EXETER CITY COUNCIL

ENVIRONMENTAL HEALTH SERVICES - CLEANSING

Business Case for Improving Customer Service & Freeing Capacity for Future Demand through Efficiencies supported by Technology Enhancements

1. INTRODUCTION

1.1 During 2008 Cleansing Services, supported by the Council's mobile working project consultant 'Annite', conducted a review of its key communication processes with a view to making greater use of automation, integration and mobile technology.

1.2 A service improvement team (SIG) consisting of management and staff representatives was formed to critically examine processes and work practices and identify areas where benefits could be realised through the introduction of leaner working practices supported by new technology.

1.3 During the review in 2008 the SIG identified two major parts capable of deriving the most benefit from technological and process improvement, namely:

Part A) in-cab technology and hand-held mobile technology for use by both vehicle-based and on-foot outdoor workers; and

Part B) a Customer Relation Management (CRM) link between the Council website and back and front office systems for use by customers and office based staff.

1.4 Subsequently, the Council has been successful in bidding for £110,000 external funding from South West Regional Improvement and Efficiency Programme (RIEP) for Part A, on the grounds of innovation and improved efficiency of the service offered to customers. The Council's bid was one of 8 successful bids from a field of over 80. This bid was linked to the successful implementation of the internal Part B bid. In effect, this has strengthened the internal bid by improving the value for money aspect of the project for the Council. These two project parts are described below.

2. CLEANSING SERVICES

2.1 Cleansing Services is the largest service within the Council with 170 employees, delivering key front-line services of refuse collection, recycling and street cleansing to every citizen, as well as operating income-deriving services to fee-paying customers (both trade and domestic). Public satisfaction with these services has a direct impact upon the reputation of the Council, the City's attractiveness to visitors, the desirability of businesses to locate in Exeter, and the feeling of well-being by citizens.

2.2 Exeter enjoys high satisfaction levels with its services for waste collection (84%) and in the recent Place Survey, refuse collection and environmental cleanliness of the street scene were issues that the public in Exeter clearly rated as important to them.

2.3 The service handles a very large number of customer interactions; predominantly telephone calls averaging over 3,000 per month, which are channelled through the Cleansing Administrative Team. At the onset of this project, the Team's capacity to cope with the peaks of demand was often severely tested.

Future demand on the service

2.4 The demand on Cleansing Services is set to grow year on year and more dwellings and roads and footpaths are built. Within the Regional Spatial Strategy, Exeter's dwelling stock is predicted to rise from 51,390 (2008) to 64,987 by 2026, with an annual growth of 1.31% equal to 673 dwellings per year. This will produce greater demand on the refuse/recycling collection, street cleansing and litter collection functions, and consequential demand upon the Administration Team, principally from telephone transactions.

2.5 This demand can either be met by increasing the Administrative Team compliment by 1 FTE in the medium term, or introducing technological solutions to better cope with this demand. Failure to implement either will result in the team being over-burdened and unable to respond to all callers in a timely fashion, which in turn will generate more failure demand calls and risk the reputation of the service and the Council. It will also divert resources away from managing and proactively growing the income-generating parts of the service.

3. SCOPE OF PROJECT

3.1 The scope of the project was to examine the range of processes that were undertaken by the service and to identify key areas where the introduction of a technology solution could produce significant benefits in efficiency and effectiveness; it also sought to identify other improvements in the processes examined. These benefits would be realised in both cashable terms and/or improved service delivery.

3.2 The project aims concentrated on improving customer services by using electronic communications to enable reduced administrative handling of service requests, and improved internal communications between operations. These improvements will enable the following key benefits to be realised:

- significant substitution of telephone transactions with customers with electronic transactions that are automated;
- significant reductions in failure demand calls from the public (e.g. missed bins, fly-tipping, graffiti);
- reductions in unnecessary operational responses to failure demand calls (e.g. missed bins due to customer failings);
- growth in income-deriving transactions to be accommodated within existing resources in the medium term;
- predicted growth in customer demand from year on year increases in Exeter's population and housing development to be accommodated within existing administrative resources in the medium term;
- enhanced service from more timely responses to street scene issues derived from officer/operative led reporting in the field, rather than public-led complaints;
- health and safety gains, reduction in accident claims and potential insurance premium gains, derived from the use of in-cab technology in route mapping.

