NEXT GENERATION OF CREDIT CARDS

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Nowadays there is a new tendency in the world of credit cards. Static plastic cards are in the past, cutting-edge card manufacturers are literally changing the face of credit cards to make them something they've never been before: interactive.

Cards were born from cardboard, they've been 'mag striped' and 'chipped' and now we enter their silicon age, with an LCD display and touchpad, opening up a multitude of possibilities.

Credit cards of next generation have a complete computer architecture. There are over 70 electrical components squeezed into one-tenth of a cubic square inch of volume.

In the near future, credit cards may contain a tiny powered LCD screen programmed to display single-use passwords, account balance and eventually even a three-dimensional, 360-degree video of you for identification purposes. It may even speak in host's own voice.

The card of next generation looks like standard-issue debit card with two additions to its face: a small rectangular LCD screen in the upper right corner and an integrated "press" button in the lower right. Press the button and the card generates a one-time pass code that helps prevent fraud in card-not-present (CNP) online and telephone transactions.

The new cards are as thin and flexible as a typical credit. They are also scratch resistant and waterproof. One thing they do not have is one-type-fits-all characteristics.

These cards have multiple accounts. In order to select an account, all you do is press a button, and when you press a button it lights up, you rewrite all 1200 bits of data to that magnetic stripe, so you can swipe it in a traditional reader.

In additional, new technologies shore up card security. A host of new anti-fraud technologies join display screens to make it easier for card issuers to thwart fraud.

The new multilayer strategy involves embedding the various substrate layers of a laminate card with features that work together to make verification easy, but replication difficult. These include:

1. Color-shifting inks and films, similar to those in use on some U.S. currencies.

2. Microtext: the microscopic print in these background layers are only legible under certain magnifications.

3. Holograms: useful for instant visual verification.

4. Ultraviolet inks: popular on national ID cards, this technology only shows up under a UV light.

5. Retroreflective images: these images only appear under a focused light source.

6. Floating images: these images seem to be suspended or "float" below the surface of the card.

Lenticular printing, the process whereby different print layers make an image appear to move when the card is tilted, has largely been used for marketing purposes. But it also may have a role in the multilayered approach to card security.

To sum up, credit cards of new generation contain some elements of computer architecture. This will help people to make financial operations easier and secure.