IT team that delivered the system changes to support Warm Front considered that alongside their technical expertise, key elements in their success were a detailed knowledge of the business. The IT team includes business and financial, as well as technical staff. The approach taken by Eaga's IT team has centred on building strong internal customer relationships, recognised by the award of Eaga's internal customer service award in both 2004 and 2005. Throughout the development work, all relevant stakeholders were closely consulted and involved in training and testing to ensure that the changes met their needs.

Realising the benefits

11 In June 2005, as part of Defra's re-tendering of the contract for the management of the Warm Front Scheme, Eaga Partnership's transformation programme went through the OGC Gateway Review, specifically Gate 4 "Readiness for Service". The Eaga programme was commended by the review team as their plan detailed a range of key performance indicators, agreed with Defra, for Warm Front's operation, each targeting an area of performance that would have the most impact in delivering the Public Service Agreement target. For example, the fuel efficiency of a dwelling is measured using the Standard Assessment Procedure; a scale from 1 to 100. Eaga Partnership records the number of clients' homes where Warm Front's actions have taken a dwelling's Standard Assessment Procedure rating to above 65. Achieving this value makes it less likely individuals will fall into fuel poverty in the future.

12 The expanded capacity of the new Warm Front system is designed to improve service to customers allowing it to process significantly more applications than ever before. Currently, the system is handling 17,000 new applications for assistance each month.

13 The new system introduced electronic ordering, billing and invoicing which generated substantial administrative savings. Electronic ordering eliminated the use of faxes, leading to the redeployment of three full time filing clerks and freeing up storage space. With the introduction of eBilling, central heating installers were able to submit claims electronically via a web portal. Eaga then raises a self bill invoice on their behalf, replacing VAT invoices. This reduced the number of staff needed to process and match invoices by a factor of 70 per cent.

14 Financial reporting has also been made more efficient. For example, at the end of each month, the payments and reconciliation exercises now take one day, rather than four days using the old system. Also, Eaga's VAT position can be reported directly from the new system, whereas before substantial manual intervention was needed before accurate figures could be obtained.

15 Eaga Partnership designed its Warm Front systems to encourage and reward good performance from its staff and suppliers. For example, after an installer has completed the installation of a central heating system, a Warm Front inspector checks it against an agreed specification, and generally reviews the quality of workmanship. By logging on to a portal provided by the Warm Front system, the data is fed back and the system allocates a ranking to the installer. This ranking is then used as one of the criteria for allocating future work.

16 The new system has added extra validation of the data entered via the various client portals, greatly improving its quality. For example, validating the submission of building survey results has provided a clearer picture of the improvements in Standard Assessment Procedure levels of each home that has received Warm Front assistance, and clearer feedback on the performance of installers has helped identify trends making it easier to address quality issues.

17 The new, more modern infrastructure, will also allow the Eaga Partnership to diversify its business into new areas, reducing the organisation's dependency on the revenues from the Warm Front contract.



Part of the Department
for Work and Pensions

DEPARTMENT FOR WORK AND PENSIONS

Pension Credit

The Pension Service is the Department for Work and Pensions' delivery agency set up to provide services to senior citizens, both those already receiving pensions and pensioner benefits, and those planning for their retirement. Pension Credit was established to provide a minimum income for all pensioners without penalising those with modest savings.

"The Pension Service successfully introduced a new benefit, Pension Credit, which continues to lift pensioners out of poverty. The on-time delivery of the enabling information technology was a key element in the project's success. This was achieved through building internal capability and creating a culture where the project team, along with a number of different suppliers, collaborated together to achieve a single goal: to say to pensioners 'Pick it up. It's yours.'"

The Pension Service

Cost

£297 million.

Supplier

EDS – system development; BT – communications infrastructure; Ventura – contact centre operation; PricewaterhouseCoopers (now IBM) – business consultancy.

Timescale

June 2002 – April 2003.

Current status

The Department for Work and Pensions has a Public Service Agreement target of 3.2 million pensioner households being in receipt of Pension Credit by 2008. By November 2005, 2.7 million pensioner households were receiving Pension Credit.¹

Key components of success

- Although the Pension Credit project was responsible for the delivery of the Pension Credit products, all business areas of The Pension Service stepped up to a level of engagement with the project team where they could drive through to successful implementation.
- Throughout the project there were also clearly defined accountabilities at all stages of the process. For example, the Pension Credit project team handed over the Pension Credit products and enabling information technology to the operational unit that would receive the customers' calls in the months leading up to the benefit's go-live date. This was accompanied by a clear transition of delivery accountability from the project team to the Chief Operating Officer.
- The way in which the enabling information technology was delivered played an important part in the success of Pension Credit. This case study will focus on the elements that contributed to a successful IT implementation.
- Regular meetings of The Pension Service's senior management with the key information technology suppliers created a sense of collaboration and gave the Programme team access to key decision makers.

¹ Department for Work and Pensions Information Directorate: *Work and Pensions Longitudinal Study*. National Audit Office (2006) *Progress in Tackling Pensioner Poverty: Encouraging take-up of entitlements*, Report by the Comptroller and Auditor General, HC 1178-I Session 2005-2006, 21 July 2006. London: The Stationery Office.

Aim

1 Pension Credit was introduced to combat poverty and provide security in retirement. It replaced the Minimum Income Guarantee, a means-tested benefit that required applicants to answer detailed questions about their income, savings and personal circumstances. The Minimum Income Guarantee was perceived by senior citizens as intrusive and complex, with the result that 20 per cent of those eligible did not take it up. Pension Credit aimed to achieve higher take up and to be easier to administer. For example, unlike Minimum Income Guarantee where any change in financial circumstances required a re-assessment of entitlement, those who meet the criteria for Pension Credit have an entitlement that is valid for five years; recipients needing only to report changes if their income falls.

Acting as an intelligent client

Working actively with users and wider stakeholders

2 In 2001, some two million pensioners were living in low-income households, and Department for Work and Pensions research showed that substantial numbers were not taking up means-tested benefits to which they were entitled, owing to a number of barriers. To remove barriers to take-up, The Pension Service undertook extensive research from its inception in 2002 to better understand its customers. This identified that pensioners were deterred from applying by intrusive questioning, complexity, and by having to fill in lengthy and difficult forms. By engaging with a number of special interest groups, The Pension Service also identified that the term “benefit” was viewed by some senior citizens as having a social stigma. The Service therefore adopted the term “entitlement” for its promotion materials and its advertising put across the message “Pick it up. It’s yours”.

3 Suppliers were first tasked with converting the existing two million Minimum Income Guarantee customers to Pension Credit by its launch date of October 2003. To maximise take up, beyond existing customers, The Pension Service encouraged pensioners to apply by telephone and take part in an initial interview with a specially trained operator who would fill in as much of the application form as possible. This meant the setting up of additional telephony capacity to handle up to 4.5 million calls. The form would then be posted to the applicant to complete and forward, with the relevant proof of identity, to one of 28 local Pension Centres.

4 Learning lessons from problems encountered with other new services where telephone applicants had difficulty getting through, The Pension Service put in place measures to manage demand and ensure that the flow of applications was within The Pension Service’s capacity. To avoid significant call volumes building up around launch date The Pension Service invited pensioners to apply up to six months before or up to a year afterwards, with no adverse effect on their entitlement. To help communicate to pensioners the flexibility of the application date, The Pension Service worked closely with special interest groups.

5 As well as extending the time available for applying, The Pension Service also varied the volume of invitation packs sent out to pensioners and adjusted the intensity of advertising and promotion in different parts of the country to ensure the flow of applications into local Pension Service offices did not exceed their capacity to process them efficiently. If a local Pension Service office’s resources became stretched, local advertising was reduced until any backlog was processed.

Building capacity

6 The Pension Service had taken active steps to build its capability for delivering IT-enabled business change after outsourcing most of its information technology in the 1990s. For example, The Pension Service appointed a new Chief Information Officer, who in turn made additional appointments designed to further strengthen the agency’s IT skills and capabilities. This allowed the Pension Credit Programme to have routine access to senior IT staff who understood the lifecycle of an IT-enabled project, and the challenges likely to be faced both in terms of management and technology. For example, the architectural issues relating to design and performance.

Ensuring a viable IT solution

7 The Pension Service chose to support Pension Credit using its existing IT infrastructure, rather than to develop new systems. This gave the Programme some clear and, as it turned out, helpful boundaries. The Pension Service also aligned its business processes around current functionality and resisted the temptation to attempt overly ambitious schemes.

Creating constructive relationships with suppliers

8 After initial difficulties, the Pension Credit team built strong, open relationships with, and between, its main suppliers EDS and BT. For example, by operating a shared risk register, each side was open about the risks they perceived in the Programme. Initially, however, issues arose from the suppliers being under a number of different contractual arrangements. The Department for Work and Pensions had an existing framework agreement with EDS, for example, which it used to appoint the supplier to develop the necessary software applications and, eventually, to operate the service as well. It also had separate contracts with BT for the telephony infrastructure for the contact centres. Although this type of contractual arrangement is not uncommon, and enabled The Pension Service to initiate development more rapidly, it often requires a higher degree of contract management to ensure that suppliers fulfil their respective contractual responsibilities. The contracts with EDS and BT have recently been realigned to avoid these potential draw backs.

9 To solve issues quickly, a change of culture was required – from an emphasis on contractual obligations to one focused on collaborative working and joint problem resolution. Two steps fundamental in delivering the cultural change were, firstly, the creation of the Pension Credit Delivery Board, a forum that met weekly to focus on issue resolution by assigning ownership amongst the suppliers and setting timescales. Its success lay in its composition – senior decision-makers from all the participating organisations, chaired by The Pension Service's Chief Operating Officer. Decisions could be taken at meetings without referring back to others. The second step was the introduction of a daily teleconference. At 9 a.m. every day, senior staff from The Pension Service, the Department, EDS, BT and any other relevant stakeholders discussed current priorities.

This created a forum where problems could be aired and worked through with the assistance of the others. For example, before Pension Credit went live, testing discovered that the system might slow down at peak times, preventing operators from providing a good service to the caller. After the problem was aired at a teleconference discussion, a joint team was formed from EDS, BT and The Pension Service to examine all the possible causes. This identified that there was no one cause of the problem, but rather a collection of issues which were fixed before the go-live date with no impact on customer service.

10 The Pension Service's success at building robust collaborative relationships enabled suppliers to "constructively challenge" some of the Service's requests of them. For example, following a request by the supplier, The Pension Service reviewed the number of changes it wanted to make to the Pension Credit front office application. Around half were withdrawn with no adverse impact on the quality of customer service.

Realising the benefits

11 Pension Credit has helped address pensioner poverty by guaranteeing everyone over the age of sixty an income of at least £109 per week.

12 Between April 2002 and March 2003, The Pension Service paid £4.5 billion in Minimum Income Guarantee payments to 1.8 million customers, whereas between April 2004 and March 2005 £6.1 billion was paid in Pension Credit to 2.7 million customer households.²

13 The success of the project has been recognised by the project winning a number of awards, including the "Best Customer Relationship Management (CRM) Project in the Public Sector" award at the 2004 CRM Industry Awards and the Association of Project Management's "Project of the year" award in 2004.

² The Pension Service, *Annual Report and Accounts 2002-03 and 2005-06*.

VEHICLE AND OPERATOR SERVICES AGENCY

Operator Self Service

The Vehicle and Operator Services Agency is an executive agency of the Department for Transport. It is responsible for licensing and testing both Public Service and Heavy Goods vehicles and takes enforcement action when necessary. Operator Self Service has modernised the approach to issuing Heavy Goods Vehicle Licences by redesigning the business process and IT support for the vehicle licensing business, enabling operators to carry out most licence transactions online at any time.

“This project was successful because it first established a vision for ‘whole systems’ reform – one shared by management, staff and partners, and driven by representatives from all three. Using consultants to support and train the project teams meant that the business gained valuable experience in managing change and enabled us to carry forward that vision. Finally, there was an understanding that benefits realisation requires a strong performance culture – and it is important to be flexible about the timing of benefits delivery.”

Vehicle and Operator Services Agency

Cost
£9 million.

Supplier
Hedra – change management; LogicaCMG – software application; Computacenter – infrastructure support.

Timescale
December 1998 – March 2002 (Phase 1),
December 2004 – November 2005 (Phase 2).

Current status
The programme has been in operation since November 2005.

Key components of success

- Consultation with staff from all levels of the organisation on the design of the future business process helped identify effective solutions to potential front line problems. Early engagement with staff also created commitment to the business change.
- Analysis of the customer base identified take-up of the online services by certain groups as the key to achieving financial savings. This led to a communication programme promoting the benefits of switching to the online service targeted at those customers responsible for the majority of licence transactions.

Aim

1 In 1997, it took up to three weeks for the Vehicle and Operator Services Agency to process specific changes to a Goods or a Public Service Vehicle (PSV) licence; for example, adding or removing a vehicle registration mark and the re-issue of the appropriate discs. These largely paper-based processes represented 80 per cent of all transactions and were performed at six Traffic Area Offices situated around the UK, each office having its own limited legacy database system.

2 The Agency commissioned Hedra consultants to identify ways of modernising the licensing process. In 1999, they recommended the introduction of a 24-hour online service and more streamlined administrative processes. Hedra's plan also included cost savings from a modern IT system designed to ensure customers' data only needed to be entered once.

3 As a next step, the Agency had to determine whether the licensing service should continue as an in-house activity or instead in future it should be out-sourced to a third party. The Agency again asked Hedra to perform an analysis of the two options. An in-house service was finally chosen based upon predicted savings in annual running costs of £3 million over a period of 10 years, and fewer risks to implementation.

Building capability

4 To bring about the modernisation involved significant redesign of the existing business processes and IT systems. With around 350 staff in total, the Agency did not consider it possessed sufficient expertise to deliver a large business change programme alone. It therefore formed a partnership with Hedra to design in detail a new licensing process that would better meet customer needs and reduce administrative costs. A set of principles were developed at the outset of the partnership that helped ensure that both client and consultant shared clear expectations of their respective roles and which also encouraged skills transfer. These principles included statements of expected behaviour such as "close working between Vehicle and Operator Services Agency staff and Hedra consultants throughout the business process design phase to ensure knowledge and skills interchange". Project terms of reference were created to ensure that the Hedra team subscribed to this expected behaviour. This required Hedra to consult with Agency staff throughout the study and to take all opportunities for collaboration.

5 The use of a joint team to design the new processes was identified by the Agency as a key component in the overall success of the project. Members of the team were recruited from all levels within the Agency including, importantly, front line staff, making use of their experience of processing applications to advise and forewarn of some of the practical difficulties the new processes might encounter and to make important contributions to the design of the self-service application process. The Vehicle and Operator Services Agency consider that by creating openness and inclusiveness in the consultation process, this approach also helped to reduce staff concerns about the proposed changes.

6 Later in the project, a second joint team was established between the Agency and Hedra to manage the contractual relationships with the suppliers of software and hardware products. Initially a Hedra consultant led the team, providing advice and input on all the key technical decisions. Over time, however, Agency staff gained sufficient knowledge and confidence to take on the responsibility for the day-to-day management of suppliers.

7 LogicaCMG and Computacenter worked together to ensure that the technology deployed on the project would optimise the benefits through an effective implementation of key links to other government applications, and proactive support through the crucial initial live stage of the project.

Realising the benefits

Winning the support of wider stakeholders

8 Initial cost benefit analysis identified that key to the financial success of the project would be to persuade significant numbers of customers to switch from traditional paper-based applications to the new online route. Analysis of the Agency's customer base showed that 12.5 per cent of customers were responsible for almost 50 per cent of all transactions, and the Agency therefore used this knowledge to create a targeted communications programme to convert these customers to the new electronic licence application process.

Optimising the benefits

9 This approach proved successful. Six months after the launch, 50 per cent of goods vehicle and 79 per cent of passenger vehicle licence transactions were conducted online. The time taken for customers to obtain a licence reduced by 25 per cent, and adding a new vehicle to an existing licence using the on-line service now takes seconds rather than the 14 days previously.

10 The success of operator self service has contributed to the significant increase in the level of satisfaction among the Agency's customers. In the 2005-06 customer satisfaction survey (conducted by MORI), for operators overall satisfaction with operator licensing was 91 per cent compared with 78 per cent in 2003-04 (the base year).¹ In addition, the system has won four awards, namely:

- e-Government National Awards 2004: winner of the e-Government service uptake – Excellence in usership/user growth; winner of the e-Government team award for the self-service development;
- Government Opportunities Awards 2005: winner of the Government Opportunities Magazine's award for the Greatest Contribution to the e-Government Agenda; and,
- Public Servants of the Year Award 2006: winner of the Creative Solutions Award for Better Regulation (award sponsored by the Better Regulation Commission; for the complete development of Operator Self Service).

¹ <http://www.vosa.gov.uk/vosa/publications/cdfp%20part%201.pdf>.

OGCbuying.solutions eSourcing Service

OGCbuying.solutions is an executive agency of the Office of Government Commerce. Its role is to deliver value for money savings for central civil government and the wider public sector through a dedicated procurement service. Its eSourcing platform provides web-based collaborative tools for public sector procurement professionals and suppliers to conduct the strategic activities of the procurement lifecycle online.

“eSourcing uses proven technology to provide organisations with their own branded web presence. It has demonstrated significant efficiency improvements for both buyers and sellers engaging in public procurement activities online in many sectors of the UK public sector.”

*Stephen Heard, Director of Customer Relations,
OGCbuying.solutions*

Cost

£2 million (set up, operating and support costs to 2005-06).

Supplier

BravoSolution – application and support.

Timescale

2001 – 2005.

Current status

The eSourcing Managed Service went live in June 2005 and is now used by 34 public sector organisations. New organisations continue to join the service.

Key components of success

- The project manager and eCommerce Director had extensive previous experience in implementing eSourcing systems within other complex organisations.
- The project drew on the expertise of experienced procurement professionals from potential user bodies to specify the system requirements and test out key features to ensure it met users' needs.
- The technology chosen was successfully demonstrated at reference sites.
- The buying organisation has its own branded web portal to interface with suppliers.
- The software is securely hosted by a Service Provider, so the customer organisation requires no “client” technology investment and it can be implemented within six weeks.
- OGCbuying.solutions provided change management support for organisations transforming their procurement functions to use the new platform.
- The service has an active user group which collaborates to develop its usage.

