



Your
Trusted Partner
Technology



EMV

C O N S U L T I N G

From Awareness to Implementation

The Business Challenge

Migration to chip technology and EMV poses many challenges to your organization, not only will the cards and the terminals change drastically, but other components and processes that are an integral part of the card payment environment will change as well, including your host systems, card personalization processes, risk parameters management, terminal databases, cryptographic keys management and exception handling processes. All these changes must be carefully identified, planned, and correctly managed.

To assist our customers in their successful EMV migration plan, CIT Global has packaged 8 consulting services to ensure that the proper implementation takes place for the best interest of the bank, least implementation time and best time-to-market.

CIT Consulting Offerings

EMV Vision Development

The migration to EMV does have large impacts on many areas inside a financial organization; it impacts the organization's business, policies and operations. In order to realize the best return on the investment, it is of paramount importance to ensure that the proper vision statements have been developed and communicated, to properly guide the institution and obtain the required support from all levels of the organization.

It is critical to define the overall vision of the organization in relation to how EMV will be managed and deployed; this vision will serve as the guidelines for the definition and implementation of all the subsequent steps. To assist our customers in their successful EMV migration, CIT Global offers consulting services that ensure the proper vision statement is formulated for the organization. The main areas covered during this exercise are:

- EMV migration vision development
- EMV requirements definition
- Possible migration options definition
- Agreement on the high level migration approach

This consulting package will deliver to the organization a report detailing the results of the process and ensuring that the organization is well equipped to address the challenges related to the implementation of such a large initiative.

www.citglobal.com



Differentiation Strategy

While every bank can choose to run the EMV migration program with a focus on a single EMV application, and with minimum changes needed, as just a compliance case, there are other differentiation techniques that could be implemented to allow the financial institution to have a real and unique competitive position within its market.

The EMV specifications itself do cover a large set of functionalities, giving the organization the option to implement the ones that cover the minimum requirements as a base, along with the ability of providing other value-added services.

To receive higher returns on their investments, financial institutions need to formulate the appropriate market differentiation strategy for implementing EMV along with its value-added services.

CIT Global has developed a specialized consultation package to guide and assist the financial institution in developing this key component of the EMV migration project. Some of the areas covered are:

- Card applications definition (card present & not-present)
- Card selection
- Risk parameters definition and management

This consulting package will deliver to the organization a detailed report detailing the results of the process and the associated decisions and recommendations, ensuring that the organization is well equipped with a roadmap to address the challenges related to the implementation of such a large initiative.

Chip Deployment

The EMV chip cards are the main component for the implementation. As they impact the customers dealing with the organization, they should be deployed in a manner that achieves ultimate performance, acceptance, and market share.

The main objective of such a critical exercise is to well define the chip deployment strategy. The suggested strategy would evolve around making the bank services highly secure, flexible and rewarding to use, thus would be in a position to offer superior value propositions and guarantee a close to zero liability and zero fraud to its stakeholders while allowing its customers to express themselves and choose applications to satisfy their life style.

This consulting assignment addresses both the issuer and acquirer aspects of the organization, analyzing the following critical areas, and providing the related recommendations.

- Card platform selection
- Card personalization options and definition
- Card issuance and management
- EMV scripting engine
- Multi-applications impact

Operational Impacts Analysis

The implementation of EMV impacts many processes in the organization, from both the business and technical points of view. This consulting assignment ensures that the bank has analyzed all the related areas and has defined how these areas will be addressed as part of the overall implementation plan.

This exercise is very vital for the bank growing business as it sets the needed strategy for the marketing campaigns needed for the launching of EMV, how customer service will be handled now that the new concept of chip cards has been introduced to the customers, how training will be given to customers and merchants, in addition to setting the branches role in relation to chip cards, such as allowing for instant issuance at the branch level, or maintaining the centralized approach.

Thus, the main areas covered during such assignment are:

- Debit and credit cards operation
- Dispute resolution operation
- Customer service
- Marketing and promotions
- Branches Role
- Merchants
- Training
- Legal agreements
- Coordination of card schemes

Issuer Gap Analysis

Given this effective count down to EMV, it is likely that there will be a rush in the effective EMV implementation worldwide, especially on the issuer side since they bare most of the risk, thus leaving a real squeezing time for consulting and technology firms that can be devoted to each Issuer for providing a good level of service and much more.

Issuers by all means should consider moving quickly to EMV. It is a reality that the last card issuers to migrate will inevitably be the concentrated target of fraudsters as the strong security of EMV smart cards closes the window of opportunity for crime.

To avoid huge project risk, such as re-issuance of cards, each of the issuer affected areas should be properly analyzed and addressed, to ensure that they meet the EMV specifications, and that they are in compliance with the organization EMV vision and strategy. This is KEY to guaranteeing the successful migration.

In order to assist financial institutions to properly address these areas of the infrastructure, CIT Global provides a structured consulting package that analyzes in details each of these areas and provides the related recommendations. The following are the addressed components:

- Authorization systems
- Card personalization
- Card issuance and management
- Clearing and settlement
- Security
- EMV scripting engine

At the end of the consulting assignment a detailed report specifying the impacted areas and the related modifications that need to be implemented by the organization in order to successfully implement the EMV issuer functionalities.

Acquirer Gap Analysis

EMV impacts many areas of the acquirer infrastructure, leaving behind a diversified scope of the required infrastructure changes. Each of these areas needs to be addressed and analyzed in detail to determine the available options and decide on the best approach for the organization to implement the required functionality.

