

Implementing EMV
at the ATM

WHAT YOU NEED TO KNOW




EMV migration of ATM is mandated by Central Banks of almost all countries and more than 80 countries are now in various stages of EMV migration. In India, ATM migration is underway and all new ATMs are mandated to be EMV compliant, including micro-ATMs. Existing ATMs are being migrated to EMV acceptance terminals in a phased manner.

Key Challenges

While migrating ATMs to EMV, there are some key issues that banks have to address:

- Sorting through countless hardware and software configurations – each combination has different requirements for EMV enablement
- Identifying specific pre-requisites before migrating to EMV per brand requirements
- Addressing the needs of all payment brands (Discover, Visa, Amex, Rupay, JCB, MasterCard etc.) and their dependencies, before rolling out their ATMs for production
- Choosing between automated vs. manual testing solutions for terminal integration certification
- Selecting between physical cards vs. soft cards for certification
- Deciding whether to bring a consultant on board to manage the migration and certification

At PayHuddle, our consultants have helped a multitude of banks in India, Sri Lanka, and Nepal with their ATM migration to EMV across various payment networks – MasterCard, Visa, UPI, JCB, RuPay, Discover, and Amex among others. We have loads of field experience that comes in handy while migrating to EMV and drastically reduces the bank's time-to-market, while improving the reliability and confidence of deploying terminals.



In this article, we address some of the common challenges that our consultants have faced on the field that you need to be aware of.

Challenge 1

The complexity of coordination with multiple stakeholders hampers successful migration and certification.

The banks need to coordinate with the host vendor, terminal vendor, and the payment brands. When the number of terminals and payment brands increase, this increases the complexity of interactions. Preparedness of each of the stakeholders also affects project planning.

The consultant can easily identify the priorities and ensure that the banks' time-to-market is not compromised.

Challenge 2

Side-effects of major kernel updates during migration are not considered.

If a bank opts for multi-brand terminal integration certification, any major updates to kernel will nullify the previously acquired certification, rendering it invalid.

The consultant understands this process and ensures that either major kernel updates are not initiated, or if it is unavoidable, then brand certification is repeated for all the payment brands.

Challenge 3

Data errors occur even during successful transactions.

For instance, while performing withdrawals from an ATM, the machine dispenses the money but the terminal transmits the amount field with a zero value. The data is not correct though the transaction is successful.

The consultant would be able to perform a root cause analysis and figure out which stakeholder is responsible for the fix.

Challenge 4

In an environment which goes through changes during integration, host and terminal vendors need help in identifying the impact of their change, especially when they work in silos.

Vendors typically do not understand the impact of the changes that they make on the transaction flow. Host vendors generally have strong knowledge in ISO—not EMV, whereas terminal vendors usually have strong knowledge in EMV—not ISO. This results in an incomplete understanding of the impact on the overall transaction flow.

The consultant brings skills in both ISO and EMV and looks at the holistic impact of fixes on the transaction flow. This accelerates the process of migration by identifying the challenges early on in the cycle.

Challenge 5

Planning gets affected when the banks look at certifications from multiple payment brands.

When the bank carries out network testing, all other forms of testing have to be kept on hold as the testing environment mode is changed. As a result, everything else has to wait. Many a time, MasterCard NIV certification impacts Visa GCT certification, which probably was completed earlier and the resulting dependencies now need to be addressed. When different teams handle these certifications, it results in field issues.

The consultant understands the impact of multiple brand network testing on each other and proactively addresses all challenges.

Challenge 6

Understanding network requirements is a problem.

Some vendors hard-code the network requirements, which reduces flexibility when the banks look at multi-brand certification.

The consultant has the required knowledge to coordinate with the vendors and guide them to address issues without hard coding the requirements.



Challenge 7

Blocked cards get processed as a fallback mechanism.

More often than not, blocked cards are accepted through fallback mechanisms as the terminals do not identify the blocked card and abort the transaction. Typically, the banks are not aware of such scenarios.

The consultant proactively looks at these use cases and gets the terminal vendor to identify the blocked card and reject transactions.

Challenge 8

An understanding of the importance of EMVCo L1/ L2/ PCI PTS/ TQM certification validity and banks business needs tied to it.

Banks find it difficult to verify and authenticate certificates, for the features they expect in the terminal, and its validity. This becomes a bottleneck in kick-starting the migration project.

The consultant understands certification and its validity procedures and makes it easy for banks to complete the migration without any glitches.

Summary

There are a number of challenges that an acquiring bank faces while migrating their ATMs to EMV. It is immensely useful to take the help of a seasoned consultant to plan the project so as to ensure that the time-to-market pressures are met. With a consultant, the acquiring bank can rest assured that the needs and requirements of all the payment brands are addressed holistically and no field issues would be encountered.