atm marketplace

Increase ROI with Remote Key Loading

Implementation of new security standards help prevent crime, but can be expensive. Remote key loading offers peace of mind without a major investment.

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ATM deployers reeling from the high costs of security upgrades are wary of the next step. Implementation of Triple Digital Encryption Standards, PCI compliance and other regulatory schemes all add up. Certainly enhanced security is worth the investment, but it would be nice to invest in an upgrade that offered a significant return on investment beyond not being victimized by criminals. Remote key loading offers a solution.

What it is

Remote key loading (RKL), a security enhancement that's growing in popularity, offers a significant return on investment. Simply put, RKL is the automated handling of master keys for ATMs. Master keys are the codes that are used to encrypt a customer's personal identification number at the ATM keypad. Various jurisdictions mandate changing the master encryption key on a regular basis, as often as once a year or in the event of even a suspected breach.

In locations that require frequent changes, complying with mandates represents a significant expense. For instance, financial transaction networks in the United Kingdom

Remote key loading allows new keys to be loaded remotely via TCP/IP or dial-up connections, frequently using an encrypted PIN pad. The technology saves time and human resources.

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require ATMs to change cryptographic keys on an annual basis, making RKL technology a cost-effective solution. In Canada, the timetable is two years. Payment card standards in many other countries, Australia and Germany among them, allow for RKL as well.

Prior to the introduction of RKL, ATM operators were required to send two

engineers to visit a machine so that each one entered only one half of the master key, ensuring no single individual had the full key code, costing deployers money and human capital. And for deployers with networks in the thousands, uploading keys manually represents a significant expense. There's also the opportunity for fraud, as technicians may be vulnerable to criminals or perpetrate a scheme of their own.

Remote key loading, on the other hand, allows new keys to be loaded remotely via TCP/IP or dial-up connections.

"RKL eliminates the risk in human handling of key information," said Torbin Ellgaard, product manager for Cryptera, a Glostrup, Denmark-based manufacturer of encrypting PIN pads. "All information is safely trans-mitted online using secure cryptographic methods to protect and distribute keys."

Cryptera launched its RKL solution in 2008, allowing existing devices to be upgraded and offering RKL-capable components to manufacturers. Depending on the vintage of the PIN pad and the ATM, RKL can be implemented with a software upgrade. That way deployers can quickly take ad-vantage of the savings.

"There is a big cost reduction because of

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the practical considerations of the tradi-tional approach where two persons had to go to each ATM," Ellgaard said. "Anyone can see how that would be a costly proce-dure."

Cost savings

The savings for implementing RKL depends on many variables. In the United States, a visit to an ATM by a technician can cost between $75 and $100. Consider the cost of changing the key every two years over the life of an ATM. Say it costs $150 to change the keys every two years, and an ATM has a lifespan of six to eight years. That's a savings of $450 to $600 per machine. For owners of large fleets, the savings can be considerable.

Everlink Payment Services Inc., a Canadian payment processor, also estimates signifi-cant cost reduction from RKL. Everlink

Benefits of remote key loading

By replacing traditional dual control and split knowledge — the manual approach to key installation and maintenance — with RKL, key management becomes more:

➢ Cost-effective   ➢ Efficient

➢ Secure   ➢ Simple

estimates that for an ATM deployer with five units, the cost for a traditional physical distribution is $900. Compare that with an RKL expense of $750 for the same five units. That represents a savings of $150, or 17 percent. Scale that up to a network of 45 ATMs. For that network, the cost of a traditional key distribution is $6,900. With RKL, the cost drops to $4,500 for a savings of $2,400, or 35 percent.

Adding RKL capability to an ATM fleet can be an affordable option. RKL capability resides in the encrypting PIN pad, so the decision to replace or upgrade a fleet to RKL depends on the age of the machines.

"The EPP has to be modern enough to handle the RKL process, because you have to have key handling and key generation within the EPP," Ellgaard said.

With simple software upgrades, some EPPs may be RKL capable. Otherwise, an upgrade to an RKL-capable PIN pad may be required. In the case of much older machines, replacement of the entire unit may be necessary. RKL has been implemented in a variety of the most popular ATMs used in off-premise installations, such as Nautilus Hyosung, Triton and Tranax.

As requirements increase around the globe, RKL represents a cost-effective method of enhancing security for ATM deployers.

__About the sponsor:__ Cryptera is one of the world's leading providers of high security payment solutions. The company specializes in encrypting PIN pads for ATMs and kiosks, unattended payment solutions for self-service applications and EMV-compliant POS terminals.