Aim

1 The Office of Government Commerce and its executive agency OGCBuying.solutions aim to increase value for money savings from public sector procurement by encouraging take up of eProcurement tools that can reduce processing costs and secure better deals. In 2001, the Office of Government Commerce launched the Tender Trust pilot of eSourcing, a web-based system that enables buyers and sellers to conduct their interactions and transactions online. The project aimed to test commercial providers' claims that eSourcing reduced sourcing costs, improved the efficiency of the procurement function, and freed up procurement staff for more added value activities.

2 The Tender Trust pilot demonstrated that eSourcing could deliver benefits but the commercial software packages available were not adequate to support the exacting requirements of public sector procurement. They could not generate, for example, the large number of notices issued as part of a public sector tender process.

3 Despite the difficulties, the potential efficiency gains from reducing the paperwork involved in public sector tendering meant that interest from potential central government users was sufficiently strong for the Office of Government Commerce to initiate a project to develop an eSourcing System to meet UK public sector needs.

4 The Office of Government Commerce's eCommerce team, in conjunction with OGCBuying.solutions who would be managing the service going forward, awarded the eSourcing framework contract to BravoSolution, an Italian company with experience of operating e-tendering successfully in France and Italy, to supply the application and support the service. The team were particularly impressed with BravoSolution's ability to support the European Union's directives on public tendering and procurement.

Winning the support of users

5 To ensure that the system met users' needs, the Office of Government Commerce invited public sector organisations with an interest in using an eSourcing platform to contribute to its development. To strengthen commitment, the Office of Government Commerce formed special interest groups of potential users to examine different aspects of the sourcing cycle and to produce requirements that would enable BravoSolution to adapt its service to the UK public sector. For example, one special interest group evaluated the various commercial software packages that would work with the BravoSolution system. Another group contributed to the potentially eighty or more different email messages that the system might need to communicate to sellers during a sourcing cycle.

6 To realise the benefits of the change, it was essential to gain sufficient commitment from public sector bodies during the development phase that they would use eSourcing once it was implemented. Commitment was strengthened by convincing some potential users to make a financial contribution to the project. In return, committed users were able to have a key influence in the design of the system.

Designing a well defined solution

7 The close working relationship between the eCommerce team and departments sponsoring the development ensured the solution met their requirements. eSourcing provides four services:

- eTendering, which allows buyers and suppliers to manage their interactions during the tender process securely and conduct electronic auctions;
- eEvaluation, which enables teams to work collaboratively in developing evaluation plans, evaluating tender documentation and carrying out bid comparisons;
- eCollaboration, which enables teams to collaborate in the development and management of documentation; and,
- eContract Management, which facilitates the contract management lifecycle from the establishment of a contract through to its expiry.

8 The service is designed for rapid deployment through the hosted managed service model. BravoSolution provides setup, configuration, hosting, maintenance, security, disaster recovery and upgrade of the software for all customers through a single hosted instance. Neither customers nor suppliers require any internal IT investment or implementation/maintenance effort, and can access the service on-demand through a simple web browser.

9 An important consideration for potential users was that eSourcing was designed to be sufficiently flexible to allow them to use each of the four services individually or in any combination. Whereas commercially available eSourcing products generally provide complete suites of programs within an expensive integrated application, public sector users wanted to be able to customise the package to buy the specific eSourcing services they wished to use. By allowing users to buy licences for specific services, eSourcing provided better value for money by not duplicating other eProcurement tools users already owned. eSourcing also avoided users needing to make additional technical investment by using the same technology needed to access the Internet.

10 To encourage take up of eSourcing, the Managed Service provides users with a help desk to support their sourcing cycle. This has made eSourcing easier to use by providing training to suppliers responding to tenders or participating in electronic auctions and by dealing with the volume of queries and questions a large public procurement generates. For example, in 2005-2006 the National Health Service Purchasing and Supply Agency received responses from approximately 3,000 potential suppliers.

Building capability

11 Once the requirements had been gathered, the Office of Government Commerce handed the delivery of the project over to its executive agency, OGCBuying.solutions. OGCBuying.solutions appointed a programme director with extensive private sector experience of managing suppliers, the pitfalls in similar implementations, and an understanding of customer organisations' expectations. Procurement professionals from user organisations sat on the project board, which gave the delivery team access to considerable procurement expertise; including experience of deploying real time "live auction" software across Europe.

12 The requirement specification within the framework agreement made provision for customers to receive set-up and training services from the Service Provider as part of the licence fee, plus the ability to order additional professional services.

13 For new users, OGCBuying.solutions provides tools to enable them to make the transformation to eSourcing and facilitates access to consultants and interim managers who can carry out skills assessment, training and recruitment to ensure that users have the appropriate eSourcing capability and can assist customers with rolling out eSourcing across their organisations.

Effective governance

14 The project was subject to the OGC Gateway Review process at all stages and had a Project Board including potential customer representatives. The Senior Responsible Owner delayed award of contract to ensure the project addressed the findings of the Gateway team, even though some customers were anxious for earlier introduction of the service.

Realising the benefits

15 Research undertaken by OGCBuying.solutions found that eSourcing reduced tender cycle times by up to 28 per cent for a tender placed in the Official Journal of the European Union (OJEU), the definitive source of public sector contracts. For non-OJEU tenders, tender cycle times were reduced by 25 per cent.

16 eSourcing also delivers other general benefits, including:

- sustainability improvements and savings due to the elimination of paper, print and distribution;
- a means to improve visibility and check compliance with EU Procurement Directives, providing clear and easily accessible audit trails;
- facilitating collaboration between buying organisations working on joint procurements;
- making government opportunities accessible for all types of suppliers who only need an Internet connection and web browser to participate; and,
- offering customers access to eAuction (electronic negotiation) technology during the tender process to make additional savings. For example, by February 2006, 28 procurements undertaken by the NHS Purchasing and Supply Agency that included an eAuction achieved additional average cost savings of 7.75 per cent on the prices that had been tendered by participating suppliers.

17 The eSourcing Managed Service has contributed to the modernisation of public sector procurement. Key indicators are:

- 34 organisations have signed-up to the Managed Service with a combined annual procurement spend of over £12 billion, representing over 10 per cent of the UK public sector's total spend on goods and services, and over 1,000 buyers have used the eSourcing service to manage their procurement activities;
- reductions in paperwork: over 13,000 suppliers have submitted tender responses online, uploading a total of 55,000 documents on the system; and,
- a total of 55 eAuctions have been conducted for a total contract value of £1.95 billion, delivering over £150 million in savings on the cost of goods and services provisioned.

18 The eSourcing Service was a runner-up in the 2006 Government Computing BT awards for innovation. The Home Office implementation project is a finalist for an award from the Chartered Institute of Purchasing and Supply, and the project was presented at a Good Practice Framework workshop in France highlighting European Union High Impact Services.



ENVIRONMENT AGENCY

Fishing Rod Licences

The Environment Agency employs 12,500 members of staff and has an annual budget of some £1 billion. The Agency's responsibilities include all aspects of fisheries management from fish husbandry and management of river banks to rod licence enforcement. The Fishing Rod Licences project transformed a fixed-hours Post Office based service to a self-service system, enabling customers to purchase fishing licences on-line at any time.

"This project met its objectives including delivery on time and within budget. The system has surpassed its target sales figures and continues to grow at an annual rate of 30–60 per cent. Recent on-line marketing initiatives have had a demonstrable effect on eliciting sales that can be measured in real time, a benefit that simply isn't available through conventional sales outlets. We are now in a strong position to be able to migrate the bulk of sales into an electronic system should we decide to do so."

The Environment Agency

Cost

Initial investment of £200,000.

Supplier

SciSys – software.

Timescale

Six months from project inception in July 2000 to delivery.

Current status

The number of customers buying fishing rod licences online continues to grow. In 2005-06, 106,000 licences were sold online, and by May 2006, sales were up by 59 per cent on the same period in 2005.

Key components of success

- The online service has improved service to customers by allowing them to purchase a licence anywhere at a time of day convenient for anglers who often fish at night and may want a licence with little forward planning.
- Understanding customers and their buying patterns has allowed the Environment Agency to target specific groups to increase licence sales.
- The Fishing Rod Licences project enabled the Agency to develop its capability to deliver e-commerce services and to transfer the lessons learned to other revenue-generating projects.

Aim

1 The Environment Agency is responsible for sales of around 1.2 million fishing rod licences in England and Wales each year, primarily through Post Offices and a few bankside agents. To understand how it could improve service to customers, in 1998 the Agency's fisheries business function carried out a survey of anglers to improve its understanding of customers' needs. The survey identified that the ability to purchase a rod licence online would be a key service improvement, allowing customers to buy a licence at any time of the day in any part of the country.

2 The Agency considered there were potentially a number of services it could deliver online. The Chief Executive chose online rod licence sales as a flagship project to prove the Agency's capability to deliver an e-commerce service. The project was fast tracked for implementation in early 2001.

Understanding users' needs

3 To understand potential customer demand for the online service, in 2000 the Agency followed up its initial customer research with a telephone survey. This identified that the percentage of current rod licence holders that make use of the Internet had increased by 21 per cent between 1998 and 2000. In turn, the percentage interested in purchasing a licence online had increased from zero to seven per cent. Although the percentage was relatively small, the Agency considered there was sufficient market potential to justify investing in the online licence project.

Designing the business change and testing the viability of the IT solution

4 To bring about the change, the project team needed to modify the existing business process and develop an IT system to support online sales. Environment Agency staff first tested the system internally and then timed the external launch to coincide with the annual low sales period, to reduce potential demand on the system and

minimise the risk of technology failure. With the live version running successfully, the project team began actively marketing the service to improve customer take up. From the launch of the system until 2005-06, promotion was restricted to listing the website address on all rod licences (Internet, telesales and counter sales) and to short articles in the annual magazine for rod licence holders *Reel Life*. From April 2006, more direct methods were used, including adverts on popular search engines and an e-mail reminder to previous online buyers. These achieved significant results and could be measured on a daily basis.

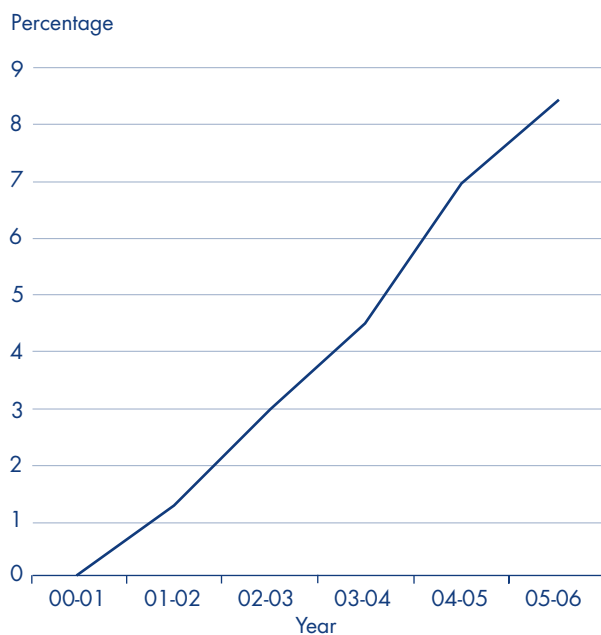
Realising the benefits

5 The project was delivered in 2001. While most licences are still bought over the counter at some 15,000 outlets, the sale of licences through the Internet has grown year-on-year, reaching 8 per cent of sales by the end of 2005-06 (**Figure 4**), overtaking both telephone sales and direct debit transactions (total sales for 2005-06 were 1,268,038, of which 106,636 were Internet sales).

6 The online service has provided an important added dimension to improving customer service. The service provides a means to purchase a licence at a time and place convenient to the customer and approximately five per cent of all fishing rod licences are now sold outside office hours when the alternative channels are closed. This has proven a particularly popular option with early morning and night anglers. Online purchasing of licences also provides almost instant access to a licence for occasional anglers.

7 The Environment Agency achieved its objective of testing its capability to deliver an e-commerce service. The transfer of knowledge and lessons learned from the Rod Licence project – for example, improved understanding of IT e-commerce solutions – have helped the Agency overcome problems such as the technological requirements of dealing with electronic payments. This has helped deliver further e-commerce services, such as registration for Hazardous Waste licences, as well as an online flood warning service.

4 The percentage of fishing rod licences sold via the Internet is growing



Source: Environment Agency

Optimising the benefits

8 The income from rod licence sales plays an essential part in funding the Environment Agency's fisheries business function. In order to maintain and grow this income, the Agency uses sales data to track sales patterns and identify which types of customers buy licences through the range of sales channels – counter sales, telephone sales, direct debit and online. The research highlights the increasing importance of online sales in meeting the Environment Agency's corporate target of achieving an annual 2 per cent increase in sales of fishing rod licences. It is the only sales channel that shows significant growth and the Agency sees it as a key means to encourage the increased take up of fishing generally, alongside other e-enabled services, including information about where to fish.



TRANSPORT FOR LONDON

Congestion Charging

Transport for London is the integrated body responsible for most of the Capital's transport systems. Congestion charging requires drivers to pay if they wish to drive in Central London during the scheme's hours of operation.

"The introduction of the Central London Congestion Charging Scheme was a substantial challenge. Transport for London was a newly formed organisation and there was no blueprint for this innovative project. Successful implementation required clear governance and the integration of a wide range of skills including policy development, traffic modelling, stakeholder engagement and the design, development, testing, delivery and operation of a wide range of technologies and IT systems to a tight timescale. Three years on from the start of the Congestion Charging Scheme, central London traffic levels and congestion emissions remain down and more people are travelling by bus, walking and cycling. The IT systems that support the operation of the scheme are working well and the scheme generates over £100 million per annum of net revenue for reinvestment back into London's transport systems."

Transport for London

Cost

Start up cost of £162 million of which £81 million was for traffic management. In addition IT design and set up costs amounting to £72 million are paid to Capita over 5 years.

Supplier

Deloitte – client-side IT and programme management support; Capita Plc – system development and operation; Initial – camera supply and installation; and COLT and BT – telecoms.

Timescale

July 2000 – February 2003.

Current status

Central London's Congestion Charging Scheme has been running for over three years. Transport for London is currently implementing the Western Extension that will extend the area of the charge to the Borough of Kensington & Chelsea and a small part of Hammersmith and Fulham. This is due to begin operating in February 2007.

Key components of success

- Effective governance provided the programme team with strong leadership, and regular access to the key decision makers.
- Transport for London kept control of the programme, but used consultants to strengthen its capabilities in programme, project and contract management, and IT support.
- Clear specification of the requirements, effective management of scope creep in the build stage and, when necessary, active management of service providers.
- Thorough technology trialling enabled Transport for London to prove the automatic number plate recognition technology was "fit-for-purpose", before it committed significant investment.
- Detailed attention to the legislation and extensive consultation and stakeholder engagement enabled decisions to be made which took account of concerns and, where appropriate, amended details to the design and operation of the Scheme.

Aim

1 In 1999, the Greater London Authority Act was passed creating a Mayor and devolved strategic government for London. The Act (as amended by the Transport Act 2000) gave the Mayor legislative powers to introduce congestion charging schemes and in May 2000 Transport for London was requested to investigate the options for implementing such a scheme along the lines set out in the Road Charging Options for London (ROCOL) study published by Government in early 2000 for the benefit of Mayoral candidates.

Engaging with stakeholders

2 Congestion charging was a new and controversial scheme upon which Transport for London needed to consult widely. Following completion of a London-wide public consultation on the Mayor's Transport Strategy, Transport for London embarked on a further round of public consultation on the detailed scheme proposals in July 2001. This involved four hundred different groups and organisations, including the London Boroughs, MPs, business groups, transport operators and organisations representing people with disabilities; placing importance on being clear about the details of the Scheme and modifying these as necessary. Following a review of the responses, associated changes to the proposals and a decision by the Mayor to proceed, work on implementing the scheme started in February 2002.

Ensuring senior level engagement

3 Clear leadership for the scheme from the Mayor, the Scheme's champion, and Chief Officers at Transport for London secured commitment to the development, design and implementation of the scheme.

4 As well as using the PRINCE2™ methodology to create programme and project boards, a governance structure was created giving the delivery team unhindered access to the key decision makers within the Greater London Authority and Transport for London. The Mayor and senior officials agreed a governance structure which reflected the need to give the team access to senior decision makers whenever key decisions or difficulties arose.

Acting as an intelligent client

Building capacity

5 When Transport for London was formed in 2000 by a merger of eight transport authorities, its primary role was policy making and operations. To strengthen capacity, Deloitte was contracted to support the procurement function as well as its IT programme and project management capabilities. Once appointed, Transport for London took active steps to integrate the consultants alongside both its own staff and those of partner organisations. For example, at Transport for London's headquarters, staff from both organisations sat side-by-side, and a matrix management approach was used to select a mix of individuals for tasks based on their skills rather than their "home" organisation. Transport for London staff were also located in the offices of partner organisations such as the Driver and Vehicle Licensing Agency with a remit to proactively build good relations.

6 Transport for London actively managed the risks to the programme with the help of its advisors. It doubted, for example, that a single supplier could both construct and run a call centre and have the expertise to install camera and number plate recognition equipment. Transport for London took the decision to contract with one supplier to set up and manage the front and back office enforcement and business operations including the call centre and payment channels, but procured the cameras, telecoms and on-street enforcement separately.

7 Transport for London was conscious of the need to gauge the likely impact of introducing congestion charging. This included extending the research work set out in the earlier ROCOL Study, including traffic and public transport measures designed to complement the introduction of congestion charging. For example, bus carrying capacities serving central London were expanded to cater for a projected 15,000 additional passengers in the three hour morning peak period.

Piloting and technology trialling

8 After researching a number of different technologies and examining road pricing schemes in other parts of the world, Transport for London selected Automatic Number Plate Recognition as the Scheme's technology platform for enforcement. One of the key advantages was its maturity, having been in use since the early 1990s in such places as London's "Ring-of-Steel", a surveillance cordon surrounding the City of London installed to combat terrorist threats. To further prove the suitability of this technology and reduce risk, trials were carried out with a number of different suppliers.

