Increased Funding and Citizen Support Give Birth to a Blueprint for Digital Transformation of Midsized Turkish City

Executive Summary

CUSTOMER NAME
Municipality of Yalova, Turkey

INDUSTRY
Public Sector

BUSINESS CHALLENGES
- Create job opportunities by promoting economic development through ICT
- Improve health and education services, and build a new hospital
- Become an e-government pilot city in Turkey and an EU Knowledge Society Center of Excellence

SOLUTIONS
- Implement productivity monitoring, mobile working, and performance management tools
- Automate health and education services; integrate an e-government portal
- Build a technology park and deploy wired and wireless broadband

BUSINESS RESULTS
- Deployed mobile working, with SMS portal integration for faster responses to citizens
- Integrated citizen services via a Citizen Loyalty Card and CRM foundation
- Launched connected community center pilot for health, education, and job information

With half the population of Yalova Province living in the city of the same name, the municipality has drawn up an ambitious e-transformation roadmap for increased use of Information and Communications Technology and broadband rollout, with an e-governance model to accelerate economic progress and improve citizen services.

Business Challenges

Situated on a peninsula in the Sea of Marmara, some 40 miles to the southeast of Istanbul, Yalova has enjoyed separate administrative status from Istanbul since 1995. The province has more than 185,000 inhabitants, half of whom are concentrated in Yalova city. Bound by a triangle of larger industrial centers, Yalova is a popular tourist destination and sees its numbers double in summer. Other principal industries are education and farming, and Yalova is ranked 13 among Turkish cities by GDP.

Hit hard by the 1999 earthquake, which killed 14,000 people across northeastern Turkey and left thousands more homeless, Yalova has worked hard to restore and improve its economic fortunes. After preliminary steps toward an e-government, Mayor Barbaros Binicioglu decided that Yalova's future depended on more substantial Information and Communications Technology (ICT) investments. City funds, however, were limited and, at first, there were doubts about how realistic it was to propose ambitious schemes such as Yalova's "ICT Valley", which was conceived as a smaller version of California's Silicon Valley, creating a center of innovation by drawing in leading ICT companies from Turkey and abroad.

What the city needed was a roadmap to support the mayor's championship of ICT as the engine of social and economic transformation in 21st-century Yalova. The roadmap would be used to attract further investments beneficial to the city's growth. Key concerns included a campaign to become an e-government pilot city; attracting investment capital to enhance healthcare and education services, while also encouraging the construction of new schools, a university, and a new hospital; and citizen services combined with strong cost controls to conserve scarce resources.

Cisco Internet Business Solutions Group (IBSG)

Solutions

Yalova began designing an e-governance system in December 2005, at the same time the city engaged with Cisco® Internet Business Solutions Group (IBSG). The e-governance system was based on three principles:

- **Transparency**—making municipal matters such as income and expenditure, municipal tenders, and property portfolios available on the Internet, while monitoring service demand and delivery through a call center

- **Productivity**—allowing the municipality to monitor performance among its 700 employees and make improvements based on ICT

- **Participation**—using funds from a United Nations Agenda 21 program to set up special councils for neighborhoods, women, pensioners, and young people; the councils in turn would provide research data for targeted services

Yalova also had the benefit of well-established relationships with major international organizations and agencies—including the European Union (EU), the United Nations Development Program, and the World Health Organization—through which it had raised money for health and social projects. The city was then able to hire a team of four dedicated community researchers. Such projects also helped position the city strategically within the larger context of Turkish national development, which depends in part on raising the country's digital profile toward European norms.

A brainstorming weekend with IBSG began the process of identifying the range of ICT projects required to support the mayor's vision. After further workshops to define project portfolios, 20 possibilities were drawn up and placed into three categories: Municipal Employee Productivity, Citizen and Business Services, and Economic Development, all supported by a wireless broadband infrastructure.

Projects selected for Municipal Employee Productivity were mobile working for municipal employees, a mayor information system providing feedback on city services, and performance management tools to enhance efficiency. In addition to the productivity gains expected to accrue from mobility, by integrating Short Message Service (SMS)—text messaging—with messaging with the mayor's information system, municipal officers could receive automatic alerts and respond to priority cases quickly.

Results from a Community District project survey generated ideas for health and education services, tailored to local needs. One project integrates the municipal portal for all of Yalova's services. A second project allows citizens who use the Yalova Citizen Loyalty card, which currently offers card holders discounts and tickets, to use their card numbers to log on to a citizen portal. The city decided that installing a customer relationship management (CRM) system would help Yalova manage its relationships with customers, including capturing, storing, and analyzing user information to serve the public better.

