

## Peru: Alerta Miraflores: Managing to Increase Citizen Safety – Lima, Peru

*Jeffrey Franco and Ignacio Soto, (Voxiva Inc.)*

- This case demonstrates strong use of evidence-based decision-making and management for results;
- It also shows leadership and political commitment at the local government level with a results orientation;
- This is a good example of citizen engagement in monitoring results.

### Introduction:

Miraflores, one of 42 municipalities of Lima, Peru, is home to approximately 100,000 residents and is a bustling commercial, residential and tourism center. Miraflores is well known for innovative ideas in city management, including the introduction of a municipal police force – the Seranazgo – to complement the Peruvian National Police. Nonetheless, in the 1990s, Miraflores experienced escalating crime (e.g., robbery, assault, and drug possession) that was having a negative impact on the quality of life and threatened to hinder tourism and economic activities. Indeed, over 70 percent of citizens in the Lima metropolitan area ranked crime as the city's biggest problem.

By the 2002 election, crime had become by far the top concern for the citizens of Miraflores. The newly elected Mayor made crime reduction and citizen security his top priority. From his previous experience in Miraflores and as a former advisor in metropolitan Lima, the Mayor knew that good and timely information was a key factor to truly manage citizen security<sup>1</sup> and to deliver on his promise. He wanted to replace the existing inefficient paper-based system with a new management system that would allow him and his municipal employees to focus on crime reduction, respond quickly to reported crime, and engage the citizens in security.

---

<sup>1</sup> Former New York Commissioner of Police William Bratton also stressed this point in a report for the Metropolitan Lima Municipality.

## Application:

According to municipal law, the Mayor chairs a Citizen Security Committee and is responsible for the security of Miraflores citizens. As his first official action after election, the Mayor visited the heads of the two stations of the National Police located in Miraflores to emphasize the importance of working as a team and leveraging reliable information to fight crime. The municipality also began collaborating with Voxiva, a Lima-based private company that is a leading global provider of practical information solutions to enhance safety, strengthen health care systems, and improve government service delivery.<sup>2</sup> Together, they designed Alerta Miraflores, a model approach to managing crime that uses Voxiva's web and phone-based technology to:

- Give citizens a way to report incidents to local security officials to record and take action;
- Capture data electronically and display it on reports and maps to let public safety officials pinpoint the areas from which citizens are calling, define priorities and dispatch the closest officers;
- Allow municipal officials to manage citizen security proactively, respond more rapidly and analyze results; and
- Create greater transparency and accountability for results, thereby encouraging greater citizen participation.

The Alerta Miraflores central phone number is displayed throughout the city. When residents dial in, they are connected to an automated incident reporting system. They can talk to an operator or record their message. When a caller reports an emergency, officials confirm incident details and immediately dispatch a police unit or an ambulance. In non-emergency cases, reports are logged, and officials initiate action and call back the

---

<sup>2</sup> For example, Voxiva worked with the Peruvian Navy to implement the company's HealthNet application to support disease surveillance in some of the most remote areas of the Amazon basin. The solution has been expanded by the Navy to all its facilities and has been introduced in five additional Latin American countries.

citizen in a timely manner. All reports are instantly captured in a central database in real time that is monitored 24 hours a day by security officials at a command center. The database includes reports registered by citizens (through Interactive Voice Response interface) and by municipal police operators (through Web interface) who receive the information through other channels such as radio UHF communications and from municipal police officers in the field. Currently, all crime reports in Miraflores are logged into the CitizenNet (an internet and interactive voice response based system).

The police's use of the information has reduced crime in several ways. In urgent cases, they use the calls to dispatch officers to the scene and to intervene appropriately. Police employ the system to help triage non-emergency calls in order to allocate resources more efficiently. And the system is used to identify "hot spots" and trends to plan more strategic approaches to problem areas.