9 Transport for London also decided to require the two organisations shortlisted to build and operate the core IT systems to conduct a technical design study. Two main benefits came from these exercises; firstly, the data helped Transport for London refine its technical specifications and, secondly they helped to reduce operational risk and get better value out of the competitive process.

Effective contract management incentivised delivery

10 In March 2002, Transport for London agreed a contract with Capita Plc, which included a framework of incentives and penalties to ensure a focus on delivery. For example, by 12 August 2002, Capita Plc was required to have an enquiry service for the public up and running. Had Capita Plc missed this milestone, the contract would have imposed a daily penalty of £95,000. Transport for London monitored progress very closely, intervening where necessary with service providers.

11 The contract's performance regime focused on timeliness of delivery, but had few quality performance measures related to the Scheme's operation. Following the launch of Congestion Charging on 17 February 2003, the call centre received on average 167,000 enquiries a week. Inadequate numbers of operators and insufficient telephony and IT system capacity resulted in drivers experiencing poor customer service with many not being able to get through.

12 In August 2003, Transport for London and Capita Plc made a Supplemental Agreement, which involved 13 additional quality performance measures including, for example, the number of blocked calls – where a driver is unable to speak to an operator. This is recorded and measured against a target set in the Supplemental Agreement. If any of the 52 performance indicators are not met, Capita Plc is required to pay compensation to Transport for London. The quality of service has improved significantly with some 90 per cent of the performance indicators being met over the last two years, although Transport for London continues to identify and implement further customer improvements.

Realising the benefits

13 An essential part of the overall delivery plan was the carrying out of a substantial public information campaign before and after the start of charging to inform the public in London and beyond of who would be affected by the scheme, how it would work and what they needed to do by when.

14 An impacts monitoring strategy was developed in 2002 prior to the start of charging, ensuring that a wide range of impacts including traffic, public transport, business, emissions, social and operational could be measured and assessed. Four annual reports¹ have been published to date. Some key results reported by Transport for London are:

- in the financial year 2005-06, the scheme raised a net revenue of £122 million for re-investment in London's transport system;
- surveys for Transport for London undertaken bi-monthly since the congestion charging scheme started in February 2003 suggest reductions in congestion now average 26 per cent during charging hours compared to conditions in 2002, before the introduction of the scheme; during charging hours traffic entering the zone has fallen by 21 per cent; and accident rates have declined – with an estimated 40 to 70 fewer personal accidents per year in central London; and,
- other wider benefits to which congestion charging has contributed include reduced traffic emissions and reduced waiting time for buses.

¹ See for example Transport for London (2006) Central London Congestion Charging Impacts Monitoring, Fourth Annual Report, June 2006 (A summary of the key findings are presented in the overview section). http://www.tfl.gov.uk/tfl/cc_london/cc_publications-library.shtml.



NORTHERN IRELAND CRIMINAL JUSTICE DIRECTORATE

Causeway

The Criminal Justice Directorate steers and shapes the modernisation of Northern Ireland's Criminal Justice System and attempts to enhance public confidence in it. Its Causeway Programme is designed to allow information sharing between Criminal Justice Organisations.

"The Causeway Programme has been successful so far because it established good working relationships across all the criminal justice organisations, involved practitioners at all levels in the design and focussed upon developing an end-to-end solution from the outset".

Criminal Justice Directorate

Cost

£48 million.

Supplier

Fujitsu Services – system development.

Timescale

Spring 2002 – ongoing.

Current status

Joint online electronic access to the Northern Ireland criminal record for participating organisations was established in 2004 on time. This has been further rolled out to a number of other agencies and non-departmental public bodies. The first full phase of the Causeway Programme – information sharing between the Police Service Northern Ireland, the Public Prosecution Service and the Forensic Service Northern Ireland (Electronic Case Preparation) – followed successfully, if approximately 6 months behind schedule, reflecting the challenge of bringing together different organisations' systems and working methods. The next phase is under development

to connect the Northern Ireland Prison Service and the Northern Ireland Court Service to the system. This release has been rescheduled to meet current resource constraints within the different organisations. The Programme team has re-profiled its business case, implementation plan and anticipated benefits as a result. The third and final phase of Causeway will be to bring the Probation Board for Northern Ireland into the system by 2009.

Key components of success

- Securing top level agreement to a single Memorandum of Co-operation achieved strong commitment from all seven criminal justice organisations.
- A six month "Proof of Concept" exercise allowed the Causeway team to properly gauge the performance of all short listed suppliers, prior to contract signing and the commitment of large sums of money.
- Recently the Programme has been inspected by the Criminal Justice Inspectorate of Northern Ireland. The Inspection report recognised that after some initial teething problems, good progress is now being made in what is a highly innovative use of technology to assist significant business change.

Aim

1 Prior to Causeway, the separate Criminal Justice Organisations (**Figure 5**) had case management computer systems, in varying states of completeness, that electronically stored offender information, but they had no mechanism to allow this to be shared electronically across the different organisations. Paper files and case notes had to be transported from building to building, and when a paper file arrived each organisation had to manually re-enter the additional information. This led to errors and sometimes the loss of complete files. Causeway is designed to address these issues by introducing IT systems that can store and transfer information electronically around the whole criminal justice landscape. Causeway is also the catalyst for significant business process change within each organisation.

2 Following the Criminal Justice Review (March 2002), determining whether cases should go forward for prosecution became the responsibility of a newly formed independent body, the Public Prosecution Service. The creation of this new body, along with several other changes to the Criminal Justice System, meant that a number of additional organisations were now required to process an offender's case file, extending the period between arrest and conviction or acquittal. In response, the Criminal Justice Directorate for the Northern Ireland Office, together with the six main Criminal Justice Organisations, established the Causeway Programme to reduce this period of time, and to improve the overall efficiency and effectiveness of the Criminal Justice system.

5 The Causeway Programme's participating organisations

The Causeway Programme is a joint undertaking by six Criminal Justice Organisations under the guidance and financial support of the Criminal Justice Directorate of the Northern Ireland Office.

- The Public Prosecution Service
- The Police Service of Northern Ireland
- The Probation Board for Northern Ireland
- Northern Ireland Court Service
- Northern Ireland Prison Service
- Forensic Science Northern Ireland

Led by the Causeway team based at the Criminal Justice Directorate, it is designed to link each organisation's separate case management system to enable the electronic sharing of offender information across Northern Ireland's Criminal Justice Organisations in an effort to shorten the time between arrest and acquittal or conviction.

Ensuring senior level engagement

3 To achieve acceptance and a commitment from each Criminal Justice Organisation three broad approaches were undertaken:

- a** The description of how the Criminal Justice Organisations' case management systems would be linked together was made as simple as possible. The Causeway team set itself the aim of being able to explain the model in less than three minutes.
- b** Funding for Causeway would come from central funds, rather than the Criminal Justice Organisations themselves. This removed the distraction of having to negotiate with each Criminal Justice Organisation to establish how much each would contribute to the Programme.
- c** The Head of each Criminal Justice Organisation signed up to a Memorandum of Co-operation.

4 The Memorandum of Co-operation took six months to get into a form that the six agency chief executives could sign up to. It included clearly set out terms in respect of what was going to be done, and by when, who would do what, and how it was going to be financed. Importantly, it also required the Heads of the Criminal Justice agencies to commit to not withdrawing from the Programme without ministerial approval.

5 Accompanying these high level commitments the document also outlined the more detailed management arrangements and how the Programme would be overseen by representatives from each Criminal Justice Organisation. These factors placed on a clear, sound footing the relationships within the Causeway Programme and between the Criminal Justice Organisations.

Acting as an intelligent client

6 For the first eight months of the Programme the Causeway team worked on the process of mapping the complicated information flows between the various Criminal Justice Organisations. This included developing a common understanding of how the seven organisations worked, the relationships between each, where information entered the various systems and what each organisation then did with it. In so doing the team were able to capture a complete picture of the business processes of the Criminal Justice system, allowing them to approach suppliers with a clearly defined requirement, around three overarching constraints:

- a all information should be entered once only;
- b the system for information sharing would have to work alongside each agency's existing case management system; and
- c there would have to be effective access and authorisation controls.

Testing the viability of the IT solution

7 The key challenge for the Causeway team was to establish whether it was technically possible to pass a great deal of information between six different case management systems. To address this risk the team conducted a proof of concept exercise with three short-listed suppliers. This lasted six months and involved the provision of approximately £250,000 funding to each potential supplier as an innovative incentive for each to develop a prototype system to test its ability to deliver a working solution. Each supplier was given equal access to the constituent Criminal Justice Organisations and their respective documentation – with “Chinese Walls” in place to ensure each team's activities were kept separate from competitors.

8 The Causeway team were able to evaluate how each supplier went about the process, with regular assessments made about the effectiveness of their project management, and how well their team worked with personnel from the Causeway Programme and the Criminal Justice Organisations.

9 Upon completion of the proof of concept exercise, third party technical consultants were brought in to work alongside the Causeway team to assess each supplier's prototype against a number of “fit-for-purpose” criteria. This process identified, amongst other things, that one of the three supplier's prototypes did not work particularly well, and by doing the proof of concept exercise, failings and weaknesses were generally discovered much earlier in the Programme's lifecycle and before major expenditure had been committed.

10 The procurement phase, including the six month proof of concept exercise, started in June 2002 with the contract awarded to the winning bidder Fujitsu Services in August 2003. In doing so, the Causeway team met their self-imposed deadlines. Both the winning and losing suppliers commented on how well the procurement timetable had been managed.

Realising the benefits

11 While the Programme is still underway, significant business process change has already occurred especially in the three organisations actively sharing information.

Early benefits to the criminal justice system include:

- a 33 Police Officers have been freed up from administrative tasks and returned to front-line duties.
- b In one district command unit, the average period between an incident occurring and a file being submitted to the prosecution service has been reduced from 70 days to 29 days.
- c The time it takes for Probation Officers to gain access to a file from the Police has reduced from 14 days to a few seconds.

12 The success of the first phase of Causeway (Electronic Case Preparation) has already joined up key parts of criminal justice in Northern Ireland. The next phase (scheduled for implementation in the mid part of 2008) will substantially complete that process, with a final, smaller phase to bring all Criminal Justice Organisations into Causeway by 2009. Given the inevitable and major challenge of bringing together different organisations' systems and working processes, this will require above all, the consistent availability of experienced staff from within each Criminal Justice Organisation to manage the Programme through each phase of its lifecycle. As a result of lessons learned from the earlier release, and in recognition of the immediate demands placed on the resources of the constituent agencies from other high priority internal projects, the business case, implementation and benefits realisation plans for Causeway have been reprofiled, whereby the Programme will now complete in 2009.



TRANSPORT FOR LONDON

Oyster® Card

Transport for London is the integrated body responsible for the Capital's transport system. The Oyster® card is an electronic smartcard, introduced in 2003, as part of the Prestige Project, a private finance initiative to renew, operate and maintain the Transport Authority's ticketing infrastructure.

"In the few years since it came into being, Transport for London has become a cornerstone of the Mayor's vision for London as a world city for the 21st century. As a central component of that vision the successful introduction of Oyster has been made possible by unwavering support from the Mayor and senior executives at Transport for London for managers who have been given well-defined tasks and the authority and resources to deliver them."

Transport for London

Cost

£40 million capital cost (in the context of a total PFI cost of £1.1 billion over 17 years).

Supplier

Transaction Systems Limited (TranSys) consortium led by EDS and Cubic Transport Systems, in conjunction with Fujitsu and WS Atkins.

Timescale

1998-2005

Current status

Oyster® Card has been in use since 24 October 2003 and is used by 3.3 million passengers every day, and used for 5 million journeys on an average weekday.

Key components of success

- The structure of the programme, with financial penalties for withdrawal for both Transport for London and TranSys, meant senior management of both parties were strongly committed to its success.
- A shared understanding of clear objectives and firm targets, combined with financial penalties for failure were key drivers of performance.
- Transport for London's senior management took ownership of issue resolution providing suppliers with access to prompt decision making.
- A commercially aware Programme Manager built a collaborative relationship with the main supplier.
- London Underground and London Buses "bought in" to the project and wholeheartedly supported the implementation by engaging actively in the business process review, system testing, and staff training processes.
- Clear understanding of users' needs enabled TranSys and Transport for London to run a targeted marketing campaign to sell the benefits of the Oyster® card to potential users.

Key components of success *continued*

- Avoiding media announcements and a public commitment to a “go live” date helped ensure that sufficient time was available for trialling and training.
- A phased and managed roll-out of Oyster® card and the supporting infrastructure meant that each new stage was introduced only when the previous one had fully bedded down, with project managers having the capacity to be flexible where new opportunities presented themselves.

Aim

1 In the 1990s, the life-expired ticketing infrastructure on London’s transport network was struggling to cope with increasing passenger numbers and growing incidences of fraud. Travellers experienced long queues at ticket offices and, in 1998, the transport authorities were losing over £40 million a year, or 3.7 per cent of total revenue, from fare evasion due to the scope for fraud with magnetic stripe tickets and because many stations had no gates to control access.

2 To improve services to customers and increase revenue, Transport for London embarked on a major renewal programme to upgrade its entire ticketing infrastructure across both the Underground and bus networks. This involved new barriers, ticket machines, accounting systems and computers across 270 Underground stations and 8,000 buses. To help tackle the problem of long queues at ticket offices, Transport for London decided to introduce a smartcard – the Oyster® card – which would be available to purchase not only from ticket offices, but also from local retailers. To give customers further choice and make paying for travel easier outside shop hours, the smartcard could also be ‘topped-up’ by telephone or online. The use of smart cards, able to “store value” also represented a reduction in transactions estimated to be equivalent on average to six single ticket sales.

Creating mechanisms for clear and effective decision making

3 Senior management of Transport for London and TranSys were strongly committed to delivering the programme, which had high financial penalties for withdrawal. To help keep delivery on track, the Transport for London Director responsible for the contract made himself the focal point for resolving all major issues and gave project teams and suppliers deadlines for resolving problems, with the incentive that he would impose a decision if they could not reach agreement within the time limit.

Acting as an intelligent client

4 While the contract deliberately vested financial risk in the TranSys consortium, senior management at Transport for London were clear that ultimate accountability for delivering the programme remained with them. In the light of these different but ultimately shared risks, Transport for London recognised how important it was for the consortium to have financial stability particularly around its need for high levels of borrowing to fund the capital investment to deliver the programme. To help reduce the consortium’s financial exposure, Transport for London worked with TranSys to sequence work so that the more straightforward parts of the programme would be delivered first, thereby allowing TranSys to meet its early financial commitments.

5 To avoid raised expectations that could have led to pressure to launch parts of the programme prematurely and, as deadlines approached, to help avoid any temptations to cut back on testing and trialling, Transport for London aimed to keep the programme low key, requiring contractors to minimise press releases, and avoiding announcing launch dates that tied the team to rigid public deadlines, which could have become a distraction from the primary task of getting the delivery right.

Building capability

6 Transport for London appointed a Programme Manager with a background in civil engineering and experience of both running complex programmes and building collaborative relationships with suppliers. To develop a strong shared commitment to delivering the programme, the Programme Manager co-located Transport for London's and TranSys' project teams. This helped foster good relations and created opportunities for knowledge transfer through informal discussions and brainstorming.

7 The Programme Manager divided the delivery team into five streams: Software Quality Engineering, Systems and Business Support, Performance Management, Project Control, and National Rail Projects. Team members were selected for their in depth knowledge of particular business processes and their ability and readiness to work in joint teams, reinforcing the Programme Manager's commitment to collaborative supplier working. Knowledge gaps were filled by seconding representatives of specific stakeholder groups to provide expert advice on particular issues. For example, twenty ticket office staff were seconded to the programme to advise on fare evasion and on the strategies fare evaders might use to cheat the new ticket systems.

Realising the benefits

8 To encourage take up of the smart card, TranSys carried out extensive marketing to key customers first, targeting through posters, press advertising and e-mails season ticket holders accustomed to paying for their travel in advance. Oyster® card is currently used by 3.3 million passengers every day.¹

9 Transferring commuters to a re-chargeable, reusable, electronic smartcard has cut the number of paper tickets sold by 100,000 a day and reduced the selling costs of tickets from 10 per cent to 5 per cent of ticket cost.

10 Revenue lost through fare evasion has fallen by 40 per cent. Though not the only factor, Oyster has been a major factor contributing to this reduction.

11 In 1999, new electronic ticket machines able to support the Oyster® card were installed in over 8,000 buses. Card readers began being used by customers from October 2003. Since that time, smart card ticketing has supported fare policy changes that reduce cash handling and improve timetable reliability.

12 To accelerate transaction times for daily commuters, self service ticket machines now offer the option of credit/debit card payments as well as cash. To provide a better service for tourists and other international residents and visitors, new self-service ticket machines can also support other languages.

13 The programme has won a number of awards in recent years, including the "Modernising Government" award in the New Media Awards 2004, the "Best Operational Project" in the 2005 Management Consultancy Awards and the 2005 Sir Henry Royce Memorial Foundation Award.

Optimising the benefits

14 Transport for London is intent on improving services to customers by using the more accurate information on travel patterns provided by the new ticketing technology to help improve its traffic demand management planning.

¹ Alongside the millions who daily use Oystercard without issue, there will be inevitably some passengers for whom the system had not worked to their satisfaction. Transport for London considers that this is inevitable with a programme of this scale and complexity, but it is keen to continue to refine and develop the system to provide the highest quality service to all of London's travelling public.



SCOTTISH WATER

“Promise to resolution” integrated customer management and field service programme

Scottish Water was formed in April 2002 following the merger of the three former water authorities – East, West and North of Scotland. It is responsible for providing clean, safe drinking water and disposing of waste water from 2.2 million homes and 130,000 businesses across Scotland. The “Promise to resolution” integrated customer management and field service programme introduced a new customer service contact centre and work scheduling system to improve both efficiency and performance.

