

Biometrics and Smart Wallets  
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by Jamie McMahon

A new device produces cards on the spot, renders bar codes

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While the United States has not adopted biometrics with all the force once projected, all the coolness has not been completely sapped from the financial industry's use of this technology. Take Jonathan Ramaci, for example.

Ramaci and his team have been working for years on the [iCache](#), a digital wallet that he believes will replace the "equivalent of a floppy disc" in which we currently store our cards and money.

The iPod-like device stores a single card, which can be rendered as any credit card the owner selects. Simply choose on the iCache's screen which card you'd like to use, and the card is dynamically altered as you slide it out. It can then be used at any point of sale terminal.

"What we did was take something that for the past 40 or 50 years hasn't evolved—and that is the wallet and payment methods," Ramaci says. "People today walk around with what are essentially dumb wallets, so we set out to find a way in which you could take analog information, digitize it and consolidate it on one easy-to-use consumer device that is intelligent."

The iCache can also render bar codes on a second, non-LCD screen. Or if a user is shopping on line, it plugs into a USB port and automatically fills out order forms. (As an alternative, it can display a picture of the card with its number and CCV code.)

And the iCache's security depends entirely on biometrics. The device includes a finger scanner, which verifies the user's identity each time he or she wishes to make payment or access information.

"We decided to include the biometrics part because, unlike with music or something like that, we're dealing with the most sensitive information that consumers own," says Ramaci. "The iCache has applicability in payments, but also in portable electronic health records and other applications, so we really had to focus in on security. The biometric component creates what really is a security perimeter inside the iCache itself that ties an individual to that device, and in turn ties any information in the device to that individual."

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