The system also records what actions police or other officials have taken (and whether the case is in process or resolved). This information is recorded in the central database, which is viewable by any authorized user and greatly increases transparency and accountability. A historical record of all reported cases is continually maintained and available for review. The data is also reviewed by the Committee of Citizen Security, the Mayor himself, and information analysis experts to search for trends and to implement strategic initiatives based on the results.

From a technology perspective, Alerta Miraflores supports integrated communication across channels (phone, web, text messaging, and e-mail). Citizens can leave voice messages that are stored in the centralized database in a voice-clip format, and authorities can respond by phone using text messages for internal alerts.

Voxiva also worked with the municipality to establish a Command Center that rapidly became the hub of the Miraflores “managing for development results” activities. The Command Center functions as a Citizen Security Data Center and a strategic situation room.

- The Miraflores Public Safety manager regularly generates a comprehensive report of charts and graphs showing crime statistics by type, location, time of the day, day of the week, and month of the year. This information is accessible in the Command Center and has been used to re-allocate resources to locations and times of greatest need and to justify additional resources.
- Every week, the Mayor brings together the Citizen Security Committee in the Command Center and leads a review with all of the authorities concerned. Alerta Miraflores provides the Committee with a rich data set for analysis, decision-making, and monitoring of trends and results. The Mayor leads all of the concerned officials in an evaluation of those results; they make decisions about the strategy, coordinate actions of the National and the Municipal Police forces, and adopt corrective measures.
- The Command Center is a powerful community relations tool. Press briefings are held at the center, and it allows the municipality to communicate more effectively with the community.
- Finally, the Command Center creates focus and visibility for data about results. It has established a sense of ownership among the community for the technology solution and, more importantly, ownership of the process of achieving results.

The introduction of Alerta Miraflores has enjoyed high-level political support. Using this system, the Mayor can and regularly and personally monitor citizen reports. He sees it as his responsibility to make sure that the citizens are properly attended

to and that his protocol of an “immediate response to every report” is fulfilled. The effectiveness of this monitoring has been remarkable for discipline and morale.

### Problem Solving:

Alerta Miraflores has proven to be a simple and effective problem-solving tool, supporting the efforts of an important municipality to address a problem of great concern to its citizens. Two specific additional areas deserve mention.

**Citizen Participation:** It was clear from the beginning that a high degree of citizen participation was THE critical success factor for this project. Citizen security was the key problem perceived by the people and the solution depended on citizen participation alongside the Serenazgo, National Police and other actions<sup>3</sup>. The Alerta phone number was widely published across the city. Citizens were encouraged to report suspicious activity. However, a lack of financing limited a campaign to promote system usage and reporting. As a result, the municipality relied on word of mouth, press coverage, and exposure at local and international events. Emphasis was placed on promoting crime reduction as a consequence of citizen participation. The concept of continued citizen participation to reduce crime was very effective in gaining acceptance for the system.

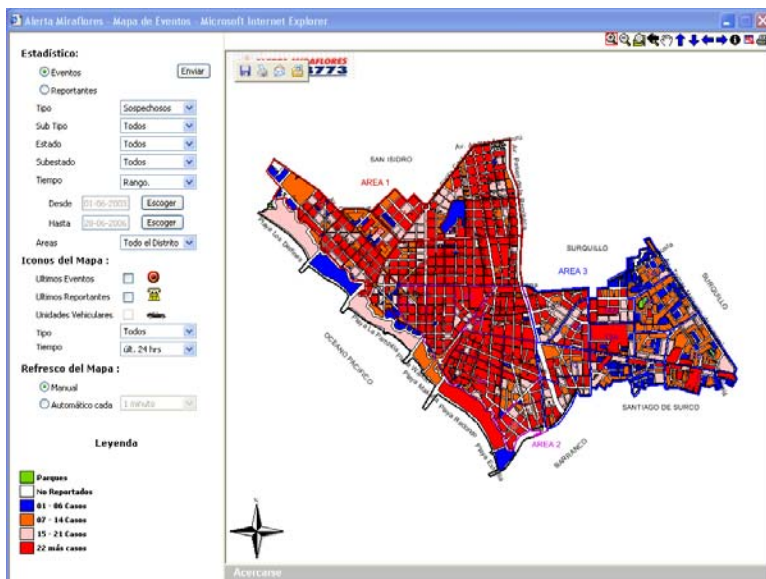
**Technological Innovation:** As the technology partner, Voxiva introduced a series of technological innovations to address specific problems. Important innovations have also come from the Citizen Security Committee. A director of one of the National Police Stations proposed an innovative