“‘Promise to resolution’ was one of the projects which helped Scottish Water outperform its efficiency target to reduce costs by more than 40 per cent over four years. In fact, Scottish Water achieved a 41 per cent reduction and is now running the water industry for £142 million less a year than the former authorities. Scottish Water’s improved efficiency has meant that the organisation has been able to invest heavily in improvements to the infrastructure.”

Scottish Water

Cost

£14 million invested in the change programme by March 2006.

Supplier

Oracle – software; Celerant – business change.

Timescale

The programme was initiated in November 2002 and delivered the first phase of a nationwide rollout in December 2003.

Current status

The change programme has continued to evolve as part of a continuous improvement process.

Key components of success

- Testing a paper-based version of the proposed business process with front-line staff proved that the system would work, identified potential improvements and secured staff support for the proposed business change.
- Using off-the-shelf technology allowed Scottish Water to quickly implement a proven workable solution and to achieve a faster return on investment.
- The IT-enabled business change was led by business managers rather than IT personnel.

Aim

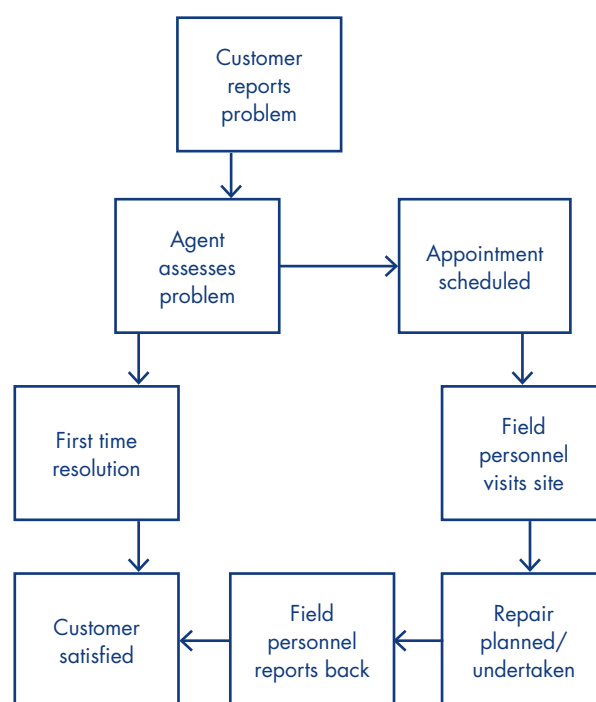
1 Scottish Water was formed in April 2002 from the merger of three of Scotland's regional water authorities. The decision to merge followed a Government review that identified that a single unified authority would be better placed to create consistent service standards, deliver value to taxpayers and be better able to finance capital improvements. The new authority was set broad targets to improve water quality and the customer experience and, more specifically, a target to reduce operating costs by 40 per cent by March 2006.

2 Research by Scottish Water identified that customers were dissatisfied with the service it provided, operational efficiency was falling and costs were rising. It identified an opportunity to improve customer satisfaction and service delivery by standardising the customer contact and field engineer assignment processes across the predecessor bodies and implementing one system to run contact centres and dispatch service crews. The required business change was designed to deliver a new customer service initiative called "Promise to resolution" (Figure 6). This aimed to provide timed appointments for visits to customers and set guaranteed response times on key activities. The plan was to create initially three contact centres, to be later consolidated into one, to deal with customer calls and use the information so collected to efficiently allocate work to field staff.

Testing the business process

3 To bring consistency into service delivery required significant redesign of the three existing business processes. Scottish Water, in recognition of the scale of the task, employed Celerant, a management consulting firm, to work with its business analyst team and front-line staff. This involved documenting the proposed new process in detail on paper and trialling it at designated field sites with operational staff to test that it would work in practice. Only when the process had been proven to work did the project team commit to purchasing software to support it.

6 "Promise to resolution" – high level process



Source: National Audit Office

4 A benefit from using a joint team was the transfer of process design skills from Celerant to the front-line staff. This led to proposals for process change from the front-line teams who knew what would and would not work. Furthermore, the fact that staff were given the opportunity to develop their own business process created a sense of ownership that helped to sell the business change to other parts of the organisation. As the process was rolled out, the front line staff that had been involved in the design became advocates themselves for the proposed business change.

Off the shelf technology

5 In order to deliver the required 40 per cent savings in operating costs by 2006, Scottish Water made an early decision to adopt off-the-shelf technology supplied by Oracle, this being a less risky and more effective route to achieving the desired return on investment, allowing a fast track implementation of the software. The decision to opt for an off-the-shelf solution was taken by the business lead of the project despite significant pressure from the IT department that a bespoke system was required to meet all the process requirements. The off-the-shelf solution proved successful, with the first installation completed within 90 days.

6 The fact that the software had been proven for other customers with similar business needs gave Scottish Water confidence that the solution would be suitable for its needs. Important to the successful implementation was to resist the temptation to amend the off-the-shelf package except where absolutely necessary. In practice, the Oracle software proved to be an 80 per cent fit for the proposed business process. With hindsight, Scottish Water would have undertaken no customisation of the system at all. The benefit obtained from adapting the off-the-shelf software was minimal when compared with the added cost, technical problems and, importantly, the additional time taken to implement the customised software.

Realising the benefits

7 The “Promise to resolution programme” has resulted in productivity improvements from both the customer call centres and field service operations. For example, the new IT system has brought together in one place information on previous contact with customers, past water service problems and current maintenance and repair projects.

8 This real-time data has increased the call centre capacity by enabling agents to answer more questions in one call and to better co-ordinate repair and maintenance activity. For example, a better understanding of the problems reported means that call centre staff can allocate field staff to jobs based on priority, rather than, as previously, treating all calls on a first come first served basis. Equally, hand held computers have allowed field staff to instantly update call centres about progress on jobs and improved the quality of data returned by field staff after each visit from 50 per cent complete to 89 per cent. This has allowed the customer to be better informed of incident progress, and once completed, allowed the field staff to be promptly re-allocated to new jobs. Improved scheduling has led to a reduction in overtime estimated to be in excess of £100,000 per annum. Improvements in scheduling have also improved customer service. Field staff can now attend 95 per cent of customer appointments within an agreed one hour window, an increase from 75 per cent in 2002.

9 Scottish Water has improved its overall customer service performance as measured by the overall performance assessment (OPA) framework of the Water Industry Commission for Scotland by 24 per cent between 2002-06, peaking in 2004-05 at 33 per cent, and narrowing the gap between its service and that of water companies in England and Wales.¹ Its current Water Industry Commission OPA target is to improve customer service performance by a further 40 per cent based on the 2004-05 baseline.

¹ Water Industry Commission for Scotland (2006) *Customer Service Report 2003-06*. Stirling: Water Industry Commission for Scotland. <http://www.watercommission.co.uk/Documents/Service%20Report.pdf>. Poorer performance in 2005-06 is due mainly to an increase in the reported number of properties experiencing sewer flooding.



UK Transplant

UK TRANSPLANT

The National Transplant Database

UK Transplant has a UK-wide remit to ensure that donated organs are matched and allocated in a fair and unbiased way. Central to its activities is the National Transplant Database which holds details of all donors and patients waiting for an organ transplant.

“The database has been developed in close co-operation with users such as acute hospital units to help them meet their requirements. Due to the critical time factors necessary in relation to organ donation and transplantation the database is key in providing robust, accurate and timely information to support the transplant service.”

UK Transplant

Cost

Running costs part of annual budget of c.£14 million (2005-06).

Timescale

1980s – present day.

Current status

UK Transplant's current IT infrastructure was developed in 1997, when a major upgrade to the National Transplant Database was undertaken and web based technology was introduced to replace the previous computer system. A continuous process of data collection, analysis and clinical feedback has helped to improve and refine the information held on the Database, and has allowed UK Transplant to better understand organ compatibility and the factors that most influence the successful outcome of transplant operations.

Key components of success

- Placing a strong emphasis on building its own capability rather than relying on outside consultants, UK Transplant has ready access to experienced individuals with the skills necessary to support the complexity of data and systems contained within the National Transplant Database.
- A continual process of data collection and analysis further refines the information held on the Database, increasing the medical profession's understanding of the factors governing the success of transplantation, thereby helping to improve clinical practice.

Aim

- 1** UK Transplant provides a 24 hour service for the matching and allocation of donor organs, and for facilitating transport arrangements to ensure that donor organs arrive at the recipient transplant centre in a safe and timely manner. It also maintains the National Transplant Database which holds the details of organ donors, eye donors, patients waiting for organ transplants, and the current health of transplant recipients.
- 2** As medical science and procedure has advanced and the scope for transplants has increased, the number of people waiting for a transplant has risen. At the same time, however, the number of donors has fallen – in part due to better survival rates generally from serious injury and other illnesses and, particularly, reduced fatalities from road accidents.
- 3** With the number of people in need of a transplant far outweighing the supply of organs and donors becoming an ever more precious resource, UK Transplant performs a continuous analysis on the data held within the National Transplant Database in an effort to highlight the significant factors that most contribute to a successful transplant operation.
- 4** Central to this are UK Transplant's Advisory Groups, consisting of surgeons, anaesthetists, intensive care experts and transplant co-ordinators who advise on transplant and donation policy, monitor organ allocation procedures and develop national clinical standards in areas such as surgical organ retrieval. These Advisory Groups meet every six months.
- 5** Also routinely considered is whether any additional data should be gathered by UK Transplant to further improve transplantation success rates.

Building capability

- 6** UK Transplant employs around 130 staff, 26 of whom are IT specialists. The vital importance of the reliability of the National Transplant Database and the need for it to provide accurate and timely information at all times has led the Service to develop and maintain an in-house IT resource, rather than to rely on outside suppliers or contractors. This reflects the importance attached to making sure that the allocation criteria to determine the best candidate for any donor organ are maintained at an optimal level. These have been built up over a long period following extensive analysis

of past transplant operations and are highly complex. Any changes to the Database can only therefore be safely performed by staff with both technical IT knowledge and a comprehensive understanding of the allocation criteria.

- 7** As a result, the only IT staff permitted to work directly on the Database are those with a sound understanding of the Service's processes and technology. Even experienced and qualified software developers are required to work for UK Transplant for a minimum of three months before they are considered ready to play even a minor role on any work to modify the organ allocation criteria.

Realising the benefits

- 8** In 2005-06, 874 patients in the UK received a heart, lung, combined heart/lung or liver transplant, with a further 1,921 in receipt of a kidney, pancreas or combined kidney/pancreas transplant.
- 9** Currently, a year after surgery 93 per cent of kidneys from living donors and 88 per cent from people who had died are still functioning well. For liver and heart transplants, the figures are 87 per cent and 85 per cent respectively. These survival rates are improving every year.¹
- 10** UK Transplant employs a number of statisticians who make use of information from the National Transplant Database to develop new and improved allocation schemes. For example, kidney transplants are allocated to patients according to a number of factors including:
 - blood and tissue analysis of the donor organ and patient
 - length of time a patient has been waiting
 - age, including the difference in relative ages of donor and recipient
 - location of patient compared to donor.
- 11** The health of patients in receipt of transplant organs is also monitored – at three and twelve months after their operation and then annually thereafter, with the data providing important information on, for example, which drugs are proving most successful at preventing organ rejection.
- 12** Through this continuous process of data collection and analysis, and clinical feed back UK Transplant aims to improve the quality of its information and to maximise the usefulness of data held within the National Transplant Database.

¹ Source: UK Transplant Activity Report 2004-05. *More transplants – new lives: Transplant activity in the UK 2004-05*, UK Transplant (August 2005).

CAMBRIDGESHIRE COUNTY COUNCIL

Introduction of Portfolio Management

Cambridgeshire County Council has a budget of £511 million and a population of 600, 000. To better utilise its resources, the Council introduced portfolio management to support both IT and non-IT based programmes and projects.

“Cambridgeshire County Council, as a large complex organisation, has a multitude of programmes and projects to manage as well as needing to respond to the day to day needs of its citizens and customers. Recognition of the value of good project and programme management was already part of Cambridgeshire’s culture but we still struggled to ensure that resources were directed towards the most critical areas and most important priorities. Implementation of new Business Development Areas and portfolio management techniques has enabled us to get a firm grip on where our resources are going and to help ensure that they are delivering to the priorities agreed with Members and citizens.”

Cambridgeshire County Council

Cost

£90,000 was provided by the Office of the Deputy Prime Minister (now the Department for Communities and Local Government) to fund staff time to develop the models and processes with a Reference Group of other interested Local Authorities and other bodies. In addition, Cambridgeshire County Council provided two to three staff for the duration of the project.

Timescale

April 2005 – February 2006.

Current status

The Council now manages all its projects and programmes within a portfolio overseen by the Chief Executive and Board.

Key components of success

- Securing the support and commitment of senior management to the introduction of portfolio management and the breaking down of existing management structures allowed the rapid consolidation of large numbers of disparate projects into smaller more coherent groupings of related programmes.

Aim

1 Cambridgeshire County Council's appointment of a new Head of Business Development to run its Corporate Project Office in April 2004 provided the opportunity to review the way the Authority managed projects and programmes. The Council found that while it had good management skills to oversee individual projects, these were sometimes treated as unrelated activities not fully aligned with business objectives and often with limited senior management oversight. Projects were run from within departments with little consideration for Council-wide resource planning and there was insufficient co-ordination of dependencies and risks at a senior management level. The Council also faced the challenge of allocating scarce resources to large numbers of investment requests, inevitably not all of which could be funded.

Prioritising the programme and project portfolio in line with business objectives

2 As a first step to improve strategic planning and resource allocation, the Corporate Project Office introduced new programme management arrangements. With the support of the Council's directors, related projects were consolidated into programmes and to strengthen senior management oversight, new governance structures were set up using PRINCE2™ and Managing Successful Programmes (MSP) methodology.

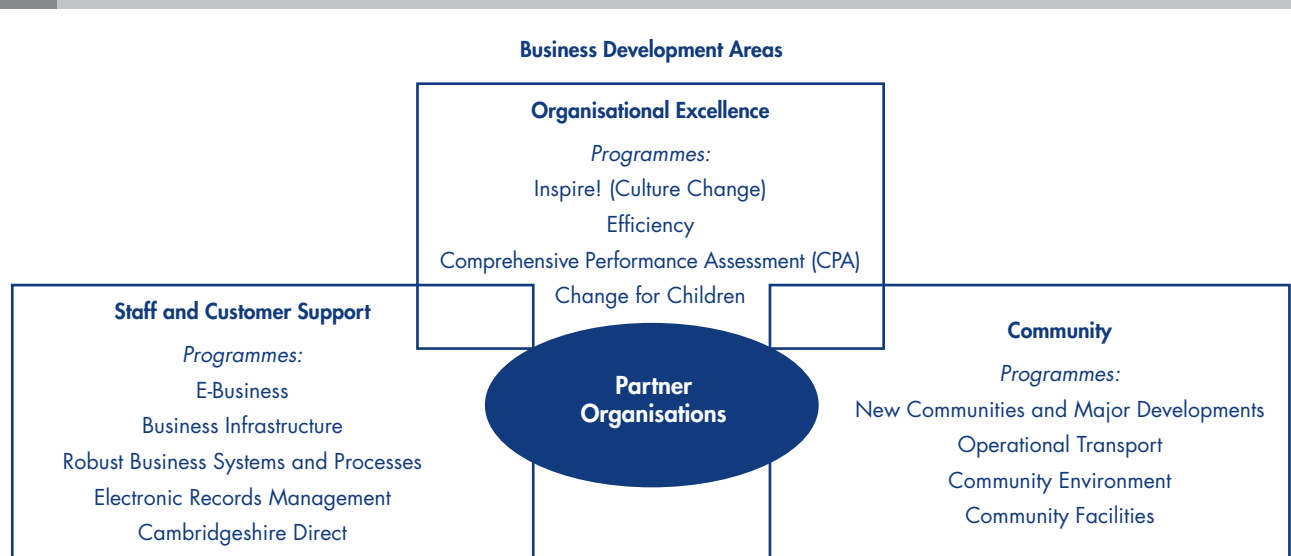
The establishment of programme boards headed by Council directors provided a forum for senior managers to constructively challenge programme teams to keep initiatives on track and delivering their intended benefits.

3 To better align programmes with strategic objectives, the Council set up three Business Development Areas – Organisational Excellence, Staff and Customer Support, and Community (**Figure 7**) – with each Area headed by the Council's Chief Executive or one of three Deputy Chief Executives – and attended by senior representatives from both internal and external partner organisations, such as Primary Care Trusts (who, for example, regularly attend Organisational Excellence Business Area meetings).

4 The creation of three Business Development Areas allows for better management of resources, with allocation based around business priorities rather than on the strength and influence of different Council departments. Each new investment request and associated business case is assessed for robustness by the relevant Business Development Area. Once approved, business cases are kept under review to make sure that the benefits sought remain relevant to Council priorities and remain achievable.

5 The introduction of Business Development Areas has also strengthened the Council's corporate-wide risk management arrangements. New programme proposals are scrutinised to assess how they will affect current activities, and where additional dependencies are identified, clear ownership for managing them is assigned to a Senior Responsible Owner.

7 Business Development Areas provide senior management oversight of the Council's key programmes



Source: Cambridgeshire County Council

6 To provide senior managers with clear and concise information, the Corporate Project Office has introduced a system of regular mission critical reporting showing the current status of each programme, its risks and dependencies, and progress towards delivering key targets.

Data for each Business Development Area are compiled under four main headings with colour-coded assessments to signify the status of each entry, as illustrated in the example below for the Council's e-Business Programme (Figure 8).

