

Attachment 2



The Creation of Citizen Information,  
The Development of Related Analytics  
for  
Central Bedfordshire Council

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## Background

Most Local Authorities in the UK, including Central Bedfordshire Council, are struggling with how to create or obtain better information about the Residents they serve. It is believed that by having better and more detailed information combined with powerful analytics could assist the Council in addressing many of the challenges that it faces. Knowing more about our residents could:

- Help us **improve our Customer Services** by tailoring our offerings to the actual needs.
- Help us **reduce demand** for services by pre-emptively engaging with individuals before they need support and by providing better, more effective first time support when they do.
- Help us **detect and avoid benefits fraud** by knowing more about the persons applying.
- Help us **shape Council Services** going forward, by understanding our community, its needs and the demographic trends taking place.

To move from where we are now to having the appropriate information and then being able to analyse the information for insight and answers, we need, as a minimum, to *determine what sources of information are potentially available*, what sources could be made available and how we could work with this information to extract the answers that we need.

This short introduction to CBC Citizen Information and Analytics is an attempt to highlight the resources available to us, the approaches that we might take and the outcomes for which we might hope. *The document is intended to engender discussion and thought. It is not a proposal for any specific project.*

## Overview of the Required Processes

The process of creating a comprehensive **information environment** for CBC is relatively simple in concept, if being more difficult in the realisation. Four things need to be put in place. We will need:

1. To find the information that we have available to us, or plan to collect those important bits that we will need. And, to understand what constitutes *useful information* and what does not.
2. To pull together the information necessary, either in real or virtual terms, into a single repository.
3. Provide analytical capability to work with the new repository to allow researchers to ask the right questions to obtain useful answers.
4. Assure that the quality of the data that we work with is good, consistent and up to date.

## Sources of Information

There are four groups of information that could be associated with the creation of a useful data repository:

- CBC Line of Business Applications

- CRM
- CBC Web Site
- External (to CBC) Data Sources

### **CBC Line of Business Applications**

We have several systems in house that collect information on a daily basis about our residents, their activities and the services that we provide to them. Adult Social Services and Children's Services both contain a wealth of information, much of it highly sensitive, but a good portion of it is usable for analytical purposes with or without the need to anonymise it first. Much of this is entered directly into the line of business application by our care staff.

The Revenues and Benefits systems likewise contain a wide range of information on residents and their interactions with the Council. Again, much of the data, but not all, is highly sensitive and much of it is administered by our internal staff.

Acolaid: blue badges, licensing, permits, and SAP, amongst others, all have information to contribute. Some of the information comes from interaction with our citizens and some generated by the in-house users of the systems.

Housing related systems and the electoral register both contain a wealth of useful information.

### **CRM**

The CRM system, when fully deployed, is capable of collecting only a portion of the information necessary. It is useful in that it records contact events with our Citizens. But it is limited in that only a small percentage of the population contact the Council during a year and then they may only contact the Council for part of their needs. It has no knowledge of either line of business or external databases or general market demographics.

### **CBC Web Site**

Like the CRM system, the Council's web site could collect information that would be very useful. To do this will require a change of approach to the technology behind the existing web site and possibly a slightly changed mission statement for the web team. But again, like the CRM, even when fully exploited the web site could only provide part of the needed picture as only a portion of the information required will pass through the web.

### **External (to CBC) Data Sources**

If all of the Council's information *were* to be made available there would still be a lot more to learn about our citizens. The Police, Fire, NHS, Mental Health, educational and training academies et cetera all have information that will determine needs, requirements and life outcomes in Central Bedfordshire.

## **Data Protection Issues**

Information Sharing has been on the government agenda for at least a decade. Many attempts to pull information together have been derailed by fears of data protection issues, data ownership and reluctance to cooperate with neighbouring organisations. With Good Will the associated Data Protection

issues can be resolved and sharing can be organised. Data Protection remains a major issue; but it is not a sufficient argument to do nothing.

## Bringing the Information Together in a Meaningful Manner

The most common technical approach is to create, through real or virtual means, an intermediate database that contains the necessary information to allow reasonable analysis to take place.

There are many technical tool sets that create this kind of environment, some naturally better than others. The tool set, when configured, interrogates all of the designated source databases on a regular basis, extracts the relevant information, reformats and manipulates the data and places the results in a new database. The new database contains the relevant information from all of the source databases and is configured to allow meaningful analysis and data quality control.

The result of the work is typically a golden record of individuals, ideally of all individuals residing within the Council's boundaries.

- The Person
- Relevant Description
- Relevant Relationships
- Relevant Events and Interactions
- Markers as to the Source of the Information

## Quality Control

The results of the consolidation of data are of course dependent on having good data to work with, accurate data. But the process used to create the consolidated repository also can be used to improve our existing data. The process described here can be used as a data quality improvement tool. As simple examples of this:

- When records are consolidated the differences in names, addresses, statistical information become apparent and the underlying data bases can be corrected.
- Missing information in the underlying databases is highlighted.
- Duplicate records become apparent.
- Changes could be made on the master record and propagated to the underlying databases.

## Analysing and Using the Information

The key question is: if we could create a central and comprehensive repository of information, would it be useful, could we make good use of it?

A convenient and possibly sufficient reason to build the database is for fraud detection. Anomalies can be detected and challenged.

Two additional important areas are a bit more complicated.

- If we know more about our citizens, can we shape better and more efficient services?

- If we know more about or citizens and their challenges, can we shape interventions that will provide better outcomes for the individuals and lower the over all demand for our services?

Answering these two questions requires more analytical ability and insight than available through simple technical manipulation of the data. The answers that we would receive are in direct relationship to the skills of the persons employed to interrogate the data.

## Inter-Agency Data Sharing

The IT tooling and skill sets necessary to realise a project of this nature are the exact same as those required for successful data sharing with our peer organisations. Building this internal capability and building a data sharing environment are related technical processes.

## Impediments to Success

- Data Protection Shyness,
- Finding the right persons with the right skill sets to run the project,
- Proactive approach to using the data when it is pulled together. It involves doing lots of things that we do not now do.

Or less formally, we can make this work if we, collectively, see a purpose for it and commit to making it work. If it is just run as an IT project then it is unlikely to return the potential benefits.

My personal estimate is that 80% of this type of project fails when run in a local authority. I have publically stated that rate of failure in conference presentations and no one has ever challenged. This is not to say that it is impossible to realise this work; just that it requires commitment and very careful handling to do so.

## Next Steps

Suggested get-the-ball-rolling, events: IT is arranging two *Show and Tell* presentations on two differing approaches to this challenge. One emphasises the collection of external data in addition to the council's own data and the other is more inwardly focused. One is from Norfolk and the other from Camden. We will try to get a very wide CBC audience together for these presentations, hopefully being scheduled for the 6<sup>th</sup> of May..

Afterwards we will take the temperature of the Council – how much interest exists. This can be reported back to CMT at which time the general consensus may or may not be for us to do further development.

End -