

Gemalto Consulting Services

Take control of your smart card implementation



FINANCIAL SERVICES & RETAIL > SERVICE

ENTERPRISE

INTERNET CONTENT PROVIDERS

PUBLIC SECTOR

TELECOMMUNICATIONS

TRANSPORT



Gemalto Consulting Services

||||| Experience in latest technologies for successful smart programs



Smart cards, already part of our daily life

We are constantly looking for faster and safer means to make our day-to-day easier. Smart Card is today considered as the technology that can grant this wish, and it is spreading in all our activities. Every time that we use a GSM phone, a chip banking card, a corporate contactless badge, a contactless transport card or an e-passport to go through customs, we use a Smart Card. All standards in payment, security and transport business now introduce the Smart Card technology at the end user level.

In the payment industry, International payment associations are leading chip migration in both contact (EMV) and contactless environments, putting a standardized Smart Card in the hands of every cardholder, as well as standardized readers on the field. Other industries are now capitalizing on this standard to deliver tailored additional services to their users.

Smart Card migration for Financial institutions

The main drivers behind this sweeping change are either a determination to

reduce card fraud and related losses, or a wish to increase customer retention and service.

The migration to chip-based credit and debit cards is far from just a mandate. This new, global standard is also the gateway to a promising market of expanded services catering for today's increasingly sophisticated cardholders. By making the switch, banks will maximize the advantages of chip-based technology. You will be able to provide exceptional levels of transaction security while greatly enhancing your offerings with value-added services such as loyalty, pre-paid products, secure authentication for Internet banking, e-commerce and smart ticketing schemes.

Your customers will feel reassured and pampered, as you will be able to deliver personalized services through secure and convenient applications.

Making the most of smart payment

As creators of much of the technology behind EMV, e-purse, contactless and mobile payment, in Gemalto we know just how smart cards can be made to work for your organization.

We will discuss with you, to be aware of your problems and ambitions. We will make your current project work and

support your innovative projects. The crucial question when facing chip implementation is to know what you want to do with smart card technology. We will work with you to analyze your current infrastructure, business model and customer-base. We will review your chip strategy with you, bearing in mind both current requirements and future ambitions. We will help you to consider new products and services, to define which debit/credit applications and e-commerce business functionality you require. We will help you to understand the impact of chip on your infrastructure and business processes:

- > Cards
- > Acquiring systems (ATM, POS, network)
- > Issuing systems
- > Authorization system and clearing system
- > Card Management systems

We can transfer the know-how to your IT teams, or provide you with a turnkey issuance solution while you focus on your core business.

By delivering our expertise directly to you, we will significantly reduce your costs, minimize project risk, and optimize project rollout timescales.

Discover opportunities with smart card systems

To understand the full potential of smart cards, and get the best from the technology, financial institutions need to move from buying cards from a vendor to developing a relationship with a genuine business partner.

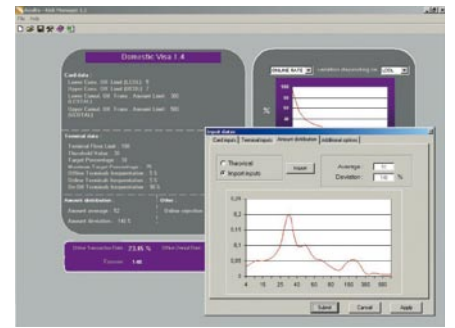
Gemalto has a proven track record in worldwide implementation of smart card migration projects in industries as diverse as Finance, Mobile Communications, Transport and Network Security. We organize customer workshops to review existing smart card deployments around the world, brainstorming sessions to identify new opportunities and offer pilot implementations of new technologies like biometrics, smart-ticketing, contactless or mobile payment.