8 Extracts from the Council's programme reporting for the eBusiness Suite.

Table 1 Programme Status

Component	This month	Reason for this month's status	Last month
Organisation and Leadership	● Green	Organisation agreed and Programme Board meetings set up; sponsors identified for projects. Project Boards and Managers need to be identified for some projects.	● Green
Benefits Management and Delivery	● Amber	Programme Manager, Project Managers and Sponsor will draft Benefits Profiles and work on them as projects are defined.	● Amber
Risks and Issues	● Green	Risk management and issue resolution strategies in place for programme and projects.	● Amber
Overall Status	● Green		● Green

Table 2 Major Risks and Issues

Major Risk/Issue	Action to be taken	By when	By whom	RAG status
Risk: Development Environments inadequate for the projects and current delivery schedule	Review the detailed project plans, discuss the recommended action plan.	End April 06	Prog Mgr DIT Project Mgrs	● Green
Issue: OTL & Project Mgmt Pilot	Prog. Mgr reviewing project plans and will recommend required action.	End April 06	Prog Mgr DIT Project Mgrs	● Amber

Table 3 Programme Deliverables

Deliverable	Milestone date	Cross-ref benefits	Comments	RAG status
1 System Upgrade	2005-06	All	Interim disk storage solution implemented. Work progressing on re-specification of acceptable solution.	● Complete
2 Reshaping for Excellence	2006		OCS and CED structure changes to be completed end Oct. ECS data collection started.	● Green
3 Report Access	2006	6,7,8,9, 10,11	Amendments made to implemented reports. Final implementation heavily dependent on DIT resources.	● Amber

Table 4 Programme Benefits

Benefit area	Realisation period	Comments	RAG status
1 Real Time Project Status Reporting for Time and Costs	2006-07	Accessing project status data on a real time basis will enable project managers to respond to cost and time issues quickly.	● Green
2 Time Recording Information for Project and Employees	2006-07	Short Term – Identifying resource working on a project, how much time plus costs. Forecasting the future resource implications (and potential to meet deadlines) of a project.	● Amber

Source: Cambridgeshire County Council

Realising the benefits

7 Cambridgeshire County Council's programme and portfolio management has promoted more cross cutting initiatives by overcoming functional silos. Business Development Areas can direct resources to the programmes and projects best aligned with the Council's corporate objectives which makes it easier to link resources to key priorities. This contributed to the Authority's "Use of Resources" evaluation under the Comprehensive Performance Assessment (CPA), which in 2005-06 was assessed as three out of four.

8 The new governance structures also allow external strategic partners to participate in the formulation of Council plans to better align them with the County's needs.

9 New proposals for investment can be considered alongside the existing programme of work, making it easier to gauge the Council's ability to resource new initiatives and to ensure new dependencies are managed effectively.

10 The new governance structures increase senior management's ability to track the progress of programmes and projects. Mission critical reporting, supported by improved management information, provides senior management with greater visibility of all the Council's programmes and projects and their risks to delivery.

11 Identifying benefits is made easier when all activities are viewed as a single portfolio. For example, contributions to Council priorities such as increased efficiency and improved customer service come from a wide variety of projects across all three Business Development Areas. By viewing the activities as a single portfolio, it is easier to understand the whole picture and to ensure that the contributions from all projects deliver a coherent result.

12 Portfolio management has led to weaker business cases being rejected at an earlier stage. This has enabled the Council to avoid significant investment that ultimately would have been wasted.

13 Cambridgeshire County Council has made its knowledge and experience available by publishing the project outputs on the Improvement and Development Agency (IDeA) website¹ in the Capacity Building Toolkit section.

¹ Improvement and Development Agency, www.idea.gov.uk.

THE CITY OF EDINBURGH COUNCIL

Modernisation of Planning and Building Standards

Edinburgh has a population of half a million and an annual budget of around £847 million. As part of its “Smart City Programme” to modernise the Council’s back office systems and processes, the Council undertook a modernisation of its Planning and Building Standards services to enable individuals, construction firms, architects and solicitors to submit applications electronically and to find planning related information online.

“Through the partnership with BT we have challenged how we were delivering our services. The investment in new ICT systems, providing an integrated platform, has improved the transparency, efficiency and effectiveness of our services. As the busiest Planning and Building Standards services in Scotland, with application volumes still increasing, the project has enabled us to become more productive.”

Andrew Holmes, Director, City Development

Cost

The Council’s ICT Partner (BT) provided 90 per cent of the initial investment, which the Council is paying back over a fixed term in monthly instalments, equivalent to £1.5 million per annum. In addition, the Council received £1.2 million from the Scottish Executive’s Modernising Government Fund for this project.

Supplier

BT – computer systems and software development and support.

Timescale

Initially proposed in early 2002, in operation by August 2003.

Current status

The system has been in operation for three years and now provides individuals and businesses with 24 hour access to the Council’s latest planning information, updated in real time.

Key components of success

- Oversight of the project from the top of the organisation ensured that it met business objectives.
- Close attention to business process mapping enabled the delivery team to provide the supplier with a clear picture of the Planning and Building Standards services’ complex processes and ensured that the IT solution met their requirements.
- The governance structure made top management accountable for realising the benefits. A formal benefits realisation methodology in line with PRINCE2™ was adopted, where the delivery of each benefit was clearly allocated to a specific manager, with compliance responsibility resting with the Project Management Board. From inception, this has enhanced the transparency and accountability in the project.

Aim

1 The City of Edinburgh Council has the busiest Planning and Building Standards services in Scotland, handling approximately 10,000 applications annually. The Departments work with individuals, law firms and the City's construction industry to provide services, advice and guidance in the areas of planning and building regulations. The Planning service is concerned with location, design, layout and appearance of buildings and land uses. Building Standards checks that new building work is carried out in accordance with the appropriate regulations.

2 In 2001, The City of Edinburgh Council and BT entered into the "Smart City Programme", a ten year technology partnership to modernise the Council's IT systems and processes and to provide a single "City Portal" for citizens and businesses to access services and information. As part of the wider programme, the Council initiated an IT-enabled business change project with BT

to modernise its Planning and Building Standards services from a position where most services were conducted using manual paper-based processes with public access restricted to weekday office hours. Services were slow, prone to inaccuracies and generated extensive paperwork, and the Council was growing increasingly concerned about the deterioration of its paper-based file archive, and the pressing need for greater storage space.

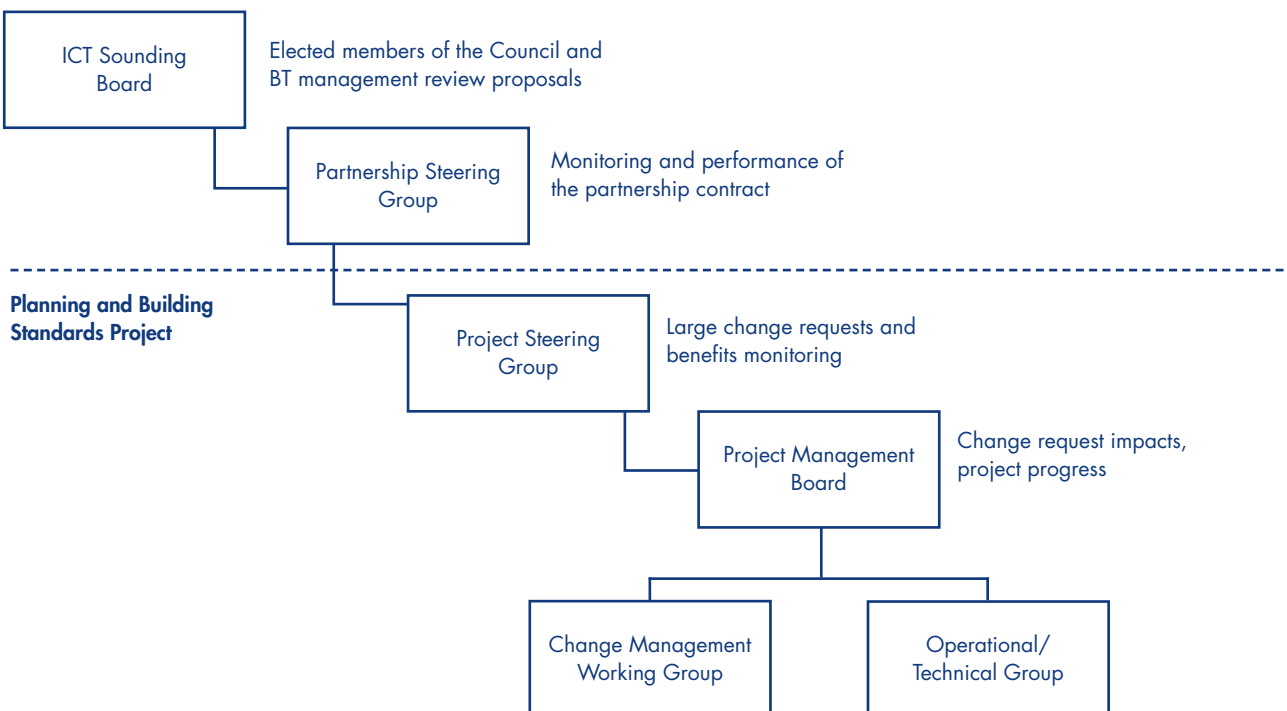
Ensuring senior level engagement

3 To ensure senior management scrutiny for the wider Programme, the Council agreed with BT a governance structure that saw elected members and senior officers involved directly in the Programme's oversight. This provided each component project, including the modernisation of Planning and Building Standards services, with ready access to key decision makers in the authority (**Figure 9**).

9

Edinburgh City Council/BT Governance Model: Smart City Programme and Planning and Building Standards Project

Smart City Programme



Source: Edinburgh City Council

4 The governance structure made benefits monitoring the responsibility of the Council's most senior staff and created a clear reporting line to the Smart City Programme. A portfolio management approach was applied to the Council's programmes and projects, with resources allocated in accordance with corporate priorities. For example, when the Planning and Building Standards project needed additional staff to migrate data from paper files to the new electronic system, managers were able to identify where temporary secondments could be made from other parts of the Council, avoiding the cost of employing temporary staff.

Building capability

5 The Council's decision to build a central e-Government Unit with a cadre of 30 PRINCE2™ qualified project managers enabled the Planning and Building Standards project team to significantly strengthen their project management capability with a secondee from the e-Government Unit.

Designing the change

6 To enable it to work most effectively with BT to design the IT solution, the project team first needed to identify how existing business processes could be improved. The project team committed significant resources to mapping the activities and requirements of Planning and Building Standards and understanding the flows of information between the two services. To ensure that the business change stayed in step with emerging changes to building and planning regulations, the process mapping effort continued throughout the lifecycle of the project.

Realising the benefits

7 Citizens and businesses now have 24 hour seven day a week access to all Edinburgh's Planning and Building Standards applications, and information is accessible in real time.

8 The electronic systems validate data at the time they are entered. This has significantly reduced incorrect applications, eliminating such basic errors as not signing or dating an application. In the first six months of 2006, those applications submitted electronically have seen a reduction of six per cent in incorrect applications, compared to those submitted manually. This is expected to improve further as users become more familiar with the new systems.

9 The new systems provide greater transparency, allowing managers to monitor the workloads and performance of case officers, to track applications as they progress through the process, and to trigger reminders as critical deadlines approach.

10 The requirement for space to store paper files has been reduced significantly. While current legislative requirements still necessitate the retention of a principal paper record, the system allows for secondary information to be filleted from the paper record and stored electronically, in some cases reducing the paper stored by over 50 per cent. In addition, while previously problems could arise in locating, copying, updating and distributing paper documents, and gradual damage to documents through handling, the new system allows the Council to "future-proof" the files.

11 The project has started to realise the benefits projected in the business case. Compared with a paper-based system, the number of administrative staff required to support the new process has been reduced, initially by approximately 10 per cent. The volume of applications submitted to the Council has continued to grow throughout the life of the project and the Council has been able to absorb this additional workload within existing resources, while showing steady improvement in performance as new business practices bed-in.

12 The Planning and Building Standards Portal was a finalist in the e-Government National Awards 2005 category "Local e-Government excellence: Take-up", and a runner up in the "Government to Business" category of the Government Computing BT Awards for Innovation 2005.



UNITED STATES DEPARTMENT OF DEFENSE

Identity Management Programme

The United States Department of Defense is a Federal Agency headquartered at the Pentagon, and includes the four branches of the armed services – Army, Navy, Air Force and Marines. The additional members of the seven uniformed services include the Coast Guard, the Commissioned Corps of the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Public Health Service (PHS) Commissioned Corps. The Common Access Card Programme was created to improve security and reduce fraud by providing uniformed personnel with a secure smart card for entry to buildings, computer networks and systems.

Supplier

EDS – system design, implementation, and infrastructure maintenance; Sun Microsystems – security advice and hardware; ActivIdentity, Inc – software for card issue and use.

Timescale

The Common Access Card directive was issued in November 1999 and the first Common Access Card was issued in October 2000.

Current status

The programme has issued over ten million cards worldwide and continues to be the method used by the Department of Defense for identity assurance and Personal Identity Protection.

Key components of success

- Well-defined business and operational policies and procedures that are clearly communicated across the vendor and client communities.
- The use of industry and commercially approved standards and procedures for defining technical requirements.
- The use of commercial off-the-shelf technologies to allow a continuity of supply and the ability to procure the most cost-effective package.
- A phased, incremental deployment with scheduled review cycles to ensure that potential issues (scalability, user training, communications plan) can be analysed, updated, and then incorporated into the ongoing roll out of the deployment.

Aim

1 The United States Department of Defense (DoD) employs approximately 3.2 million military, civilian and contract personnel in more than 130 countries and 40,000 locations. It is essential for the DoD to have an effective identity system that prevents unauthorized access to its installations, IT systems and sensitive information for security. In 1999, the Deputy Secretary of Defense issued a directive to create a standard electronic identity card for military, civilian, and contract staff to enable physical access to buildings and controlled spaces, gain access to the Department's computer networks and systems, and assure identity to obtain privileges and benefits.

2 The Common Access Card programme was established to deliver an electronic smart card that contains demographic data of the user and information such as name, rank and blood type. The Common Access Card allowed business processes to be streamlined by centralising basic data into one place and assisting in the automation of manual paper based transactions.

3 The undertaking was ambitious in scale, requiring the Department to build a network of 2,000 card issuing workstations at 900 sites worldwide, to install more than one million card readers, and to issue cards to more than 3.2 million personnel.

Testing the viability of the technology and business process

4 The Department was cognisant of past government mistakes in choosing overly complex systems and custom-made technologies and chose instead to follow international and commercial standards for the Common Access Card. The two standards chosen were Java Card and GlobalPlatform. These standards offered the advantage of access to competing card vendors, thus ensuring continuity of supply if one supplier went out of business, and mixing and matching of different suppliers' software and hardware to obtain the most cost-effective package.

5 In view of the scale and technical complexity of the programme and the newness of standards for smart card technology, which were relatively immature when the programme deployed, the Department decided to test and evolve the identity card technology, and its functionality, and the process for issuing the card over a twelve month period. The first test site was established in October 2000. By mid-2001, 70 sites around the world were issuing cards. The project team used this initial phase of the roll-out to improve both the card technology and the business process.

6 The early stages of the card issuing process identified strains on the capacity of the computer systems involved. Due to unreliable connectivity between key systems, some pilot locations were unable to issue cards at certain times of day. Steps were taken to address the connectivity problem and to add redundancy and robustness to the issuance infrastructure.

7 Feedback from front line staff was used to improve the card issuing process. The programme manager visited the best performing pilot locations to consult front line staff on what worked well. This process identified some simple lessons, such as the need to clean printers thoroughly and to bolt down hardware at the issuing sites. These lessons were passed to other locations and improved their card issue performance. The consultation was also helpful in demonstrating to staff the Department's commitment to making the programme succeed.

8 Once users began using the card, many applications ran smoothly. However, as the programme scaled up and the user base grew, problems arose in achieving the key goal of meeting the DoD's mandate to digitally sign all electronic mail and other electronic documents. Downloading over 30 megabytes of Certificate Revocation List (CRL) data took over an hour to complete, resulting in loss of productivity. Also to avoid waiting, many users circumvented the system and used webmail, causing significant security concerns. To address this, the programme team identified the need for a new validation protocol – Distributed Online Certificate Status Protocol – which reduced the validation time as well as increasing security.

Addressing user concerns

9 Programme success depended on obtaining user buy-in. A comprehensive public relations plan was developed that outlined the benefits of using the card and ensured that all users were aware of the card prior to its arrival. The early stages of the implementation identified that users were uncertain about whether they were using the card correctly. To address this, the project team set up a training programme for users and improved helpdesk assistance.

Realising the benefits

10 The Common Access Card programme has delivered efficiency gains. The time taken to issue an identity card has been reduced from hours to 15 minutes through reducing the paperwork involved and simplifying card issuing arrangements. This efficiency benefit will continue with each card issued to new staff or reissued by existing staff.

11 The card enables army divisions to assess deployment readiness in minutes rather than hours. Previously, army personnel were required to present their finance, personnel, and medical records to twelve different contact points and waited in line for their details to be processed to determine if they were equipped to go on manoeuvres. Using the Common Access Card, all the required information can now be read automatically from a single interaction and deployment readiness can be verified almost instantaneously. The Department of Defense estimated that a typical infantry division can save 30,000 man-hours a year by using the smartcard rather than the paper-based process.

12 The Department of Defense has identified that the card technology can deliver further savings and more functionality without needing to issue new cards. For example, the technology has already been extended to support a travel system that allows users to sign their travel vouchers electronically, eliminating the need for paper based processes. The next technological challenge will be the incorporation of biometric data into the card. This capability is currently under development and will be deployed during 2006.



NEW YORK CITY MAYOR'S OFFICE

NYC 3-1-1 Citizen Service Center

New York City has a population of over eight million and an annual budget of over US\$50 billion. At the outset of his administration, Mayor Bloomberg realised that New York needed a streamlined and more efficient means for citizens to access information and services. As a result, the New York City 3-1-1 Citizen Service Center was created to provide access to all government information and non-emergency services in New York City through a single telephone number. NYC 3-1-1 is available 24 hours a day with operators providing services in over 170 languages.

"I can't imagine running the city without it".

Mayor Michael R. Bloomberg, January 2003

Cost

US\$25 million.

Supplier

Accenture – lead contractor; Sun Microsystems – Solaris system upon which the Citizen Service Center is run; Siebel – call centre software; Oracle and Genesys Communications – computer telephony integration.

Timescale

Initially proposed in early 2002, in operation by March 2003.

Current status

The system has been in operation for over three years and has received more than 36 million calls to date.