By using a unified approach, the organization will ensure that the implementation is smoothly achieved and at the lowest possible investment costs. The impact on each of the affected areas needs to be properly analyzed, determining how best to take advantage of the EMV functionality options and mandates, while at the same time managing the level of investment and increase the ROI value to the organization.

CIT Global offers the consulting services to analyze in details the following areas and provide the related recommendations:

- Transaction switching systems
- Clearing and settlement systems
- POS devices
- ATM devices
- International schemas interfaces

At the end of the consulting assignment, a detailed report will be developed specifying the impacted areas and the related modifications that need to be implemented by the organization in order to successfully implement the EMV acquirer functionalities.

Security Consulting

Successful organizations are striving to introduce process improvements to achieve operating efficiencies, manage operational risk, deliver innovative business solutions and enhance customer service. CIT Global considers this area a very critical one that affects several strategic decisions, such as card size and platform selection, personalization options. The main objective of such consulting is to decide upon Security policy guidelines and Implementation options

This consulting package will cover the following points;

- EMV Security concepts
- VSCD and M-Chip EMV security requirements
- Multos and Open Platform Security requirements
- Security implementation options
- Security implementation impact

Implementation options will evolve around the following main points;

- Key management requirements
- Cryptograms generation
- Data authentication; SDA, DDA, DDA/AC
- Offline PIN validation
- Secure messaging and scripting

Implementation Impact will evolve around the following main areas;

- Current processes and operations
- Current infrastructure
- Cards and devices selection
- Key length selection in relation to card life span, application expiry dates, etc...
- Data authentication impact for each option; SDA, DDA, and DDA/AC
- Rollback procedures in case of keys compromise
- Master Keys and sessions keys derivation impact
- Overall key management impact; from determining the number of keys used, to keys length, to keys generation, expiration, etc...
- Offline PIN handling impact
- Secure messaging impact

Implementation Plan Development

EMV consulting will be considered complete once a definition of the suggested EMV implementation strategy, supplemented by a roadmap for ensuring the successful implementation of the project, is put in place.

The EMV program is affecting most of the entities within the business. Hence it is important to have a master project plan, with clear scope, success criteria according to agreed upon time frames, overseeing the entire project involved departments which can have sub-projects with low level implementation details according to the department role within the project. While developing this project plan and due to the existence of lots of factors and external dependencies, good level of focus should be exerted on project risk management (monitoring, control and response planning).

This consulting exercise will aim to deliver the EMV migration plan after a detailed infrastructure and processes analysis for the bank environment has been established. These components will help the bank in assessing the current situation, the activities prioritization required to migrate smoothly to EMV, along with the required staffing, without impacting its current ongoing business.

Based on the information collected and the related recommendations from previous consulting exercises, the required detailed implementation plan will be developed ensuring a comprehensive approach, while at the same time addressing all the bank's requirements, and ensuring the completion of the project within the specified guidelines.



Value Proposition

Over the last few years, CIT Global has been involved in different projects in the areas of EMV and multi-applications smart cards implementation. We were involved at different levels and stages of these projects, providing our customers with a complete set of services to address their needs and ensure the success of these projects.

We believe that our international experience, along with our local presence is the main key differentiator. Our experience and expertise cover both the business and technical aspects of the implementation projects. We make sure that the proper synergy is maintained and guaranteed to deliver a complete solution that exceeds the customer requirements.

CIT Global's business strategies, state-of-the-art standard operation methodology, technology partners, along with our experienced consultants backed with hundreds of man/years of international e-Payment delivery expertise, will deliver the following benefits to our customers:

- CIT is a unique End-to-End secure ePayment solution provider, who understands the payment industry and the implications of new technologies and trends implementations.
- CIT provides focused transfer of knowledge based on our world class expertise with various EMV, e-Payment, multi-applications smart cards and PKI technologies projects.
- CIT has the biggest pool of Payment solutions' consultants and resources in the Middle East region, as well as around the globe. This large pool of industry experts in the EMV and smart card areas ensures providing a strong knowledge base to capitalize on in the deployment of such project. This will provide the bank with an experienced and qualified pool of resources that can be deployed to address different phases on the project.
- CIT expertise, commitment to the Gulf Region and our regional experience, outline our high level of functional fit and our ability to scale with the customer organization as the business & technical requirements develop. Thus helps the bank to achieve several business objectives such as quick wins, fast time-to-market, immediate & creative new products, etc
- Over a decade of proven record of highly successful multi-product / multi-vendor international projects, focusing on world-class product sets, with services spanning from assessing business needs, to all aspects of project life cycle and project management.
- Providing high availability and prompt local customer support and after sales services through CIT Egypt based e-Payment Center of Excellence, in addition to Dubai and Riyadh offices, ensuring continuous services availability.

Your Trusted EMV Partner

CIT highly specialized team plays a key role in helping banks make timely, cost-effective choices. With the benefit of global experience and local expertise, CIT is practiced at reviewing business models, understanding decision drivers, and developing successful solutions. Using current methodology and tools, consulting teams help clients make choices according to their own business model.

CIT also has been consulting a number of banks in their decisions relating to EMV. CIT serves both the global and regional customers with our network of technology and integration partners. We do realize the importance of local service, ensuring continuity and security for the bank. CIT stands as your reliable & competent local partner.

CIT CONTACT

To Receive More Information About
Our Offerings, Please Contact Us At:

sales@citglobal.com