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> Tolga Senturk
> Project Consultant
> Yalova ICT Project

To promote Economic Development, Yalova elected for a technology park model to replace the earlier ICT Valley concept. This decision was coupled with innovative plans to develop broadband infrastructure by laying municipal fiber ducts and deploying wireless broadband, reaching up to 90 percent of the population.[1]

Education centers were also planned to raise the technical expertise of Yalova's citizens and fashion a modern workforce from a well-educated populace that is at present marked by relatively high numbers of unemployed college graduates.

From each of the three categories, the city selected projects that would result in "quick wins" (such as the mayor's office communicating to citizens via Internet kiosks), in the belief that showing positive results to Yalova's people would convince them of the projects' value. The city hoped to attract financial support from national and international bodies and encourage legislative change at a national level, to set the city on the road to earning its own ICT-based revenues through public-private partnerships for reinvestment in other projects. Any wins would advance Yalova's case to be chosen by the Turkish government as an e-government pilot city.

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Business Results

Yalova has taken a number of steps toward e-transformation. It was the first Turkish city to join the Eurocities Network[2] as an associate member and, in March 2006, hosted the first European Union Knowledge Society Telecities IT Forum held on Turkish soil, with Cisco as a key sponsor. The meeting marked another step in Yalova's journey toward becoming a European Union Knowledge Society Center of Excellence.[3] "By being the first associate member in Turkey to host a Eurocities meeting, Yalova put itself on the international map," says Binicioglu. "We have also aligned key projects on our digital city roadmap with Turkey's national e-transformation strategy and hope in this way to become the pilot city for wireless broadband services, with our own Techno Park."

IBSG supports the municipality in its lobbying activities, including contacts with the Turkish State Planning Organization, which controls a US$2.5 billion national ICT budget and operates under the direction of the Prime Minister's Office. This effort should help Yalova achieve the desired status of a national pilot city for

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>
> Barbaros Binicioglu
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> Muncipality of Yalova

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1. Yalova is seeking regulatory changes that would empower municipal authorities to lay fiber and deploy a revenue-sharing model, in partnership with service providers, as well as for a technology park. Both plans are pending approval.

2. Eurocities spans 130 European cities in 30 countries. www.eurocities.org/main.php

3. Turkey became an associate member of the European Economic Community, the precursor to the European Union, more than 40 years ago, and is working to become a full member.

e-government services. In the meantime, some projects identified in Yalova's e-transformation roadmap have been presented to the European Union and to the national government for possible funding. The city awaits decisions from both.

The mayor's backing of ICT has taken on a high profile, owing to his enthusiastic use of technology to contact individual citizens. Through SMS integration, Binicioglu can use mobile e-mail or voice to respond directly on his smart phone in priority cases. His support of a municipal mayor information and performance management system has quickened adoption among municipal employees, with a workflow solution and an integrated performance dashboard in place to monitor service delivery times and employee productivity.

Public interest has increased due to the mayor's involvement in workshops to define the project portfolio, and by news of the e-transformation program relayed to citizens through Internet kiosks. Citizens can also read newspapers, access e-mails, consult an electronic city guide, and go to the city's Website to learn more about developments. In this way, Yalova's people feel they have some ownership in the program.

In August 2007, Yalova was due to launch a connected community center pilot, with a manager and 15 PCs that can be used by the public for up to an hour, free of charge. While Internet usage is relatively high in the city, there are disadvantaged sections of the community without Web access, and the aim is to introduce these people to municipal services in health, education, and employment.

By providing Citizen Loyalty Card holders with logon access to the citizen portal, the municipality will gain visibility into usage and service demand. "Most importantly, the city will be able to follow how frequently people use the portal, which subjects they are most interested in, and how they use it," says Senturk. "We will be able to enrich and develop the portal in accordance with usage, and so increase utilization. The feedback will enhance our outlook on developing services in the future."

Next Steps

While positive results from Yalova's e-transformation efforts are becoming more visible, the possibilities for continued success are great. The city's potential as a leader within Turkey, where it hopes to establish a national knowledge-sharing network based on an international Eurocities model, is further recognized by other midsized Turkish cities that attended the Yalova Telecities forum in March. This positioning in turn is likely to bolster Yalova's campaign to be chosen by the government as a pilot city for e-government, offering vital lessons to up to 50 other Turkish cities, lessons and a replicable model to up to 50 other Turkish cities.

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More Information

The Cisco Internet Business Solutions Group (IBSG), the global strategic consulting arm of Cisco, helps Global Fortune 500 companies and public organizations transform the way they do business—first by designing innovative business processes, and then by integrating advanced technologies into visionary roadmaps that improve customer experience and revenue growth.

For further information about IBSG, visit http://www.cisco.com/go/ibsg

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