4. SERVICE IMPROVEMENT GROUP AND QUICK WINS

4.1 The Service Improvement Group (SIG) that was facilitated by the external consultant critically examined a range of processes and identified some 'quick wins', which were then implemented during the review period; these contributed significantly to a reduction in the number of customer contacts made via telephone. During Q3

2007/08 Cleansing Services handled 10,363 incoming telephone calls, whereas it handled 8,246 calls during Q3 2008/09 – a reduction of 20% for the same period. There are no comparative statistics at this time for the number of incoming emails, however, anecdotal evidence is that email traffic has also noticeably reduced.

4.2 Many of the 'quick wins' have consisted of making greater use of the functions enabled by CONFIRM (the principal database), for example 'Letter Monitoring' is no longer a separate exercise requiring a dedicated member of staff to track and record. It is now part of normal routine operations carried out and recorded in CONFIRM by administrative staff and supervisors. This information is now also directly accessible by the Environmental Health Administration Team, which has removed the need for special reports to be compiled.

4.3 Another 'quick win' has been achieved through enabling customers to access standard forms and service requests via the Council website, for example trade customers are now able to download, complete and email forms directly to Cleansing Services without having to use traditional paper and postal based methods. However, this improvement has not completely removed the need for multiple data handling as information captured in this way is not able to be automatically transferred from the website to CONFIRM or FRONTLINE (the Customer Service Centre database).

4.4 A further 'quick win' is one where our Customer Service officers now actively encourage commercial customers to set up direct debits, which has reduced the number of 'failure demand' calls with regard to payment collections. However, without a fully automated online facility on the Council website there is still a high level of manual handling required when setting up direct debits.

4.5 As part of the review Cleansing started to gather and report management information, which does not traditionally form part of National and Local BVPI reporting requirements, e.g. telephone and email traffic, website hits, etc. This information has given the Cleansing Services management team valuable information about overall demand for its services.

5. PART A – WIRELESS TECHNOLOGY

5.1 This part examined the use of wireless in-cab technology and hand-held mobile technology for use by outdoor workers, to radically improve operational communications so that the service moves away from reacting to external communication in an information vacuum, and moves to a position where the service is informed and able to work proactively.

5.2 This technology will help customers and staff to transact using instantly available and up-to-date information and service progress reports. On the ground, this will mean that street scene issues such as fly-tipping can be effectively reported in a timely manner for action, so forestalling 'failure demand' requests from the public, and accurate information about bin presentations can be quickly relayed to office systems to permit management decisions based upon accurate information about missed bins.

Service benefits

5.3 The introduction on in-cab and other mobile devices for staff in the field will give significant qualitative improvements to the service and potential financial savings. The key improvements that will be facilitated are as follows:

a) to enable crews to provide accurate and 'instant' information about operational issues to improve the information customer service advisors are able to give to callers;
b) to enable new or changing service requirements for elderly or disabled people to be instantly communicated to crews;
c) allow for informed modelling of rounds by enabling reference points to be recorded geographically, indicating potential hazards and other considerations and allowing better risk assessment and planning of safer rounds;
d) give audible driver instructions about the round as the vehicle progresses, which will be particularly valuable any new employee or agency driver, and help reduce missed bins and vehicle accidents;
e) to improve the skills and capability of both administrative and outdoor Cleansing Service staff;
f) to enable crews to report a whole range of street scene issues at any time of the day, so that the Cleansing Services and other parts of the Council can deal proactively with issues before they become a issue reported by the public;
g) to improve customer satisfaction - faster transaction times, up-to-the-minute and accurate information, quicker feedback;
h) reduced 'failure demand' leading to fewer customer driven contacts with the Council, and a reduction in operational responses where the customer is at fault (e.g. for failing to present their bin);
i) rationalisation of data exchange leading to a reduction of multiple data entries by Council staff;
j) improved management information so that senior executives and managers are better able to direct service improvements where required;
k) capturing the know-how so that internal IT Services use the experience gained to roll out self-services to other Exeter City Council departments;
l) sharing the learning gained from this project with neighbouring local authorities to help improve the self-service capability for waste management services in the region, and enhancing the reputation of the Council.