Training and tools for a successful deployment

The key factor for success is the hands-on expertise of your own teams. We design and animate workshops to transfer our know-how on smart card technology to your operational and management teams. We have also developed user-friendly tools to support you in:

- > Establishing the cost of a migration plan
- > Optimizing EMV risk parameter on the card
- > Manufacturing test cards
- > Testing EMV cards in step-by-step Transaction

Our training modules are always tailored to the audience profile in order to balance the right level of business and technical information



Our generic offer encompasses:

- > Payment cards as a marketing tool
- > Financial Transaction Security (via POS, ATM or Internet)
- > Risk Management Parameters
- > Acquiring System (POS, ATM, acquiring network)

Gemalto Consulting Services Offer

Our Objectives

Keep you informed of latest technology evolution

Transfer experienced knowledge on implementation to your teams

Support you from project definition until implementation

Analyze specific issues and innovative opportunities

Our actions

- Market studies about pilots and implementation
- Specifications writing or reviewing

- Standard trainings
- Dedicated trainings
- Workshops
- Brainstorming sessions

- Business case, implementation plan
- System Specifications
- Punctual expertise (remote or local)
- Dedicated resource (remote or local)
- Project manager (local)
- Troubleshooting assistance ...

- Security assessments of card systems
- Contactless Pilots
- Mobile Payment architectures
- EMV implementation at ATMs

- > Authorization System / Clearing System
- > Card Issuance System
- > Card Profile definition (Visa and MasterCard)
- > Payment system certification
- > Contactless and Mobile Payment

Technical expertise and support during implementation

Our technical expertise embraces security, chip card standards – including EMV and contactless –, chip card design, acquiring systems, card management and issuing systems, as well as banking transaction processing.

While working with Gemalto, you can be assured that our expertise will be available throughout the project up to the roll-out.

We can:

- > Clarify or complement information given during the training program
- > Write suitable technical specifications according to your requirements
- > Design your new systems
- > Share experience of similar projects
- > Shorten time-to-market by providing technical assistance during development
- > Define custom tests, support validation and acceptance procedure for the developments
- > Provide support for troubleshooting and problems solving during project launch

Consulting and project management worldwide

Gemalto's unrivalled expertise in payment systems means that no one

is better placed to translate your business and functional requirements into a successful migration.

Through detailed assessment of your business drivers and gap analysis we craft a unique and winning implementation strategy accordingly.

Smart card technology is evolving rapidly; we perform specific studies to help you take informed decisions.

With our project management and consulting skills, we can add our strengths to your project management team. We can either assist your own project manager, or provide you with all the local resources you need to handle your smart card migration.



■ Typical questions we can help you answer

Here are some we have already handled

- > What do we need to do to support Change PIN in our ATMs?
- > During pilot tests with personalized cards at selected acquirer terminals, our authorization system indicates that the cryptograms received are wrong. What is the source of the problem?
- > I am using SDA cards, how will migration to DDA impact my system?
- > We are facing a fraud problem with our Internet Banking system. Can we take advantage of EMV implementation to increase security?
- > We are a Service Bureau: what actions do we need to take and what investments should we make, to upgrade our system for chip card issuance i.e. data preparation, card personalization, and certification?
- > What will be the major impacts of EMV on our bank infrastructure, and which departments shall we involve internally?
- > We are moving to EMV, and so are our competitors, what are our best opportunities for capitalizing on the EMV infrastructure to stand out from the crowd?
- > How to implement pre-paid products? What will be the impacts?
- > About mobile payment and NFC technology: What is the security level of a mobile transaction? How to manage offline/online transactions? What interface should we design?

■ **Some of our References**

Algeria, Austria, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Denmark, France, Gabon, Germany, Greece, India, Indonesia, Ireland, Italy, Ivory Coast, Japan, Malaysia, Mexico, Morocco, The Netherlands, Nigeria, Norway, Oman, Poland, Portugal, Romania, Russia, Senegal, Singapore, South Africa, Spain, Switzerland, Thailand, Turkey, UAE, Ukraine, UK.



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