WIPRO
Applying Thought

EXTENDING THE LONG ARM OF THE LAW

By enabling the consolidation and sharing of crime data on a near real-time basis, Wipro helps the Crime and Criminal Tracking Network & Systems, crack down on crime.

INDUSTRY LANDSCAPE

Worldwide, information and communication technologies are being used to combat crime and terrorism and engage in a proactive manner in order to tackle growing threats. In India, there is no proper and centralized system in place by which criminal records can be stored, shared, accessed and retrieved at a pan-India level. Police stations in the country operate in an isolated manner with only the help of voice connectivity, or in a limited manner through the national crime database available at the National Crime Records Bureau. Other than manual records, there is no single and comprehensive database of criminal records that can be accessed and/or acted upon by all the state police departments.

Realizing this as a gross deficiency in knowledge transfer, as part of its ongoing efforts to curb incidence of crime and terrorist activities in the country, the Ministry of Home Affairs, GOI, has embarked upon a mission mode critical project named Crime and Criminal Tracking Network and Systems (CCTNS).

THE CLIENT

The National Crime Records Bureau (NCRB) is mandated to empower the Indian police force with Information Technology with a view to maintaining a national-level database of crimes, criminals and property related to crime, and providing police with near real-time accurate information in order to fight crime.

Currently NCRB is entrusted with the task of implementing CCTNS. In addition, NCRB is responsible for training personnel and providing change management, building and maintaining the requisite infrastructure and electronic and non- electronic mediums to meet citizen requirements.

OPPORTUNITY

Given the vast geographic spread of India and the increase in terrorism and cyber crimes in the past decade, lack of automated processes and the glaring deficiency of an integrated knowledge base has resulted in the need for immediate implementation of relevant analytical tools to gather meaningful information in order to predict and apprehend criminals using the latest available technology.

The overall goals of the CCTNS system encompass the efficient collection, storage, retrieval, analysis, sharing and transfer of information across police stations, the state headquarters and the central police organizations.

"Crime and Criminal Tracking Network and Systems (CCTNS) Project is an ambitious mission mode project taken by Ministry of Home Affairs under National e-Governance Plan. This will allow sharing and investigation of crime and detection of criminals on near real-time basis. This will help in improved services for the general public and for image makeover of the Police. NCRB is proud to be associated with a project that shall serve our national interests and be used in early detection of crimes across the country."

Shri P.R.K. Naidu,
Joint Director & IG (CCTNS),
National Crime Records Bureau

Several challenges, both minor and major, were faced during this engagement. Since the application is meant to work in more than 20,000 locations across the country, there was a need for consolidation of requirements from approximately 15,000 police stations and 6,000 higher offices. The SRS (Software/System Requirement Specifications) phase was delayed as the initial data gathering from 3 states was increased to 10 states in order to have a valid representation of the 35 states and union territories.

The presence of demographic boundaries and local laws—since policing is a State subject—complicated and delayed the SRS stage further. Thereafter, representatives from each state had to be briefed and involved in discussions, based on which relevant revisions were made.

Demographics and the resistance to change in state police departments also created initial challenges to the progress of the project.

Finally the project became very demanding since the timelines given for its execution were exceedingly tight, while its scope and requirements were vast.

SOLUTION

Wipro developed a customized software application with over 5,000 screens.

- The software application was developed using two different technologies, Microsoft .Net framework as well as open source Java.
- State-of-the-art state level data centers were built to create a seamless transfer of information, redundancy, etc.
- Complaints recorded on a computer in the local police station in the state are stored directly in the database of the state-level data center.
- All databases and information from servers at the state level is consolidated and transferred to the national data center in Delhi.
- The application is also available to work in the offline mode in order to tackle issues of power outages and loss of connectivity.

BUSINESS IMPACT

The benefits from CCTNS to all users at police stations and to citizens will be manifold:

- Integration and consolidation of data on crimes and criminals at both the state and national level will allow better and faster action on crimes.
- A uniform system will be implemented across all states, replacing the haphazard and discrete systems being used at present.
- It will be citizen-focused, thereby allowing citizens to see the status of FIRs and complaints online.
- Automation will allow proper messaging and alerts, MIS reports, intelligence-led searches and sharing of information across different government agencies such as RPOs, RTOs, e-courts, CBI and IB.
- Customized dashboards will allow in-depth and meaningful analysis of data. For instance, one can see how each state is functioning or even drill down to the police station level and understand which areas are reporting the maximum number of crimes, or the nature of crimes in certain areas. This will help deploy resources accordingly and prevent occurrence of the crime in future.
- With information captured in electronic format, details such as photos, fingerprints, or other biometrics can also be shared easily across states and agencies, facilitating much faster tracking of crimes and criminals.

About Wipro

Wipro Infotech, the India, Middle East and Africa business of Wipro Limited (NYSE:WIT) is a leading Information Technology, Consulting and Outsourcing company, that delivers solutions to enable its clients do business better. Wipro delivers winning business outcomes through its deep industry experience and a 360° view of "Business through Technology" – helping clients create successful and adaptive businesses. A company recognized globally for its comprehensive portfolio of services, a practitioner's approach to delivering innovation and an organization wide commitment to sustainability, Wipro's IT business has over 130,000 employees and clients across 54 countries.

For more information email us at: reachus@wipro.com

DO BUSINESS BETTER

WWW.WIPRO.COM   NYSE:WIT | OVER 130,000 EMPLOYEES | 54 COUNTRIES | CONSULTING | SYSTEM INTEGRATION | OUTSOURCING

CORPORATE OFFICE, WIPRO LIMITED, DODDAKANNELLI, SARJAPUR ROAD, BANGALORE - 560 035, INDIA TEL : +91 (80) 2844 0011, FAX : +91 (80) 2844 0256