Financial benefits

5.4 These improvements can give financial benefits in operations that currently are either difficult to quantify because they are spread over a range of activities, and/or are a corporate rather than a service saving (e.g. insurance premiums). However, there is confidence that potential savings will be derived from:

- reducing the number of 'missed bin' special visits by 400 p.a., giving a saving in vehicle fuel and releasing resources that can be usefully deployed on income earning activities (e.g. special waste collections), used to enhance responses to fly-tipping reports, or diverted to substitute for a reduction in existing resources;
- reducing the transaction time on missed bin calls, which will be diverted to further supporting income generating transactions;
- reducing the large number of refuse collection vehicle accidents (RCV), particularly those caused by agency drivers, thereby reducing claims made against the Council with potential to reduce insurance premiums overall (an indicative saving has not been sought at this stage), and lost time on RCV repairs.

5.5 To translate these potential savings into real posts, the following administrative and operational posts have been identified:

- 0.5 FTE Cleansing Support Officer (Grade 5), giving a potential revenue saving of £11,303 (SCP 19 mid-point of grade, with oncosts at 27%);
- 1 FTE Cleansing Operative (Grade 1), giving a potential saving of £15,636 (SCP 6 mid-point of grade, with oncosts at 27%).

This will give a total annual saving of £26,939.

6. PART B – CUSTOMER RELATION MANAGEMENT LINK

6.1 The key objective identified in Part B was to create more effective and efficient electronic communications between the Council website, CONFIRM (Cleansing Service's database) and FRONTLINE . By creating "invisible" harmony between the Council Website, FRONTLINE and CONFIRM it will be possible for:

- a customer to log a service request (e.g. missed bin) on the Council website, or at the Customer Service Centre, or via Cleansing Services;
- details would be directly updated from the website into FRONTLINE;
- FRONTLINE would create a job in CONFIRM to deal with the issue;
- CONFIRM would report back on each completed stage of the job;
- staff could access FRONTLINE or CONFIRM to get a progress report for the customer;
- Customer Service Centre staff will also be able to track service requests logged directly into CONFIRM in order to inform any customer query

Service Benefits

6.2 There are a number of key benefits that will be derived from this linkage, which will reduce operator resources in dealing with customer transactions; these are described below:

- the full range of Cleansing's customer services to be fully transacted via the Council's website, (e.g. waste transfer notes, orders, missed bins reports, collect and return requests, brown bin hire and service requests, setting up of direct debits, etc.);
- service requests captured on the Council's website to be automatically transferred to CONFIRM via FRONTLINE;
- service requests logged directly on FRONTLINE but destined for Cleansing Services to be automatically routed to and updated in CONFIRM;
- improved data management through central logging, monitoring and customer feedback relating to customer service requests (i.e. two-way updates between CONFIRM and FRONTLINE);
- back and front office roles to be managed more effectively and efficiently;
- releasing capacity to enable proactive marketing of the Council's commercial waste management services, thereby increasing customer base and income;
- generation of email and SMS text communications with customers using CONFIRM and/or FRONTLINE (to help prevent failure demand and improve awareness through social marketing messages);
- greater collaboration and integration between the Customer Service Centre and Cleansing Services, which should improve customer handling.

Financial benefits

6.3 The ability for Cleansing Services to automate and integrate more of its customer transactions through the application of a CRM link, means that managers and staff will be in a position to concentrate more of their efforts on achieving additional income from the two potential revenue streams outlined below. The two revenue streams, namely Trade Recycling and Domestic Garden Bin Hires will offer significant opportunities for income growth.

