

Technology Today

Alan Pierce

Your Personal ATM

ONCE mentioned to our daughter that we needed to stop at an ATM machine for some money. Stacey asked, "Are we going to ask our Auntie Em for money?" Since that day we have affectionately identified ATM cash withdrawals as money from Auntie Em.

An electronic version of Auntie Em could soon reside in your home. VeriFone, Visa USA, MasterCard International, Chase Manhattan Bank, and Citicorp have recently launched a joint venture to test a personal digital cash machine on the Upper West Side of Manhattan. The slot in the VeriFone Personal ATM[®] machine shown in the photo doesn't spit out cash. Instead, it loads digital cash and personal information onto a smart card that you can use in place of cash for everyday purchases.

This VeriSmart[™] card is a major advance over currently available (American) digital money cards, since the VeriSmart card can be refilled when cash is depleted. In the past, Americans haven't taken to smart cards at the same rate as Europeans. A refillable Mondex Smart Card was introduced in Swindon, England, in July of 1995. Since then, Europeans have been able to refill smart cards by slipping them into special screen phones located all over the Europe.

The advanced state of the European Smart Card probably results from less European interest in credit cards. Digital money cards are cash on a plastic card. Therefore, the most critical difference between digital money cards and bank card ATM withdrawals is the fact that you don't need any credit history to acquire a digital cash card.

Our currently available Visa Cash card contains a read/write chip similar to that found in a VeriSmart card. However, the read/write data chip of the old card was designed to only perform subtraction. The new chip holds much more information than a credit card magnetic strip with computer-enhanced security. The chip can perform multiple applications and adapt to new applications as they develop. Software for new applications will transfer to the card during the normal downloading process currently used for money transfers.

This new system is called an open architecture system because it allows other companies to develop uses and hardware for the card. In time, you will be able to



Photo courtesy of VeriFone Inc.

give your child a card that can only be used to purchase school lunches or make phone calls home. Your older child's card could be limited to book purchases, phone calls home, and tuition payments. In combination with its digital cash function, the card could hold all kinds of personal data, including medical records.

The members of this current joint venture hope to create a standard that will

allow for inter-operability for all kinds of applications. By combining 1997 US Census Bureau figures with Dataquest data, VeriFone projects that 3.4 billion smart cards, manufactured by different companies and backed by different banking institutions, will be in use by 2001. If this projection holds true, there will be the equivalent of one smart card for every two people on our planet. Can printed cash survive the present march of technology?

Recalling the Facts

1. What is the difference between digital money and printed money?

2. What is the difference between digital cash on a smart card and cash from an ATM machine?

3. Describe at least three ways that a VeriSmart card differs from a credit card. **TD**

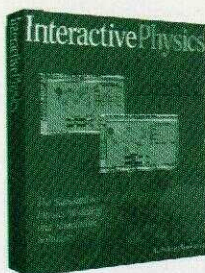
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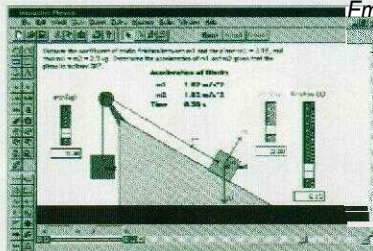
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