

You are in: [Business](#)

Wednesday, 13 June, 2001, 11:14 GMT 12:14 UK

## Smart money goes multilingual



The new machines offer an unprecedented level of security

**By the BBC's Andrew Enever in Bolivia**

A Bolivian company is closing the gap between urban and rural economies through the design and production of its own easy-to-use smart card operated cash machines.

Prodem, which has been offering microcredit and other financial services for over 14 years to Bolivia's poor urban and rural population, sees the multilingual ATM is just the latest step in its services to those excluded from mainstream society - but it could become a Latin American hit.

Operated using only a smart card and a fingerprint scanner the new machines offer an unprecedented level of security to Prodem's clients." There is no possibility of fraud," commented Sergio Prudencio Tardío, national commercial manager at Prodem.

"If a customer loses their card, it is impossible for another person to use it because of the digital fingerprint."

Another advantage of the smart cards is that they store customer's personal details, account numbers, a record of transactions and a fingerprint.

This allows the cash dispensers to operate without a permanent network connection, a great help in remote rural areas.

### Simplistic approach

Search BBC News Online

 

Advanced search options

[Launch console for latest audio/video](#)
[BBC RADIO NEWS](#)
[BBC ONE TV NEWS](#)
[WORLD NEWS SUMMARY](#)
[BBC NEWS 24 BULLETIN](#)
[PROGRAMMES GUIDE](#)

See also:

[04 Jan 01 | UK](#)
[How credit cards get cloned](#)
[22 Oct 00 | Americas](#)
[Economic package for Bolivia's rural poor](#)
[28 Mar 01 | Country profiles](#)
[Country profile: Bolivia](#)
**Top Business stories now:**
[WorldCom chiefs refuse to testify](#)
[Buoyant eBay snaps up bills firm](#)
[Digital TV woes hit Pace profits](#)
[Bush vows action after scandals](#)
[Merck 'exaggerated' revenue in accounts](#)
[Congress pushes accounting reform](#)
[Oil trade thaws US-Russian ties](#)
[HIV: the drug firms' quest for a cure](#)

**Links to more Business stories are at the foot of the page.**

The machines also offer a functional simplicity capable of overcoming language barriers and illiteracy.

The Bolivian model will speak instructions to clients in a choice of either Spanish or one of the two predominant indigenous languages Aymara and Quechua.



Working to find easier ways for rural people to access their savings.

To make things even easier clients will be able to access the various services available by simply touching the screen.

The ATMs and smartcards are the outcome of Prodem's work to find easier and more secure ways for rural people to access their savings.

However the decision to import the various technologies and make a final product in Bolivia was forced upon the company by the prohibitive prices offered by the industry leaders.

### **Expanding networks**

Having taken on the task Prodem acted with speed, developing software to link the fingerprint and smart card readers with the dispenser, and adapting the Microsoft Visual Basic and Visual 'C' operating software to their specific requirements.

Less than a year later the company are completing tests on the prototype and the first ten production machines will be up and running by August of this year.

Prodem have further plans to expand their national network of machines but their ambitions have already spread beyond Bolivia's borders.

According to Prodem's Director Eduardo Bazoberry the company is on the verge of clinching its first deal to export 40 machines.

Other negotiations over the sale of programmed smart cards and the accompanying reader software to a Peruvian client are at an advance stage and on top of this certain major rural banking groups including Colombia's Bancafé and Banrural in

Guatemala have made enquiries.

### Cost effective

Such levels of interest are highly promising for the company, though they are hardly surprising when considering the competitiveness of Prodem's ATM.

Despite the technical advantages offered by the hardware combination of a De La Rue cash dispensing system, France's Gemplus smart card technology and a fingerprint reader from US-based Digital Persona, Prodem are building their machine for only \$15,000, less than half the price of standard ATM's, which can cost anywhere between \$35,000-\$40,000.

Prodem have made the smart cards available to all their account holders at a price of \$10 with a further \$7 annual operating charge applicable.

The company operate 55 branches throughout Bolivia and plans to establish a branch in every one of Bolivia's 312 municipalities over the next five years.

---

[✉ E-mail this story to a friend](#)

---

### Links to more Business stories

In This Section

---

© **BBC** [^^ Back to top](#)

[News Front Page](#) | [World](#) | [UK](#) | [UK Politics](#) | [Business](#) | [Sci/Tech](#) | [Health](#) | [Education](#) | [Entertainment](#) | [Talking Point](#) | [In Depth](#) | [AudioVideo](#)

-----  
[To BBC Sport>>](#) | [To BBC Weather>>](#)  
-----

© MMIII | [News Sources](#) | [Privacy](#)