6.4 **Trade recycling -** Cleansing Services will have the capacity to divert some of its current resources to provide a Saturday sack/tape collection service for trade recycling customers. With careful targeting, there is also a real opportunity to increase the number of customers on some of our existing collection days. In addition, further customer growth potential has been identified with larger businesses requiring a Eurobin collection for recyclates.

6.5 **Garden bin hire -** two vehicles and crews provide garden waste collection services. There are 6,300 registered customers paying an annual hire fee, but also around 28,000 bio bags sold to individuals for ad hoc collections. Many of the potential registered customers are already likely to be using the garden sack service, and an emphasis would be placed on replacing the more expensive ad hoc collections with registered customers, whilst expanding on the options of receptacles to suit different customer needs.

6.6 **Savings potential -** the ability for Cleansing Services to automate and integrate more of its customer transactions through the application of a CRM link also means that the current administrative establishment may not need to be increased to cope with the extension of cleansing services to properties due to be built in Exeter over the next 3 to 5 years. Without this technology the administrative establishment is likely to need to be increased by at least 1 additional person at a total employment cost of £20,000 per annum (this potential cost has not been included in any calculations of the return on investment).

6.7 Table 1 below sets out the potential annual revenue and savings that will mitigate the capital and revenue costs.

Table 1 – Potential additional annual revenue income

Description	**Revenue/ Savings**	**Comments**
Trade Recycling	£14,500	Assumes additional income beyond 2009/10 target (+100 customers at average annual revenue of £145/customer)
Domestic Garden – additional customers = 1,213 @ £26/bin customer (rounded to nearest £10)	£31,600	Assumes 20% (modest growth) based on trends since service inception. 6,067 customers at end 2008 is used as the baseline
0.5 Cleansing Support Officer 1 Cleansing Operative	£26,900	Includes all employment costs
TOTAL POTENTIAL ADDITIONAL INCOME	**£73,000**	

Qualitative Business Benefits

6.8 The following qualitative business benefits have been identified:

- the integrated CRM link will enable domestic and business customers to transact a greater range of services fully on the Council's website thereby enabling a higher quality of customer service;
- the automatic updating of transactions between the website, FRONTLINE and CONFIRM will enable an increased volume of transactions with minimal or no additional administrative handling;
- the integrated and automatic updating of service progress in FRONTLINE and CONFIRM will enable Council customer service advisors to provide up-to-the minute progress reports to callers;
- electronic communications will reduce postage costs and paper trails and thereby enhance the use of DIP technology and electronic storage facilities;
- automation will give access to more timely, accurate and evidence based data to identify at an early stage, potential problem areas and inform management decisions;
- automated and integrated electronic communication channels - emails and SMS – out of CONFIRM/FRONTLINE will enable more timely communications with customers and will also provide an opportunity for direct marketing to commercial customers;
- the CRM link will be a necessary building block for facilitating the wireless mobile technology described in Part A.

7. ALTERNATIVE TECHNOLOGY OPTION

7.1 Since this project commenced, an alternative technology option has been identified that may offer substantial benefits beyond those realisable with the current identified solution, and at a lesser cost. This option provides an alternative integration solution for both Parts A and B, that for both front-office to back-office and mobile applications. The provider for this option has provided integration solutions in one third of UK local government organisations.

7.2 If this alternative option is chosen, then there is likely to be a reduction in both capital and revenue costs, and a corresponding improvement in the investment return.

7.3 There is also the potential to utilise the real-time, bi-directional integration delivered from this project to the many other back-office applications within the Council, and in relation to any mobile working This could realise considerable savings for the Council when applied to other existing and future integration solutions.

7.4 For the purposes of this project, an assessment will be made of this alternative solution, and a decision made at an early stage to follow the most appropriate option.

8. CONCLUSION

8.1 The provision of an integration solution to back and front-office systems together with mobile working for Cleansing Services will derive an investment return of 32.7% (Appendix IV). This investment return may be enhanced by the realisation of potential financial savings that can be delivered by the mobile working technology.