Key components of success

- Strong and sustained commitment and involvement from City Hall, supported by a capable management team; drawing on citywide expertise, and recognised as an "intelligent customer" by suppliers.
- Clearly defined scope established at the outset, combined with an absolute requirement for completion within one year.
- Close attention to business process mapping; reflecting the complexity of bringing together the call centres of some 40 different agencies across New York City.
- No public announcement of a "go live" date, combined with a progressive expansion of the new system to avoid creating unhelpful hostages to fortune.

Aim

1 NYC 3-1-1 was designed to provide the citizens of New York with a single responsive and easy-to-remember telephone contact point (3-1-1) for access to the City's non-emergency services. It replaced approximately 40 separate call centres and hotlines and 14 pages of phone numbers in the City's telephone directory. NYC 3-1-1 is also available to callers from anywhere in the world by dialling (212) NEW-YORK from outside the City proper.

2 Operating through a single Citizen Service Center, NYC 3-1-1 provides the citizen with access to information on City, state and federal government services and the means to lodge service requests with many of the agencies serving the City. Within the Service Center a multi-tiered cadre of generalist and specialist staff access information held either directly by the Center's database, or remotely from other City agencies. For more complicated enquiries and service requests, callers are transferred directly to the staff of the relevant agency. Information can be updated in real time, and 3-1-1 works closely with other City agencies to maintain the most current information.

Demonstrating commitment to the change

3 As 3-1-1 was a key priority of Mayor Bloomberg following his election in 2001, the project received strong commitment and vision from City Hall throughout.

4 At the outset, and with the assistance of consultants, the Mayor's Office undertook a conceptual analysis to determine what would work best for the City's needs. This included drawing upon the experience of other cities in the United States.

5 In addition to a strong team within the Mayor's Office, the development of NYC 3-1-1 was overseen by an experienced team within the City's Department of Information Technology and Telecommunications. Both were rated highly by suppliers. Within the management structure, there was effective challenge from a Technical Steering Committee, which helped shape the request for bids from suppliers, while a Selection Committee was established to make all key decisions. The management team also received good support from the City's Office of Management and Budget which brought to bear its considerable experience of past IT programmes and projects in its oversight of the procurement process. This assistance helped the management team to make effective decisions about the relative costs, risks and credibility of the different bids and bidders, resulting in the lowest cost bid being rejected in favour of a more expensive but more convincing proposal.

Managing risk effectively

6 The quality of service delivery by the City's agencies could not be compromised during the transition to NYC 3-1-1. Business risk was therefore a key focus throughout the project. A key risk within this was the inter-operability between different agencies' business processes and systems. As a consequence, the City invested significant resources on employing business analysts to examine those processes thoroughly and to get a clear picture of the capacities and capabilities of the various agencies' existing call centres.

7 An early imperative of the Mayor was that the project should be delivered in one year, with stiff completion targets set for the many constituent activities. The contract was signed in August 2002, and the system went live in March 2003. Once the system was live, the City embarked on a public awareness campaign promoting the availability of the number, which received over six million calls during its first year of operation.

8 While NYC 3-1-1 involved the assembly of many new and existing processes, software applications and technologies, wherever possible, off-the-shelf and mature technology was used to avoid the added risk in developing bespoke systems and software.

9 Also to reduce risk, initially only 11 agencies were fully consolidated into the 3-1-1 call centre. To this day, five agencies that maintained and relied on pre-existing legacy systems continue to operate separately (although they are linked to the 3-1-1 system as the initial point of contact for citizens). For complaints requiring the legacy system applications, the caller may be transferred from a Tier 1 generalist operator to a Tier 2 specialist within the 3-1-1 call centre, where the complaint or request is entered directly into the appropriate system.

10 As part of addressing business risk, a large number of caller scenarios were tested before the system went live. The 3-1-1 system was also designed to scale up rapidly to meet demands in an emergency situation. In August 2003, for example, an electrical failure across the region resulted in calls to 3-1-1 more than tripling to 150,000 in two days. During a strike by New York City's public transit workers in December 2005, 3-1-1 handled more than 240,000 calls in the first 24-hours of the strike, and approximately one-half million during the three-day event.

Realising the benefits

For citizens

11 All calls to 3-1-1 are answered by a live operator, 24 hours a day, seven days a week, with immediate access to translation services in over 170 languages.

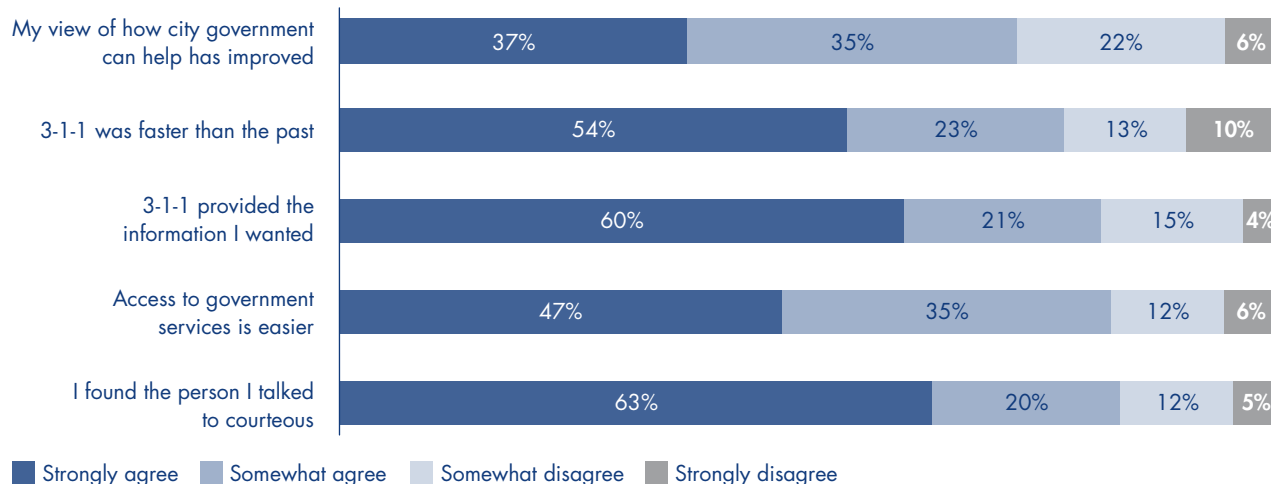
12 In the first year of operation, the service received some 6.7 million calls, rising to 11 million the following year. To date, NYC 3-1-1 has serviced more than 36 million calls, with an average daily volume of around 40,000 calls. As shown below (**Figure 10**), the introduction of NYC 3-1-1 has been well received by citizens in respect of its responsiveness and access to information and services.

For the City

13 The introduction of NYC 3-1-1 has seen the volume of calls to all levels of government increase. For city government, in particular, volume rose by 19 per cent in 2003 and 27 per cent in 2004. While this increase in call volume required more staff at the 3-1-1 Citizen Service Center than had filled the ranks at the disparate agency call centers that had been consolidated, the creation of a centralised 3-1-1 allowed the city to provide a standard level of customer service for the first time.

10 New York citizens rate NYC 3-1-1 highly

NYC 3-1-1's impact on citizens



Source: Accenture

14 The introduction of a single call centre has resulted in a streamlined reporting process, allowing agencies to avoid the risk of duplication of activities. Previously, a concern or problem with a service might result in calls from citizens to different agencies, all of whom would then respond. For example, as many as three different agencies might become involved in filling a pothole or dealing with an environmental health issue.

15 Beyond the avoidance of duplicated effort, NYC 3-1-1 has also prompted agencies to develop protocols for arbitration and escalation of issues between themselves, to address inter-agency operational decisions, and to make for clear assignment of roles and responsibilities.

16 NYC 3-1-1 also assists agencies to achieve greater cost-effectiveness in service delivery by allowing specialist or professional staff to focus on core activities, rather than becoming distracted by routine requests for information or services. Previously, for example, requests for information about day-care nurseries might occupy unnecessarily the time of professionals in the City's Administration for Children's Services.

Optimising the benefits

17 Early on, NYC 3-1-1 was seen as a means to provide for the first time an accurate, consistent measurement and analysis of citywide service delivery. The collection of large volumes of detailed information about the incidence of citizens' needs leads to better targeting of services. The accurate monitoring of "quality of life" complaints such as excessive or late-night noise, for example, assists the police to target their activities to particular areas and times. Such information also allows for performance measurement and reporting across the different City agencies, and response times to service requests, as well as other performance criteria, are now routinely monitored centrally.



CITY OF ANAHEIM

Enterprise Virtual Operations Center

The City of Anaheim is located in Southern California and includes Disneyland within its jurisdiction. After 9/11, City officials recognised that protecting its citizens against both large scale crises and everyday emergency situations necessitated an innovative, more proactive approach to emergency management, with technology as the driving force.

"This application destroys silos, virtually eliminating those departmental idiosyncrasies. It forces organisational collaboration and that's the key."

Thomas J Wood, Assistant City Manager

Cost

US\$1.2 million.

Supplier

EDS.

Timescale

Implemented in six months between Summer 2003 and February 2004.

Current status

Implemented and enhanced to include more robust Geographic Information Systems and mapping capabilities and intelligence for customised and automated Major Event Advisories.

Key components of success

- Understanding the needs of customers' operations and environments.
- Clear leadership from the City authorities under the oversight of the Assistant City Manager.
- Efficient and secure dissemination of information from various data sources organised to maximise its value to the end-user.
- Use of existing systems, combined wherever possible with off-the-shelf technology.

Aim

1 To accelerate its response to local emergencies and unforeseen events, the City of Anaheim saw a need to improve information sharing between Police, Fire and other City Departments and professional entertainment venues such as Major League Baseball, the National Hockey League, US Olympic events and various conferences and conventions, as well as Disneyland. This led to the development of an “Enterprise Virtual Operations Center” – an online command centre for emergency management and operations. Securely accessible via the Internet, it brings together real-time data from a wide variety of sources to allow for critical decision-making in times of emergency or public safety, making it possible “with just one click” for City officials to see what is happening on all the City’s critical response fronts. For example, the Fire Chief can see colour-coded information on a single screen for all incidents affecting the Fire Department; the Police Chief likewise for his or her Department.

Demonstrating commitment to the change

2 The project benefited from the clear leadership of the Assistant City Manager, who had clarity about what he wanted to achieve and the power to bring it about.

3 There was also a close partnership between the City and its IT supplier to establish a clear set of priorities and options.

Managing risk effectively

4 Risk is managed effectively by empowering critical stakeholders with detailed current information via voice and data securely either remotely or on-site.

5 The successful development of the Enterprise Virtual Operations Center (EVOC) required a clear understanding of each user’s business processes, operational needs and the way the organisation handled information. As a first step, therefore, the team talked to all potential users in the City. For example, for the system to work effectively it needed to “listen in” on Anaheim’s Police and Fire Departments’ radio systems, which operated using analogue technology. This required conversion into digital signals so that they could be streamed through the new technology, to allow authorised users to access information simply by logging in through the EVOC portal. This allowed for remote access whether from another municipal authority or for someone

simply on holiday and, as an online facility, it eliminated the risk of a single point failure should a more traditional command post be damaged or destroyed.

Designing the system around users

6 The development of the Enterprise Virtual Operations Center followed a three stage approach: design, implementation and operation. Central to that development was a set of business rules for a particular type of event; with the system accessing data from different databases and combining it in different ways to meet the need of different users at different levels and positions through a series of hierarchies.

Realising the benefits

7 The Enterprise Virtual Operations Center brings together communications to provide a real-time picture of resource availability and utilisation, making it possible to utilise the City’s resources more effectively. For the first time, decision makers can ascertain how many police units are on scene, how many fire units are on the way and even what a 9-1-1 caller said about a particular incident. Beyond emergency response, the system allows City officials to access blueprints, utility plans and video cameras throughout the City to obtain live information about what is happening in any given area or locality.

8 To meet the City’s wish to get the maximum return from its existing IT infrastructure, rather than building a costly and complex new centralised database, the supplier, EDS, created a system that allowed the connecting together of all the Departments’ existing databases and data “warehouses” through a single web-based portal.

9 Ultimately, the City anticipates expanding the Enterprise Virtual Operations Center beyond emergency management to serve as a platform for widespread operation collaboration. For instance, Anaheim officials believe that it could be useful to promote community policing. Beyond the immediate City authorities, the system can be used by a wide variety of public and private organisations ranging from utilities and health bodies to businesses with critical infrastructure to protect.

10 Following the successful introduction of the Enterprise Virtual Operations Center, the City of Anaheim is extending this capability to surrounding jurisdictions in Southern California. The system’s scalable architecture will help facilitate this expansion, allowing regional government to collaborate in new ways.



OFFICE OF THE REVENUE COMMISSIONERS

Revenue On-Line Service

The Office of the Revenue Commissioners is responsible for the collection and management of taxes and duties for the Republic of Ireland. Revenue On-Line aims to increase efficiency, reduce costs and improve customer service by enabling taxpayers to both pay their taxes and file their tax returns on line. In January 2004, Revenue On-Line won an award for being a leading innovator in digital media in the “Business to Business” category at the 02 Digital Media Awards. In 2005, ROS won a European eGovernment award for its beneficial impact on government service to citizens and business.

“ROS is a shining example of how Ireland is succeeding in using information technologies to deliver effective and efficient front-line services to all users”.

Tom Kitt T.D., Minister for State at the Department of an Taoiseach

Cost
€40 million.

Supplier
Revenue with business partners: Accenture – system development; Baltimore Technologies/Lancomms – network security.

Timescale
1998 – 2000 for initial launch.

Current status
Revenue On-Line can now process most taxes and duties levied in the Republic of Ireland.

Key components of success

- Senior level commitment to the programme, with strong support at Ministerial level and from the Board of the Revenue Commissioners.
- Strong collaborative relationships between the Revenue’s team and its major suppliers.
- Effective and early engagement with potential users and wider stakeholders, targeting professional groups in particular to demonstrate the advantages of the system and, through their endorsement, to secure high levels of acceptance and take up in the general community.
- Phased roll out to different types of taxes and duties, implementing the simplest first, to build support for the change by demonstrating its effectiveness.
- A strong foundation as a result of Revenue’s Integrated Taxation Services framework. This ensured transparent integration with stable back-office systems providing common registration, transaction processing and banking for all taxes.
- Considerable time and effort was invested in designing and making sure the new business processes were right before engaging with suppliers.

Aim

1 In 1997, with the Irish Republic's continuing economic success, the Revenue was facing increasing volumes of mail, email and telephone calls. In an effort to free resources from manual processing, the Commissioners approved the development of an online system to allow electronic filing of tax returns and payment of taxes incorporating a Customer Information Service (CIS) to enable customers and their agents view their Revenue account.

Senior level engagement

2 The Revenue On-Line team realised early on the importance of gaining the commitment of Ministers and senior officials. This included the need to secure the legislative changes required to secure legal recognition for information and documents transferred electronically or submitted without a taxpayer's signature.

3 A project board of six Assistant Secretaries within Revenue was established to direct and oversee the implementation of Revenue On-Line. One of the Board's initial functions was to approve the programme's overall strategy – *Think Big, Start Small and Scale Fast* – which started as a simple system, and then expanded to support other taxes and duties. The strategy was highly effective and saw the launch of the first phase of the system in September 2000, two years after commencement of the Programme.

4 The Revenue On-Line programme was led by a dedicated strategy manager reporting directly to the Project Board. In support of the programme, the Board allowed him to "hand-pick" high calibre staff from the Revenue's 6,500 employees to work exclusively on the planning and requirements gathering stages.

Supplier collaboration

5 In January 2000 and April 2000, contracts to design and deliver the Revenue On-Line system and network security were awarded after an open EU tender to Accenture and Baltimore Technologies respectively. The Revenue team considered implementation would proceed more smoothly if the staff from the three organisations could easily discuss issues and problems between themselves. A new building was found, away from existing Revenue offices, where the teams could share a common open-plan space. This contributed greatly to creating a collaborative working environment, giving suppliers easy access to the programme's decision makers, who were also housed in the new location. Once developed, Revenue On-Line was run from the Revenue's computer centre to avail of standard facilities for security, connectivity to Revenue back-office systems and the cross departmental Public Service Broker, business continuity/ disaster recovery and operational/technical support.

Phased roll out

6 Revenue On-Line was rolled out in manageable phases, with the simplest taxes and processes – filing and paying VAT returns and Employers Withholding Taxes – being supported first. The first phase acted as a "proof of concept", demonstrating that the system would work and providing the means to build support for the change.

Effective user and stakeholder engagement

7 All major legal and accountancy professional bodies potentially affected by the introduction of Revenue On-Line were consulted about its plans. The Revenue recognised that take up would be strongly influenced by how much trust users placed in the system. The delivery team, therefore, ran workshops with citizens and business users to establish a common set of requirements, and to highlight and address users' concerns. Many of these centred on the security of the system. Consultation with the relevant representative bodies is a standard feature within the Revenue On-Line Service (ROS) when new services are being developed.

8 At the time of the system's development, the Republic of Ireland had no authority or public body that could issue digital certificates – a means of securely authenticating the identity of users of Internet based transaction systems. The Revenue decided to create its own Digital Certifying Authority. Whilst costly, it greatly enhanced the confidence in the security of the service among its users. Revenue does not charge users for the issue of digital certificates.

9 During the development of the service, the Revenue team contracted and utilised a mobile training unit to demonstrate the Revenue On-Line System around the Republic to raise its profile and to show how it would work. In addition a nationwide team of ROS liaison officers (RLOs) targeted, in particular, senior partners at the country's largest accountancy practices, since they had the power to influence more junior staff to use the new system.

10 The Revenue team invited potential suppliers of rival software to test their applications alongside the new on-line service to ensure compatibility. This helped change those companies' perspectives; many no longer saw Revenue On-Line as competition, rather that their products could act to complement the Service's own systems. Achieving such compatibility also helped persuade users of commercial software packages to start using the Revenue's new service, which further increased take up.

Realising the benefits

11 The benefits that have been delivered by the system are:

- circa 33 per cent of Revenue's manual processing staff have been released from paper-based processing and redeployed onto compliance activities;
- taxpayers can access their tax and payment records online 24 hours a day, seven days a week, without having to contact their local tax office;
- by 2005, 65 per cent of income tax returns were being filed online; and
- by January 2006, 87 per cent of new vehicle registration tax transactions were being carried out online.
- Revenue conservatively estimate a saving on postage, printing and processing costs from ROS in 2005 at €10 million.