<sup>3</sup> Other ways of fostering such participation as filling complaints and receiving individual information were implemented in an additional module, and then a third one, providing a way for citizens to monitor municipal services was developed.

approach to address security concerns on the part of local businesses. This led to a partnership between Voxiva and Visanet, the Visa Cards processor, to allow point of sale devices to send silent emergency alarms to Alerta (POS SOS). An agreement has been reached between the municipality, Visanet and Voxiva to insure immediate police action and a responsible use of the alarm by business operators. Less than **3 months** after Alerta was installed, the National Police, along with Miraflores and San Isidro<sup>4</sup> Serenazgo forces, used reports from a POS SOS plus additional citizen reports in the Alerta system to capture two murderers. Voxiva and Visanet were awarded the 2006 Business Creativity Award in Peru for the use of the POS SOS to improve citizen security.

## Results:

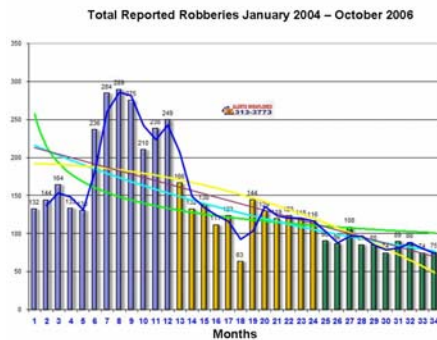


**Increased Citizen Involvement:** The metric introduced from the beginning was crime reduction as a consequence of citizen participation. In total, 133,000 reports have been registered in

<sup>4</sup> A neighbor district that is also one of Voxiva's customers

Alerta Miraflores since 2003 with an increase each year. Forty-seven percent of reports to the system are citizens reporting suspicious activities in their neighborhoods. The GIS map on the previous page displays citizen reports from June 2003 to June 2006. The distribution of reports shows that citizens in every zone of Miraflores have participated in the citizen security system by reporting suspicious activity in their neighborhoods.

**Achieving Results for Citizens:** By improving its ability to rapidly respond to reported incidents; providing timely feedback to citizens; and capturing detailed crime information, the municipality is better able to prevent crime and increase citizen security. The graph at the right was generated by the Alerta system and demonstrates a drop in robberies over the past three years. In fact, Alerta Miraflores has reported a 68% drop in robberies since 2003. In part, the improvements have enhanced tactical effectiveness: several of the reports have led to the immediate capture of thieves. In addition, the increasing number of citizen calls has fostered preventive measures. Other results have had an impact on quality of life. For example, noise disturbance calls that were categorized by type (see Table 1 on the following page) and localized using GIS mapping led the Miraflores' Municipal Council to implement a noise reduction ordinance in 2004. Some results have been more strategic, allowing the municipality to do better planning and resource allocation. Altogether, municipal officials estimate that there has been a 30 percent reduction in assaults and a significant reduction in overall crime.



*Municipal officers analyze data from Alerta Miraflores to detect daily, weekly, monthly and yearly trends.*

**Table 1**

Sum of Total Number of Reports by Type	Year				Total General
	2003	2004	2005	2006	
Assault/Robbery	2,019	5,857	4,131	2,221	14,228
Accident	1,273	3,842	3,467	2,599	11,181
Suspicious Activity	1,480	9,035	13,533	14,667	38,715
Noise / Neighbor disturbance	4,734	13,944	16,530	11,804	47,012
Other			8,160	13,785	21,945
<b>Total General</b>	<b>9,506</b>	<b>32,678</b>	<b>45,821</b>	<b>45,076</b>	<b>133,081</b>

*Source: Alerta Miraflores*

**High Report Reliability:** Alerta Miraflores receives a very low percentage of false reports. Since its launch in 2003, 98% of the reports logged by the system were confirmed incidents like noise and accidents, or suspicious or criminal activity (robbery, assault, drug possession, prostitution, and delinquency). The high report reliability ensures that the municipal staff dedicates its time to responding to legitimate cases.