8.2 This project will bring in substantial funding of £110,000 from South West RIEP, which has been granted following close scrutiny of a business case showing the improvement gains that can be realised.

8.3 There are also considerable qualitative benefits to be derived for the service, and real reputation benefits for the Council, from progressing with this project.

9 RECOMMENDATION

9.1 Approval be given to the introduction of new technology and working practices as outlined in this report with the initial costs being met from external funding of £110,000 from SWRIEP and up to £127,100, subject to confirmation of final prices from systems providers, from the Council's LGR and Mobile Working budget.

APPENDIX I: RISK PLAN

There are a number of risks associated with achieving the revenue income streams, as set out in the table below.

	Risk	Impact	Likelihood	Mitigation
1	Project funding delayed	Potential revenue income eroded during first year, thereby extending payback period	Low	Robust business cases formed to secure funding, and early approval sought.
2	Automated processes not fully understood and mapped out	Unable to maximise automation of administrative function	Medium	Project team chosen and tasked to ensure a good understanding of the processes
3	Customers unable to set up direct debits on website	Unable to maximise benefits of automated payment transactions	Medium	Process 'test-driven' comprehensively prior to launch.
4	Insufficient business development expertise	Lack of expertise to identify, develop, implement and monitor achievement of business development goals	Medium	Programme Management principals utilised to ensure individual projects are properly co-ordinated.
5	Insufficient marketing and selling expertise	Unable to proactively market and sell to target markets for trade recycling and garden bin customers	Medium	Marketing plan formulated. Staff concerned with selling, to be given appropriate training.
6	Fail to get customers to set up direct debits (manually and electronically)	Transaction time reductions not achieved, and service delivery interruptions continue through non-payment of invoices	Medium	Marketing plan formulated to seek customers and encourage direct debit payments. Consideration given to fee differentials to encourage take up.
7	Current economic downturn	Domestic residents may be deterred from converting to garden bin hire service	Medium	Marketing plan formulated.
8	Additional trade recycling customers not acquired in a managed way	Erratic workloads for collection crews and the MRF	Low	Regular reviews of customer growth patterns instigated, and remodelling of rounds effected accordingly.
9	Technological solutions more complex than anticipated	Project implementation delayed. Increased costs encountered to resolve complex problems.	High	Appropriate level of IT expertise committed to project. IT programme closely monitored and reviewed.

APPENDIX II : TIMELINE FOR PROJECT

Review integration requirements with LAGAN & CONFIRM, and prepare technical roadmap for implementation	LR, IT Services, Customer First Manager & service providers	Q4 2009/10
Prepare route map for automating communication of all key services	MT, LR, LH, PL, FT, DH & Customer First Mgr	Q4 2009/10
Review all current website materials to ensure coordinated messaging and transaction facilities	LR with each process owner, including Customer First Mgr	Q4 2009/10
Prepare Business Development Plan	MT, LR, PL, FT, LH, DH	Q4 2009/10
Set up web-based automated transaction processes including: email alerts, SMS, direct debits and online payments	LR, IT Services & Customer First Mgr, Finance	Q1 2010/11
Enhanced online transactions fully operational	LR with each process owner	Q2 2010/11
Train Cleansing Services and Customer First staff to manage the automated processes	LR with each process owner	Q2 2010/11
Implement Business Development Plan	PL/FT, DH	Q3 2010/11
Monitor Business Development Plan	LR	Ongoing from Q3 2010/11

APPENDIX III : FINANCIAL CONSIDERATIONS

Summary of Capital Costs:

Part A - Capital funding to be provided by SWRIEP

In-Cab wireless devices	£ 80,000
Wireless mobile devices	£ 10,000
Integration and development	£ 20,000
Total Capital Requirement … … … … … …	**£110,000**

Summary of Capital Funding:

Match capital funding for Part A provided by Exeter Council as follows:

CRM Software	£ 70,000
Integration and development	£ 30,000
Total match capital funding … … … … … …	**£100,000**

Revenue Funding:

Revenue funding will be supplied by Exeter City Council as follows:

CRM technology (Part A)	£ 10,000
In-cab/mobile technology (Part B)	£ 11,640
Total Revenue funding … … … … … … …	**£ 21,640**

Capital Costs & Annual Revenue Costs

Setting up a CRM link for the first time in the Council, together with allowing citizens and businesses to set up Direct Debits on the Council website is a corporate objective, namely to enable customers to deal with the Council via electronic means.