12 From June 2006, Revenue commenced providing an online Self-service for their 2.2 million PAYE customers.

BRITISH COLUMBIA'S MINISTRY OF LABOUR AND CITIZEN SERVICES

Network BC

The Ministry of Labour and Citizens' Services is responsible for improving British Columbians' access to the services of the provincial government by making them more responsive to citizens' needs. Network BC is a dedicated project office within the Ministry that works with British Columbia's communities and the private sector to improve citizens' access to the Internet.

"We are committed to bridging the digital divide, and Network BC's efforts to improve access to broadband Internet are opening up a world of opportunities for those who live and work in our rural and remote communities."

Labour and Citizens' Services Minister, Mike de Jong

Cost

No new government spending. Leveraged Canadian \$245 million that the Province spends over four years on telecommunications services.

Supplier

TELUS Communications Inc., plus Internet service providers.

Timescale

2002 – 2007.

Current status

The programme is on target to provide high speed (broadband) Internet access for the majority of 366 communities¹ in British Columbia by 31 December, 2006, with the remainder being connected by the 2nd Quarter of 2007.

Key components of success

- Support and leadership at the highest levels of Government and industry, which created a willingness to explore new and innovative possibilities beyond those more usually in place between Government and the telecommunications sector. The Network BC programme involved both industry executives and elected officials who, via the Premier's Technology Council, called for high speed access to be extended to all 366 communities in British Columbia. Further, the Premier and other senior elected officials have been involved in this programme from the outset and the decision to negotiate directly with TELUS received full Cabinet approval.
- A negotiating team purposely built to contain the array of skills and expertise necessary to negotiate a complex and often technical agreement.
- Active and continued involvement of those public sector organisations in the contract negotiation and the management of the supplier.

¹ Community is defined as any locale with a name and either a school, a library or a health facility. This definition was determined by the Premier's Technology Council in its Second Quarterly Report (Aug 2002).

Key components of success *continued*

- A commitment on behalf of the public sector to continually engage community stakeholders (Internet service providers, end users, local governments, including First Nations Councils²) and represent their interests in project implementation.
- A commitment to communicating the results and in engaging local provincial government officials in doing so.

Aim

1 Bridging the digital divide³ between communities with access to high speed telecommunications services and those without access was identified as a priority for the Province of British Columbia in 2001.

2 In August 2001, the Office of the Premier of British Columbia announced the formation of the Premier's Technology Council to provide advice on all technology-related issues facing British Columbia and its citizens.

3 In 2002, the Council published a report highlighting the scale of the digital divide across British Columbia. It identified that out of 366 communities, 151 lacked affordable high speed internet access.

4 The report recommended using the existing Shared Provincial Access Network (SPAN/BC network)⁴ to help accomplish the Programme's aim. The Council considered that if this network was expanded to include Provincial health authorities and Crown corporations, the Government of British Columbia would have significantly increased collective purchasing power to motivate telecommunications suppliers to upgrade their networks and provide the desired high speed connectivity to unserved communities.

5 The Ministry of Labour and Citizens' Services created a dedicated project office called Network BC to bring together all the various ministries and public authorities with an interest in the project and to manage the upgrade programme. Interested parties included:

- All ministries of the Government of British Columbia
- Provincial Health Services Authority
- Fraser Health Authority
- Interior Health Authority
- Northern Health Authority
- Vancouver Coastal Health Authority
- Vancouver Island Health Authority
- British Columbia Hydro and Power Authority
- British Columbia Lottery Corporation
- Insurance Corporation of British Columbia
- WorkSafe BC

A strong, commercially aware procurement team

6 After assessing the marketplace, Network BC judged that a competitive tendering process to undertake the improvement to the network infrastructure would only attract multiple bidders near urban areas and remote areas would attract few bidders. It was therefore decided that the most efficient way to bridge the digital divide, with no financial outlay by the provincial government, was to directly negotiate with TELUS, the largest telecommunications company in Western Canada, which already had over 340 existing contracts and agreements to supply telecommunications services to various public sector organisations in British Columbia.

2 First Nation is a term of ethnicity and refers to the indigenous peoples of North America.

3 The gap between those citizens with access to new technology – including skills training, computers and broadband Internet access – and those without.

4 Operated by Workplace Technology Services (WTS) department of the Ministry of Labour and Citizens' Services, SPAN/BC supports over 50,000 Provincial government users via 4,000 network nodes distributed throughout the Province, including all public schools, libraries and public safety agencies as well as most ministry regional offices and offices in the capital regional district of Victoria.

7 With only a single large supplier, Network BC was keen to create a strong team to negotiate the best possible deal and in advance of negotiations, therefore, it created a team drawn from internal technical experts, legal counsel, external professional negotiators, and financial analysts who could act collectively as an Intelligent Client.

8 The approach to the contract negotiations followed “interest based” best practice. This enabled the public sector bodies involved in the joint procurement to have regular input into the negotiations through their Chief Information Officers, and financial and legal representatives.

9 In March 2005, two primary agreements were reached between the parties, the Master Competitive Services Agreement and the Connecting Communities Agreement. The first of these specified the services that the Provincial Government and the broader public service would buy from TELUS. This agreement, however, applied only to non-tariffed services where prices are not regulated. This resulted in the consolidation of multiple existing TELUS contracts (approximately 340) into one master agreement covering all the participating bodies. This was achieved by agreeing to a streamlined and simplified set of services (reduced from 900 to approximately 90) and resulted in a fifteen per cent savings (Canadian \$54 million over four years) by both the Government and the broader public sector on telecommunications costs. The Master Competitive Services Agreement also extended to 31 December, 2008 the telecommunications contracts for those non-tariffed services provided by TELUS.

10 The Connecting Communities Agreement commits TELUS to the provision of affordable high speed Internet-based services to 119 of 151 unserved communities in British Columbia by 31 December, 2006. Of the remaining 32 communities, 29 will be connected by high speed satellite, and three will be connected as part of a Federal Broadband for Rural and Northern Development Pilot Program. This will complete access to the 366 communities identified by the Premier’s Technology Council in 2002.

11 People living in remote communities were kept informed about the project by a Communities Consultation Team made up of representatives drawn from the various remote communities of British Columbia. The team also provided advice to the negotiating team about what the community groups most needed. For example, small locally-based Internet Service Providers feared TELUS would, in addition to providing the long distance telecommunications infrastructure, be tempted to also offer low-cost “last mile”⁵ services up to people’s front doors (through Asymmetric Digital Subscriber Line (ASDL) facilities), thereby squeezing out local competition. In response, the Province negotiated a non-compete clause into the Connecting Communities Agreement, ensuring TELUS could not offer such services for a period of three years.

Ensuring senior management leadership

12 Network BC put in place a governance model to oversee the agreement reached with TELUS involving an Executive Governance Committee providing strategic direction and ultimate dispute resolution, and a Council of Chief Information Officers responsible for making ongoing management and operational decisions. Membership of both bodies consists of representatives of the various public sector organisations taking part in the project.

13 A Contract Management Office was also created with responsibilities for generating management information for the Executive Governance Committee and Chief Information Officers, regularly reporting upon the performance of TELUS against various service level agreements.

⁵ Telecommunications cabling along a relatively short distance that delivers voice, data and television services directly into a person’s home.

Realising the benefits

14 The programme is on track to deliver affordable high-speed broadband Internet access to 119 of 151 unserved communities by 31 December, 2006. This will complete the wider service provision for the 366 communities identified in 2002 as a Government priority.

15 To contribute to local economic development, a “utility” pricing model in the 119 communities allows locally-based Internet Service Providers to compete for the supply of “last mile” services at a scalable cost per user per month, (with the Province and TELUS paying the cost of connecting the local Provider to the TELUS infrastructure).

16 Pricing for access to the TELUS infrastructure itself in all 336 communities is based on the price for similar services in the more urban Vancouver region of British Columbia.

17 In rationalising 340 contracts and agreements with TELUS into a single four year contract, Network BC has generated Canadian \$54 million in savings.

18 Other network benefits include:

- faster network speeds and greater capacity at no additional cost to Government or the broader public sector;
- enforceable and enhanced service levels with TELUS that include financial consequences for non-performance; and
- enhanced network services that will support the enabling of e-services for Government and the broader public sector, as well as for education and health, while facilitating regional economic development.

19 Wider benefits for communities and citizens include:

- improved education and training opportunities within communities;
- access to medical information and treatment through the Internet; (for example, pre- and post-surgery consultations via video-conferencing in some communities as part of a Ministry of Health initiative); and
- access to global markets for local artists and artisans in remote First Nations communities.

20 In June 2006, Network BC was named a Laureate of the Computerworld Honours Programme for its efforts in connecting remote communities and improving their ability to exchange information and promote business and commerce.



APACS

Chip and PIN programme

APACS (formerly the Association for Payment Clearing Services) is the UK payments trade association for those institutions that deliver payment services to customers. To help banks, businesses and their customers avoid fraud, the chip and PIN system was launched as a more secure way to pay with credit or debit cards.

“The chip and PIN Programme has been a ground-breaking initiative to bring about a step-change improvement in the levels of payment card security in the UK. It has been an enormous undertaking, involving communicating and executing change with 42 million customers who between them hold over 140 million credit and debit cards, three million retail staff in shops and businesses across the country and 250,000 bank branch and call centre staff.”

APACS

Cost

£1.1 billion, estimated total spending by APACS, UK retailers and banks.

Supplier

The programme team published technical guidelines for the card, point of sale hardware, and the communications requirements. Individual retailers, banks and card issuers chose their own suppliers for the hardware and software.

Timescale

2003 – 2006.

Current status

99.7 per cent of cardholders are now using chip and PIN.¹

Key components of success

- APACS’ recognition of the problem of fraud and the concerns of banks and retailers enabled it to develop a clear, well defined IT-enabled solution.
- A governance structure provided by an independent Programme Management Organisation was able to drive forward the chip and PIN programme and manage the stakeholder relationships.
- A Programme Steering Committee of equal numbers of bank and retailer representatives, chaired by an independent arbitrator and conciliator and assisted by informal groupings, brought banks and retailers to ensure the programme met both parties’ needs.
- Government’s strong commitment to cutting payment card fraud convinced card issuing banks and retailers to invest in the infrastructure necessary to support chip and PIN.

¹ APACS figures.

Aim

1 The aim of the chip and PIN programme was to cut the growth in payment card fraud. Defining the scope of the fraud that chip and PIN was to address was key to determining the most appropriate IT solution. The programme team's understanding of the nature and scale of payment card fraud led it to target first fraud involving face-to-face transactions.

Designing the business change and testing the viability of the IT solution

2 The programme team undertook extensive testing of different technologies to scope a solution that was easy for both cardholders and retailers to use. For example, early on in the programme's life, biometric² technology was discounted because of its false reject rate, which risked turning away genuine customers.

3 In 2003, the programme team undertook an initial live trial in Northampton, whereby cardholders were issued with credit and debit cards containing silicon chips with a unique Personal Identification Number (PIN) that they could use to verify their payments in shops and businesses. This allowed the programme team to test the robustness of the technology in a "real world" environment and to gauge customer acceptance. The Programme Steering Committee judged the trial a success and banks and retailers agreed to commence the full rollout of chip and PIN technology.

Demonstrating commitment to the change

4 Gaining commitment to chip and PIN was a major challenge; particularly as it involved persuading thousands of smaller retailers to invest in new point-of-sale equipment. Negotiations took two years, during which the support of Ministers was crucial in convincing banks and retailers of the need to join forces to tackle the growing problem of payment card fraud, which fuelled other crimes.

Winning the support of users and wider stakeholders

5 To provide stakeholders with a channel to express their concerns, a Steering Committee was formed, divided equally between banking and retail organisations. Retail representatives were drawn from those with a major stake in the new system, such as supermarket, high street and petrol retailers. The Committee proved effective in raising different sectors' issues. For example, from a retailer perspective the independent shops and businesses wanted to ensure that the installation and operation of the card reading equipment was made as simple as possible because many of these did not have IT expertise and could not afford structured training programmes for their staff; whereas supermarkets needed the chip and PIN process to be speedy enough not to lengthen queues at check outs.

6 To assist the programme team in its negotiations with wider stakeholders, an independent Chairman with a strong background in professional arbitration and conciliation was appointed from outside the financial sector. The Chairman's negotiating skills helped ensure that the programme adopted a consensus approach to decision making, allayed fears and bred confidence that stakeholders' concerns would be addressed. Below the Steering Committee, the programme team was divided into three groups: a communications team to engage with stakeholders and produce publicity for customers, banks and retailers; a technical team for setting a single chip and PIN standard; and an implementation team to assist banks and retailers with their project plans and system testing.

7 To handle the sheer scale of the change, which involved 400,000 retailers across the UK, the communications team devised a strategy to get the chip and PIN message across effectively by segmenting retailers into four tiers. For the top tier of the fifty largest retailers, senior members of the programme team communicated directly with the retailers' most senior managers. For the smallest retailers, the programme team worked through small businesses' close relationship with their banks, with the Programme providing promotional material to be distributed by the banks.

² Using physical characteristics, such as finger prints, hand geometry, eye structure or voice recognition.

8 The programme team ensured it could target its market by building a database of all significant UK retailers, recording size, type of business, contacts and the retailer's progress in implementing chip and PIN. Where progress was lagging, the team took action to keep the programme on track. For the top tier of retailers with a significant influence on take up, senior members of the chip and PIN programme arranged individual meetings with the retailer's senior management to offer support.

Realising the benefits

9 By December 2005, APACS data showed that 127.4 million chip and PIN credit and debit cards had been issued:

- the annual fraud figures for 2005 saw a reduction of £65 million in counterfeit card fraud, and fraud on lost and stolen cards compared to the same period in 2004;³
- 90 per cent of all face-to-face payments were being conducted using chip and PIN; and,
- 87 per cent of chip and PIN cardholders found the system easy to use.

3 APACS (2006) *Fraud: The facts*. London: APACS. <http://www9.secure-ssl-server.com/cardwatch/images/uploads/publications/Fraud%20the%20Facts%202006.pdf>.

BRITANNIA BUILDING SOCIETY

“Really Big Programme”

Britannia Building Society was founded in 1856 in Leek, Staffordshire. It has retained its mutual status and grown to become the UK's second largest building society with over 3 million members and some 5,000 staff. The “Really Big Programme” involved replacing the Society's complete IT infrastructure to create a “single view” of each of its customers and their savings and investment accounts, mortgages, loans and other financial products.

“The ‘Really Big Programme’ set out to deliver three key objectives: to fix known problems with the Society's IT Infrastructure; to deliver the benefits stated in the programme business case; and to leave the Society ‘fit for the future’ in terms of its change capability. The problems were fixed, the business case was over-achieved, and Britannia's capability for change is being proved as at July 2006 in the integration of the newly acquired Bristol and West branches into our business. Without the ‘Really Big Programme’, we would not have had the IT infrastructure or the confidence in our change capability to undertake this venture within the challenging timescales that the business set itself.”

Britannia Building Society

Cost

£60 million.

Supplier

TietoEnator (formerly AttentiV Systems and Lynx Financial Systems) – financial package; FINEOS – customer management package; LogicaCMG – system integration partner; KPMG – system design partner.

Timescale

March 2000 – March 2004.

Current status

The programme was completed in March 2004, following successful implementation of all planned systems.

Key components of success

- The business change was led by a capable and experienced programme manager, fully supported by the Society's Main Group and Executive Boards.
- The Group Board maintained close scrutiny of the business case's assumptions and projected benefits, revising these in response to changes in the financial markets and agreeing significant changes at board level. The programme team always ensured that the Board had real choices, and were never presented with a painful fait accompli.
- The programme team recognised the importance of building strong team relationships between Britannia staff and those of its suppliers and contractors; a “one team” approach.

Aim

1 In 1999, Britannia Building Society started work on a new five year Corporate Plan, including a major review of its Information Systems Strategy. The review identified that key elements of the Plan could not be achieved using the Society's existing IT systems, which organised data on a product-by-product basis. Information on members with mortgages was stored on one system, while information on members' savings accounts was stored on another and dealt with by a different part of the Society. Customer service suffered because of the lack of a single view of the customers' product holdings and the difficulty of maintaining accurate customer information across multiple systems, and potential sales opportunities were being lost.

2 The "Really Big Programme" aimed to create a customer-centric organisation by implementing new IT systems to store information around customers rather than products. With a single view of all a member's products with the Society, staff could increase sales by identifying which customers would benefit from being offered new products, such as offset mortgages whereby customers can "offset" interest from savings against mortgage payments.

Ensuring senior level engagement

3 The "Really Big Programme" was a fundamental business change for the Society and the Group Board of executive and non-executive directors retained close scrutiny throughout. To ensure the programme would achieve the Society's objectives, the Group Board conducted formal reviews of the business case at six-monthly intervals and approved the programme manager's plans and any significant cost and scope changes. To inform the Board's decision making, prior to the Group Board Review the programme manager confirmed with business managers whether the assumptions and benefits relevant to their areas still held or whether these needed to be changed. For example, the marketing department revisited its assumptions about sales targets, margins, and the market size for particular types of mortgages that could be offered once the "Really Big Programme" delivered the new IT infrastructure.

4 To strengthen further the Board's control over "Really Big", the programme manager requested the Board to authorise only a three per cent contingency in the programme's original approved budget. For any additional resources, the programme manager would present justification to the Board, accompanied by alternative options. Careful analysis of costs and benefits enabled the Board to make key decisions on the technology needed to achieve its sales and customer service goals. For example, in the second half of the programme, it became apparent that to achieve the originally agreed level of integration of savings, mortgages and investment information, an additional £7 million investment would be required. The Board was given the choice to authorise this additional spend or to agree on a lower level of integration that would still leave the Society with a stable and much improved infrastructure (and a still viable business case for the programme). They chose the former.