**Transparency and Citizen Inclusion:** Every report is kept in the database, providing both citizens and the municipality with a track record and fostering accountability. The transparency of the system enables the Mayor and his staff to call citizens to acknowledge their valuable reports or apologize in case of mistakes. The system is straightforward and user-friendly and phone calls to report crimes and other incidences have been logged by all citizens, including senior citizens and children. There is a sense of renewed trust and collaboration between the citizens of Miraflores and the police force.

**Security Management:** The introduction of Alerta has served as a catalyst for enhanced management of citizen security. Coordination among all those involved is no small achievement: two different police organizations and other auxiliary forces like firemen are working as a unified team with a single focus on

improving the security of citizens and reducing crime. Any Latin American city council would be proud of this accomplishment. As a national police official noted, “Now we know our enemy better.” This type of information permits intelligence actions against gangs and, in general, more sophisticated and informed police work.

**Replicability:** The success of the Miraflores Alerta system has gained attention as a model for other municipalities within Peru and beyond. To date, eight municipalities in Lima have contracted the Voxiva Citizen Security Solution. Two more municipalities are already operating under the system in Argentina. One of the Argentina citizen security solutions is under the umbrella of a partnership agreement between Voxiva and Microsoft to deploy the Voxiva Product CitizenNet across Latin America. CitizenNet is not only technologically innovative; it is also cost effective. While Miraflores is a relatively affluent municipality, other poorer communities such as Villa María del Triunfo have also successfully budgeted for and are implementing similar systems.

## Conclusion:

Alerta Miraflores has been instrumental in improving the process by which the Municipality of Miraflores is confronting crime and solving problems facing its citizens. It has truly enhanced the organizational capacity of the municipality to reduce criminal activity within its boundaries. There are a number of conclusions that can be reached:

- Citizen engagement has been a critical factor in achieving important development results.
- Collaboration across organizations and agencies through the Citizen Security Committee and a public-private partnership between the municipality and Voxiva were important success factors.
- Timely information provided by citizens has stimulated enhanced management of the Miraflores security forces, in

both tactics and strategy. It has also assisted officials to bring in increased financial resources and equipment.

- Timely, transparent data are useful to guide responses and also to provide the municipality with a rich data set for analysis, decision-making, and monitoring of results.

Alerta Miraflores has proven its value: the combination of effective leadership, sufficient resources, and innovative technology has engaged citizens and is continuing to contribute to a significant reduction of crime in Miraflores.

Miraflores has been very willing to share its experience with other communities in Perú and Latin America and has helped to found a network, “Digital Cities/ Safe Communities,” established by Voxiva and Microsoft to promote citizen security and services.

The municipality is working with support from Voxiva and Microsoft to improve its analytical capabilities, adopt more powerful analytical tools and make better predictive use of its current and historical data. For example, Voxiva participated in the Windows Vista and Office 2007 platform launch with Alerta Miraflores. The new Microsoft Excel is a powerful analytical tool that municipalities can use for improving the quality of their reports and analytical skills.

Miraflores continues to add other citizen services to Voxiva’s suite of applications as additional modules to provide broader support for municipal management. For example, a Citizen Participation Module receives complaints, suggestions, and queries from citizens on any issue outside of crime reporting. Officers must return all calls in a pre-established time period. Another module, the Municipal Services Module, provides citizens with their current tax account information by entering their Tax or ID number. New modules continue to be developed to expand citizen access to municipal services and support the expansion of e-government within Miraflores.