The software and implementation costs of each of the FRONTLINE and CONFIRM service providers have been included in this business case, as set out in Tables A and B below. The tables also include IT Services capital and revenue costs for:

- internal integration between the website, FRONTLINE and CONFIRM;
- full integration with Payments, including the setting up of Direct Debits online;
- SMS software and a dedicated SMS server.

N.B. The above costs do not include a contingency element, and costs may vary from those original provided by the system suppliers.

Table A – Capital Costs

Description	Indicative Cost	Comments
CONFIRM CRM software and implementation (round to nearest £10)	£28,230	Pitney Bowes quotation
FRONTLINE CRM software and implementation	£36,530	Supplied on 12.03.09
ECC IT Services – 80 days @ £386/day, including Payments	£30,880	Supplied on 12.03.009

integration		
SMS Software and dedicated SMS server (if proceeded with).	£ 2,000	Estimated on 22.08.08
TOTAL CAPITAL COST	**£97,640**	

Table B – Annual Revenue Costs

Description	**Indicative Cost**	**Comments**
CONFIRM CRM (rounded to nearest £10)	£ 3,890	Pitney Bowes quotation, dated 18.08.08
FRONTLINE CRM	£ 4,100	Supplied on 12.03.09
ECC IT Services	£ 1,930	5 days @ £386/day
TOTAL REVENUE COST	**£ 9,920**	

APPENDIX IV: INVESTMENT RETURN OVER 5 YEARS

Capital Costs	Year1	Year2	Year3	Year4	Year5	Total
Confirm CRM Software	28,230					28,230
Frontline CRM Software	36,530					
SMS Software	2,000					
IT Development Costs	30,880					30,880
Software for Waste Collector	15,000					
In-cab technology	64,800					
Wirless devices	9,350					
IT Development Costs	10,000					
Less RIEP funding	(99,150)					
						0
Total	97,640	0	0	0	0	97,640
Depreciation	5	years				

Revenue Costs	Year1	Year2	Year3	Year4	Year5	Total
Expenditure						
Supplies and Services						
Confirm CRM	3,890	3,890	3,890	3,890	3,890	19,450
Frontline CRM	4,100	4,100	4,100	4,100	4,100	20,500
In-cab Technology	8,640	8,640	8,640	8,640	8,640	43,200
Hosted Data Service	3,000	3,000	3,000	3,000	3,000	15,000
Support Services	1,930	1,930	1,930	1,930	1,930	9,650
Depreciation	19,528	19,528	19,528	19,528	19,528	97,640
Total Revenue Expenditure	41,088	41,088	41,088	41,088	41,088	205,440
Revenue Income						
Trade Recycling		(14,500)	(14,500)	(14,500)	(14,500)	(58,000)
Domestic Garden		(31,600)	(31,600)	(31,600)	(31,600)	(126,400)
Reduced costs		(26,900)	(26,900)	(26,900)	(26,900)	(107,600)
RIEP Funding	(11,640)					(11,640)
Total Revenue Income	(11,640)	(73,000)	(73,000)	(73,000)	(73,000)	(303,640)

Net Revenue Cost / (Income)	29,448	(31,912)	(31,912)	(31,912)	(31,912)	(98,200)

Cumulative Cash Flow	107,560	56,120	4,680	(46,760)	(98,200)	(98,200)
Investment Return	-30.2%	32.7%	32.7%	32.7%	32.7%	