5 Below the Group Board, scrutiny and co-ordination of the programme across the business were strengthened by the Society's Executive Board supplying the programme sponsor, who chaired the programme's Steering Committee, jointly, with the programme manager. Every Executive Board and Steering Committee member had monthly one-to-one meetings with the programme manager to discuss the programme's impact on his or her area of the business and for the programme manager to address issues and concerns.

6 The regular business case reviews undertaken by the Main Board and the strong engagement by the Executive Board provided strong leadership and regular access to the Society's decision makers. When in April 2003 the programme sponsor left the business, clear reporting lines to the top of the organisation and active involvement of both Boards ensured that delivery remained on course.

7 To support scrutiny of the programme and its suppliers, Britannia engaged the Concours Group to provide formal quality assurance reports, which were circulated to the Group and Executive Boards as well as the Steering Committee. Independent quality assurance reports built trust and confidence between senior management and the programme team, as well as alerting senior management when issues needed to be addressed; for example, the need to give the Steering Committee greater autonomy in taking decisions to change some of the Society's business processes to enable them to be supported by off-the-shelf software packages.

Designing the business change and recognising the risks

8 In the programme's design phase the programme team, including an external consultant acting as design partner, worked to identify and mitigate key risks by endeavouring wherever possible to roll out the programme incrementally. However, in the final phase of the programme, the team identified problems in rolling out the new Teller System across the retail network in phases and in separating this from roll out of the new Investments Administration System. To assess the options, the programme's Steering Committee ran a workshop where the implications of going "Double Big Bang" – implementing both systems over a single weekend – were identified and quantified until they were fully understood. These were compared with the alternative of implementing a new interim system requiring bespoke software development that would run the new systems in parallel with the existing infrastructure and allow for phased implementation. Although "Double Big Bang" had high risks, these were more readily identifiable than the risks of developing a new temporary system based on bespoke software, which provided a better basis for developing contingency actions. On this basis of clearly understanding the risks, the programme decided to take the option of the "Double Big Bang".

Creating constructive relationships with suppliers

9 To avoid the risks associated with developing bespoke software applications, Britannia took the decision to build its new infrastructure and all future systems using commercially available financial packages. For the programme manager, this meant managing package suppliers as well as contractors. The programme manager saw integrating supplier, contractor and Britannia staff into effective project teams led by good project managers as essential for delivering the programme. To create strong teams, the most skilled people were appointed project managers regardless of their "home" organisations. Consequently, Britannia staff led some teams, but some teams of Britannia staff were led by suppliers and a project manager from one supplier might lead a team of staff from another supplier. To foster team identity, all project staff wore Britannia's name badge.

10 Early in the programme, Britannia ran workshops to identify the behaviours most likely to encourage successful delivery. Empathy, a positive attitude, and teamwork were identified as key behaviours. The teams met quarterly to review whether they were displaying the key behaviours and agree any changes they needed to make. Placing an emphasis on behaviour as well as process and structure was highlighted as a key success factor in the programme's nomination for the British Computer Society's Business Achievement Award.

Realising the benefits

11 Key tangible benefits of the programme for Britannia are its new product capability, increased profitability and efficiency gains through reducing duplication of staff activity and systems. All Britannia's mortgage products are also now based on daily interest calculations, which were impossible to offer with the old IT systems.

12 The key intangible benefit was the significantly increased change capability, and confidence in that capability, that came from not just the success of the programme but also the way it was run, resourced, and supported throughout the business.

13 For 2004, the impact on profit of increased mortgage sales was £2.2 million; over the life of the Business Case (up to 2009) it is anticipated to be £72.8 million.

14 In 2004, the British Computer Society awarded Britannia Building Society its Business Achievement Award for the "Really Big Programme".

PRUDENTIAL

PRUDENTIAL UK “Single View”

Prudential plc is a leading international financial services company with operations in Europe, Asia and the United States. Founded in 1848, the company provides products and services to more than 18 million customers worldwide and employs 21,500 staff. The “Single View” customer service transformation programme was introduced to improve customer marketing and account administration by providing staff with an integrated view of all the products and services each customer has purchased from Prudential UK.

Cost

£37 million.

Supplier

Wipro – software; Capgemini and BEA Systems – manpower and solution.

Timescale

The customer services transformation programme was initiated in November 2001 and completed in November 2003.

Current status

The programme has achieved a £20 million per annum reduction in the cost base of the customer service function and transformed Prudential UK’s operation from silo based product transactions to a customer focussed business.

Key components of success

- The programme’s governance structure shared responsibility for delivery across all board members, removing functional silos and developing a common commitment across the whole organisation to the success of the programme.
- Analysing the effectiveness of its call centres has enabled Prudential UK to optimise the benefits of the programme by resolving more queries at first point of contact, resulting in reduced costs and further improvements to customer service.

Aim

1 In 2001, Prudential UK had over 23 separate product based call centres handling customer enquiries staffed by operators with product specific knowledge. Customers had to contact different parts of Prudential UK for each product enquiry and Prudential UK needed large numbers of systems to support the business – many with duplicate data. The product specific approach also prevented the workload being shared effectively across call centres in busy periods. Staff did not have the skills to support peaks in demand in other product areas.

2 To understand customers better and improve customer service, Prudential UK initiated a customer service transformation programme to provide a single view of all customers and their value to the company. The programme aimed to improve the consistency of service to customers and to reduce the number of legacy call centres. The programme also aimed to redesign the contact process to allow operators to answer most enquiries on all products and to refer fewer calls to product specialists. The customer transformation programme was identified as of major strategic importance and key to achieving the objectives of the Chief Executive's wider business programme – the 1000 day transformation programme to re-establish Prudential UK's position as number one in the pensions' marketplace – and was incorporated into the wider programme.

Ensuring senior level engagement

3 Successful delivery of the 1000 day transformation programme required commitment from all Prudential UK's business functions. To create a sense of shared ownership, Prudential UK implemented a governance structure that brought together all business functions and rotated accountability for the delivery of the transformation programme between board members (**Figure 11 overleaf**).

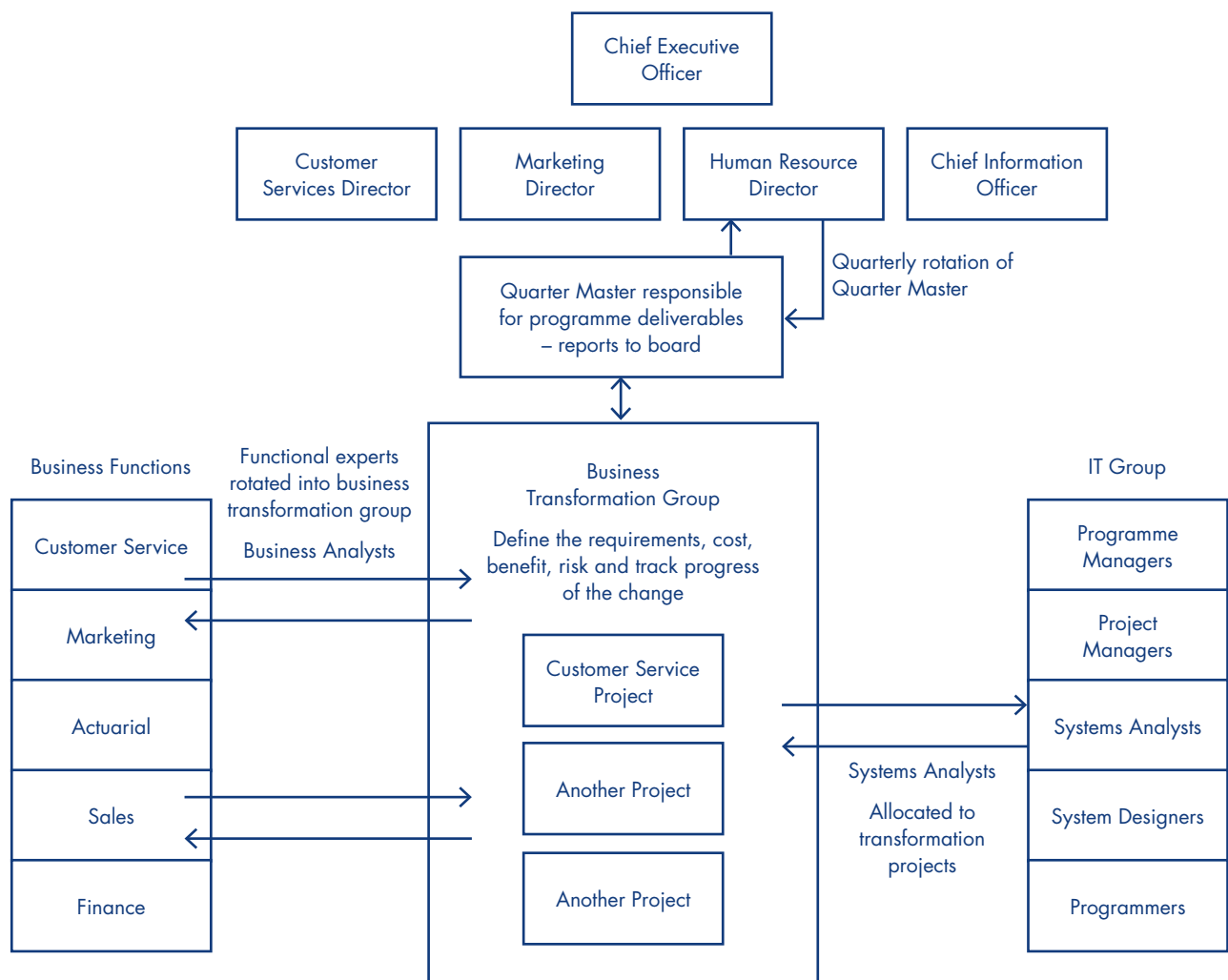
4 Quarterly rotation of Directors into the role of Quarter Master for the programme, and measurement of their performance during that quarter, created shared accountability. All board members were equally committed to the programme's success.

Prioritising the programme and project portfolio in line with business objectives

5 The governance process also allowed investment decisions to be managed as a portfolio by examining progress as a whole rather than as individual projects. The Quarter Master escalated critical issues to the board, allowing trade-offs to be made between projects in the best interests of the programme. Directors' shared accountability for the success of the programme removed organisational barriers, such as protection of functional budgets. Furthermore, the transformation programme contained projects that benefited all areas of the business, motivating each business function to see the programme succeed as a whole rather than championing individual projects.

6 The Single View programme was a major complex business change that involved aligning the interests of different business units and ensuring that the separate IT projects were aligned to the programme's business objectives. Aligning IT projects and business objectives had not always worked well in the past. To bring different interests together and prioritise the needs of different business units, Prudential UK established a new Business Transformation Group (Figure 11). The Business Transformation Group was made responsible for developing a "cost, benefit, risk case" for each potential project submitted to the group. This ensured that each project was assessed on its merits by an independent cross-business group and that investment decisions were based on the projected benefits. The Business Transformation Group took on responsibility for defining the requirements and monitoring project progress, ensuring that projects were centrally co-ordinated and close senior management oversight maintained.

11 Prudential UK governance structure and Business Transformation Group



Source: National Audit Office

Realising the benefits

7 Prudential UK has reduced the cost base of its customer services function by £20 million by transforming its support systems and the way it deals with customers. The 23 product based call centres have been replaced by a virtual call centre that spans across three locations – Belfast, Craigforth and Mumbai, all operating the same business process. This has improved customer service by ensuring that staff deal with customers in a consistent way at all times of the day. In addition, as staff are similarly skilled and follow the same process rather than being product specialists, the three locations can manage the workload more effectively. If one location has spare capacity, it can take calls from another call centre.

Optimising the benefits

8 Following implementation of the customer service transformation programme, Prudential UK improved customer service and efficiency by updating the knowledge system that supports call centre staff. All product and process knowledge was incorporated into one system, which can be accessed via the customer service system. This provides staff with guidance on the call handling process and product information, enabling staff to resolve more calls at the first point of contact. To further improve customer service, the knowledge system is continually refined by incorporating feedback from staff and analysing process problems. Ninety per cent of customer calls are now dealt with at first point of contact, improving customer service by reducing call duration and cutting costs by reducing the need to employ specialist staff.



**NORWICH
UNION**
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NORWICH UNION

'Pay As You Drive'TM insurance

Norwich Union is part of the Aviva group – the world's fifth-largest insurance group and the biggest in the UK. The group has 58,000 employees serving 35 million customers worldwide and £322 billion assets under management with income and sales in 2005 of £35 billion.¹ Under its own brand and that of the RAC, Norwich Union insures one in seven motor vehicles in the UK. 'Pay As You Drive'TM insurance uses Global Positioning Satellite (GPS) technology to calculate monthly insurance premiums based on how often, when and where people drive.

"This programme has been, and continues to be of significant benefit to our group. We have delivered a number of successes on our path to changing the face of motor insurance. Our first major win was in the proving of the technology, not only in the car but the whole IT infrastructure to capture, send, store, analyse data and then produce detailed journey bills for customers. Secondly we have developed an in depth understanding of journey risk that not only benefits the pricing to 'Pay As You Drive'TM customers but also gives us a clearer understanding of all motorists' driving patterns and behaviour. The third key success has been the acceptance of, and indeed demand from, customers for this innovative new insurance concept."

Norwich Union

Cost

Commercially sensitive.

Timescale

First announced in 2001, the programme is ongoing.

Current status

The system is currently used by 1,500 paying customers with a further 5,000 volunteers involved in a pilot to gain a fuller understanding of driving patterns and risks.

Key components of success

- An incremental approach to the development of an innovative solution allowed the project team to develop, test and refine the business process and technology requirements prior to making the product available to paying customers.
- 'Pay As You Drive'TM insurance meets users' needs and satisfies customers' demand for insurance that reflects their individual patterns of motoring.

¹ All figures as of 31 December 2005.

Aim

- 1 The market for motor insurance is highly flexible with approximately 20 per cent of customers changing their provider every year. Traditionally, insurance premiums are assessed at a particular point in time and may not be a true reflection of a driver's motoring habits throughout a particular year.
- 2 Research by Norwich Union indicated that 90 per cent of customers would prefer the cost of their motor insurance to reflect how much they use their cars and the journeys they make. The Company therefore identified that a more accurate calculation of insurance costs was key to attracting new and retaining existing customers.
- 3 As a consequence, Norwich Union began the development of 'Pay As You Drive'TM insurance, with the aim of allowing motorists to be charged insurance based upon the actual use of their car. This required a system that could record the movement of cars by time of day distance and routes travelled, and make use of this data to charge customers.

Testing the viability of the IT solution and designing the change

- 4 The proposed business solution was untried and required extensive testing to refine the variables that would determine the prices charged per journey and to prove the technical capability. A three stage incremental roll out was initiated to develop the solution: 1) a proof of concept; 2) a pilot of the system with 5,000 non-paying customers, and 3) a roll out to a live environment with 1,500 paying customers.
- 5 The proof of concept was initiated to test the technology required to transmit information about a journey from a customer's car. The "black box" technology was initially trialled in laboratory conditions and, after successful tests, 20 project staff and company executives had the devices placed in their own vehicles to determine if the solution worked under motoring conditions. The proof of concept identified that while there were some technical issues to resolve, the idea was viable, and a decision was taken to extend the testing to a pilot of 5,000 existing customers.

6 Participants for the pilot were recruited from Norwich Union's existing customer base and were given financial incentives to take part. The primary aim was to test the capability of the technology to collect, store and analyse journey data. Again Norwich Union took an incremental approach and initially the system was trialled with only 500 of the pilot group to avoid any possible capacity problems. Norwich Union also wanted an early understanding of any potential issues with other parts of the business process; for example, the logistics of installing black boxes in cars, and the best approach to servicing problems with the boxes. Some useful additional lessons were learnt that had not been captured during the earlier staff trials, such as the best location for the black boxes within cars.

7 Following a successful four month trial with the initial 500 customers, the system was rolled out to the remaining 4,500 participants within the pilot group. This wider pilot was used to gather the volume of data needed to better understand the relationship between pricing and risk. For example, there was an initial assumption that drivers with high mileages should be charged more, but the pilot proved that those drivers generally used safer motorway routes and the calculation had to be adjusted accordingly. The pilot also identified that the volume of data storage required, even for only 5,000 customers, equated to one of the largest databases in the world. This information allowed Norwich Union to consider the implications of extending the 'Pay As You Drive'TM service to all customers and to explore potential solutions to the data capacity issues.

8 The final stage of testing involved a live trial with paying customers to see how they would react to 'Pay As You Drive'TM insurance. The project team chose young drivers because they believed this group had most to benefit from the initiative. (These drivers are considered high risk due to their inexperience and because of the high proportion of journeys undertaken at night or weekends.) From this exercise, Norwich Union was able to gauge the degree of customer support for the new product, and indeed found considerable demand for it.

Realising the benefits

9 Following the learning from its pilots, on 5 October 2006, Norwich Union launched two 'Pay As You Drive'TM insurance products, each with different pence per mile rates to suit different customers' driving habits – one for young drivers and one for the 48 per cent of customers who do not use their cars during the morning rush hour.

10 The 'Pay As You Drive'TM programme is still in the early stages of roll out and, as such, the benefits to customers have yet to be fully established. Central to this will be the ongoing research and development necessary to allow 'Pay As You Drive'TM insurance to be extended to as many customers as possible by generating the data to inform them how their driving patterns can influence the premiums that they pay.

11 The Company expects this to be particularly relevant to young drivers who, depending on when and where they use their vehicles, may see a major difference in the cost of their insurance. Savings from the live customer trial, for example, amounted to as much as £300 per year for individual drivers.

12 While other drivers with different patterns of motoring may not see such a marked difference to their insurance costs, Norwich Union expects that an improved understanding of how a premium is calculated will allow customers generally to better control their costs. For example, by commuting to the edge of a city rather than driving into the centre, or by doing so at different times, a motorist might save on his or her premium. In addition, where a customer is involved in an accident or breakdown, the system can locate the vehicle precisely to aid faster recovery. (Norwich Union intends to produce targeted and individualised messages to help customers understand the collective benefits of 'Pay As You Drive'TM.)

13 Norwich Union has also identified potential opportunities to generate further benefits from 'Pay As You Drive'TM. It is exploring the possibility of making available to other organisations summarised data; for example, to local authorities for traffic management planning.

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