



IMPROVING PUBLIC SERVICES

GIS COMBINES WITH MANAGEMENT INFORMATION SYSTEMS TECHNOLOGY TO ENABLE INFORMATION SHARING, INCREASE MUNICIPAL REVENUES AND TO DELIVER IMPROVED SERVICES TO THE CITIZENS OF BEYOGLU, ISTANBUL.

Located close to the Golden Horn, a seaway off the Bosphorus in Turkey, Beyoglu Municipality is one of the many suburbs of Istanbul. Like many growing and forward-thinking municipalities in Turkey, Beyoğlu Municipality has recognised the need to improve the delivery of important and sometimes crucial services to its citizens and has identified a number of projects that need to be undertaken if it is to be able to achieve this aim. The municipality has also recognised that in order to help fund these projects, it needs to increase its income. For example, one area for potential funding income is a reduction in the incidence of non-payment of taxes that are due. But to achieve this increase in its income and to deliver improved services, the municipality has realised that it needs wider and readier access to better and more accurate information. So a development programme has been put in place to enable this.

The programme has a number of clearly identified goals, namely:

- By increasing its income, to enhance the municipality's ability to provide both essential and non-essential services to its citizens.
- To capitalise on the enormous increase in the use of computers by its citizens by enabling information to be delivered by e-mail and via the municipality's Web site.
- To improve coordination with and cooperation between other local government departments and institutions.

- To establish the social, economic and cultural identities of the municipality's residents by collecting and analysing the necessary data.
- To build an information system, with two fundamental technologies – geographic information system (GIS) and management information system (MIS) – accessing a single database.

To help them do this, Beyoglu Municipality has enlisted the assistance of a local IT systems specialist and Cadcorp partner, Sampas A.S. Based in Adana, with offices in four other locations, including its GIS centre in Istanbul, Sampas is the largest supplier of IT systems to the local government sector in Turkey and specialises in developing bespoke applications based on Oracle and the Cadcorp SIS digital mapping/GIS software suite.

Sampas has developed several applications designed specifically to help local authorities in Turkey to realise potential income and to deliver essential services to their citizens. Built on Cadcorp SIS, these applications enable the in-depth analysis of data collected and stored in an Oracle database and provide spatial information graphically.

An important aspect of all these applications is that the ability of Cadcorp SIS to read and display data in a wide range of native GIS, CAD, graphic and database formats, on-the-fly, ensures that from one common user interface, the user has the ability to capture, edit,

MAIN IMAGE: The Mayor of Beyoglu Municipality photographed during a TV interview with the Sampas site survey team in the background.

TOP RIGHT: Inside the municipal offices

BOTTOM LEFT: An example of preparing a graphic report of an social analysis of the selected item like social security of citizens, gender, education level... etc.

BOTTOM RIGHT: The application uses the data of National Cadastral Office with on-line connection to reform the cadastre and ownership structure of a specific area according to plan instructions.

maintain, analyse and display spatial data without needing to worry about how to link to complex database systems. This has been instrumental in the acceptance of Sampas' systems by users in local authorities throughout Turkey and is a key aspect of the system at Beyoglu Municipality.

Corporate-level benefits.

In the past, Beyoglu Municipality has been unable to deliver, effectively, all of the services to its citizens that it strives to, due to lack of information, or to the inaccuracy of the data that it does have available to it. So the first task – and it is a major task – has been to collect and to store in a single relational database management system the enormous amount of information, both graphical and non-graphical, that exists within the municipality.

This alone will bring benefits. With the data being stored in a single database, duplication of data can be avoided, while its accuracy and currency is also easier to ensure. The information within the database will also be available to and accessible by all departments within the municipality, as well as being available to citizens via the municipality's Web site.

In addition, with all management information being stored in a single database and accessible by everyone, as appropriate, further benefits are expected to emerge through improved communication and cooperation between the organisation's various depart-

ments. In the past, information within the municipality has been fragmented and increasingly difficult to recover as time goes by, leading to duplication and inaccuracy.

The new system is also expected to help administrators organise services for the many internal departments, such as planning, health and education etc., by acquiring a better understanding and appreciation of the available resources within each department. The administration process will therefore become more transparent, meaning that internal activities and processes can be checked and controlled in order to make them more relevant to the services being provided.

Importantly, the new system will also be used in the development of strategic plans in areas such as economic development, social conditions, commercial activities and tourism, etc. Whereas in the past there was duplication of effort, lost information and general confusion, with the new system in place and fully operational every aspect of the municipality's activities will be able to be planned, using accurate, up-to-date information from one central location.

One further and from a corporate viewpoint, crucial benefit of the new system is that it will enable Beyoglu Municipality to identify locations within its boundaries in which incidents of the non-payment of local government taxes occur. This capability has already enabled the municipality to realise a significant increase in its income from local taxation. This, in turn, will enable it to provide to its citizens those essential services that were previously denied them due to a lack of financial resources.

Benefits for citizens.

Although the project is still in its relatively early stages, some of the benefits that the integrated GIS/MIS will bring to the citizens of Beyoglu can be readily identified and are already becoming apparent. Many of these benefits are due to the fact that it is becoming increasingly possible for citizens to obtain information from the various departments within the municipality through its Web site and via e-

mail correspondence. This will open up previously hidden aspects of many of the activities carried out by the municipality on behalf of its citizens, helping to keep them informed.

Because the information relating to the activities of the different departments within the municipality will be more accurate and up-to-date and will be available to other departments and government organisations, as and when they need it from one central database, better planning will be possible.

This improved planning by the municipality, enabled by the ready availability of better and more accurate information, will help ensure that citizens receive equal and standard services, including emergency services, road cleaning, infrastructure maintenance and utility services – water, gas and electricity supply.

Previously, bureaucratic routines, exacerbated or held back by the lack of, or inaccurate information, caused a great deal of frustration for citizens and staff alike, as well as a general lack of urgency. However, with the integration of the information from the different departments into a single database and with the ability for the public to access appropriate information via e-mail and through the Web site, it becomes possible for responses to queries from the citizens of Beyoglu to be far more accurate and to be made available much more quickly.

The result is that data relating to each of the municipality's departments will be more accurate, up-to-date and readily available through a common user interface to those who need to work with it on behalf of the public. Ultimately life will improve for the citizens of Beyoglu Municipality, as the accessibility and quality of services improves through increasing modernisation.

For more information: Contact Sampas A.S. located in Adana, Turkey

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