

Finding a Balance between Security and Convenience

Any fraud fighting technology must be easy to use for credit union members and employees, or they will not adopt it. The goal is to find the best possible security that causes the least amount of intrusion and behavioral change to the member and consumer. Beyond that, it is critical for any fraud technology to be flexible enough to work across multiple lines of business, such as online banking, branch banking, point of sale, ATM, etc. – which ensures that your credit union receives the biggest bang for the buck in terms of both ROI and effectiveness.

Everyone knows that credit card skimming fraud is a huge problem (to the tune of \$1.2B a year in losses), but debit card skimming fraud is also a mushrooming problem and has enabled the fraudsters to walk away with cash from ATMs. Consumers have a great deal of faith in debit cards, so credit unions cannot afford to suffer debit card breaches because the consequences are just too great.

Back in 2003, MagTek introduced MagnePrint™; a card authentication technology that will detect skimmed or fraudulently altered cards – ANY magstripe card. This technology essentially captures an intrinsic and unique magnetic signature that is analogous to that of a human “fingerprint” or “DNA”, from any existing plastic card with a magstripe – no change is needed to the card or the encoding/personalization of the card. MagnePrint validates the authenticity of a card by reading the unique pattern of magnetic particles sealed on the magstripe. Those particles create a permanent and repeatable signal that cannot be duplicated.

Using our low cost MagneCrypt™ readers, members can then register their debit/credit cards with the credit union’s database, where the card data will be stored in an encrypted database. This ensures that it would be impossible for a cloned card to be used in place of the real registered card wherever MagnePrint-enabled readers are installed: at the branch, point-of-sale terminal, ATM, or in the members own home or office for Internet banking.

In order to streamline the adoption process for MagnePrint™ in the marketplace and to comply with FFIEC Strong Two-Factor Authentication guidelines, we have created an entirely new company called MAGENSA™ LLC. This company is a Trusted Verification Authority (TVA) providing real-time remote-hosted credential authentication services. This is an outsourced service that permits credit unions to meet FFIEC guidelines by integrating multi-factor authentication and data encryption capabilities into their current systems without the need for substantial financial costs or changes to their existing processing infrastructure.

The beauty of this system is that it provides a hosted credential authentication service that is easy to implement and encrypted end-to-end. This means that sophisticated “Man-in-the-Middle” attacks won’t work, and that simple credit/debit cards are transformed into secure tokens. MagnePrint™ enabled MagneCrypt™ readers come in a wide variety of low cost form factors. These readers are plug n’ play utilizing the standard USB connectivity and there are no drivers to install. Online bankers simply swipe their card and are instantly validated. This is exactly the kind of proactive security that credit union members are looking for today, and MagTek® is leading the way in delivering convenient fraud prevention technologies.



Kiran Gandhi
Vice President

Kiran Gandhi is Vice President of Business Development for MagTek®. During his 12 year tenure at MagTek®, Kiran has held many influential positions, and most recently, Kiran has served as the Program Manager for the MagnePrint™ Technology for the past six years. Within this period, he took MagnePrint from an unknown concept technology to being a most talked about “cost effective risk management tool” for the payment card industry. Prior to joining MagTek®, Kiran has been associated with credit, debit, and stored value card industry in various executive management positions. Kiran is a member of EFTA-Electronic Funds Transfer Association, ATMIA-ATM Industry Association, NACHA and NACCU.

