

TRIBUNAL SUPREMO DE ELECCIONES, COSTA RICA: PRESERVING THE INTEGRITY OF THE VOTING SYSTEM

The Challenge

Costa Rica takes pride in being the oldest democracy in Central America, and the *Tribunal Supremo de Elecciones* (TSE) is committed to preserving the integrity of its voting system.

In 1998, TSE was ready to modernize the election system by transforming the existing national ID card into a modern, fraud-proof card. This was a very important step, given the fact that the ID card, which all citizens apply for at the age of 18, was already used for almost all identification needs such as cashing checks and applying for a driver's license. Traditionally, the issuance process was done manually and entailed taking a photograph of each citizen, collecting a signature on paper, and sealing the photo and signature in a plastic ID card. Cards took about four weeks to process and were susceptible to tampering. TSE wanted to improve the system by incorporating technologies that could accurately verify each voter's identity, efficiently deliver tamper-proof ID cards, and streamline the electoral process.

The Solution

Identix® BioEngine® technology and 500 dpi single fingerprint DFR® readers helped in delivering an integrated biometric identification solution. This solution enabled TSE to issue biometrically-secured, tamper resistant identity cards to each of the nation's 2 million voters, and was integrated into the existing national demographics database maintained by the TSE, which contained four million records.

The solution consisted of Identix BioEngine technology for one-to-many identification, and 140 Identix® DFR® readers for capturing fingerprints. Upon enrollment, each applicant's two-finger record is searched against the entire Automated Fingerprint Identification System (AFIS) database of previously enrolled applicants to weed out duplicates. At 29 sites throughout Costa Rica, the system electronically captured images of two fingertips, the face, and signature from each of the applicants. Once approved, the TSE issued the ID card, which stores the applicant's biometric data.

These tamper-proof cards enable the TSE to accurately verify each voter, thus ensuring the integrity of the election process. Additionally, the electronic imaging system helped the government accelerate the delivery of service in other situations where Costa Ricans used their ID cards, such as cashing checks, applying for healthcare benefits, immigration, and driver licensing.

About BioEngine® Technology

Identix BioEngine technology is a minutiae-based algorithm that analyzes the fingerprint image for endings, splits and bifurcations in the ridge patterns. The strength of the BioEngine® algorithm comes from its ability to discern fingerprint images over an extended period of time. BioEngine® SDKs allow developers to create custom one-to-one verification and one-to-many identification applications, such as time and attendance, transaction verification, physical access, information security and ID programs. Identix® technology has issued more than 100 million BioEngine fingerprint templates around the world for various large-scale identification programs.

About Identix Incorporated

Identix Incorporated (Nasdaq:IDNX) is the world's leading multi-biometric technology company. Identix provides fingerprint, facial and skin biometric technologies, as well as systems, and critical system components that empower the identification of individuals in large-scale ID and ID management programs. The Company's offerings include live scan systems and services for biometric data capture, mobile systems for on-the-spot ID, and backend standards-based modules and software components for biometric matching and data mining. Identix products are used to conduct background checks, speed travel and commerce via secure identification documents, prevent identity fraud in large-scale government and civil ID programs, and control access to secure areas and networks. With a global network of partners, such as leading system integrators, defense prime contractors and OEMs, Identix serves a broad range of markets including government, law enforcement, gaming, finance, travel, transportation, corporate enterprise and healthcare.