

**MODULAR**  
MODULAR CORP (M) SDN BHD  
Malaysia  
&  
MODULAR TECHNOLOGIES INDIA PVT LTD

STAY SECURE... STAY SMART...

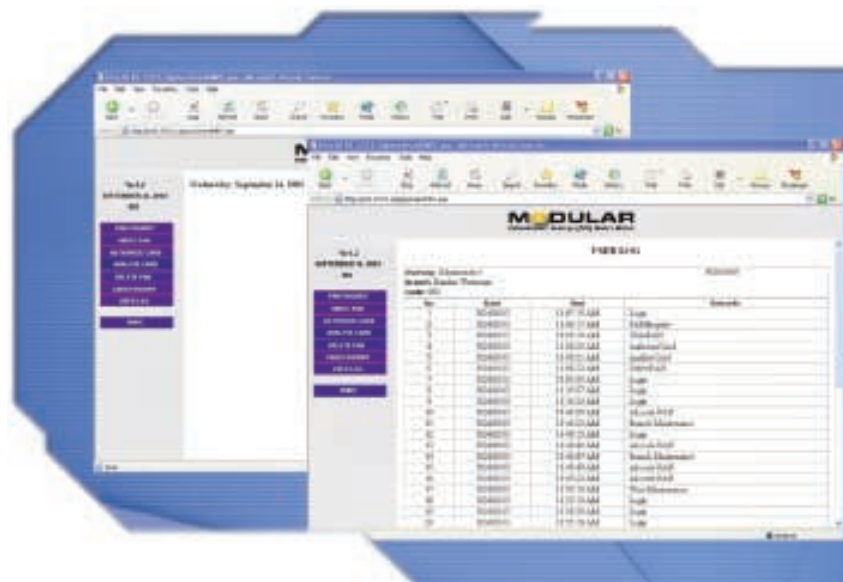
## Smart Card Management System

Modular Corp has developed a Smart Card Management System which allows for the implementation and management of post issuance applications on existing smart cards.

Post Issuance integrates with and compliments existing systems to activate new applications on smart cards, including Malaysia's Bankcard. Modular Corp's Smart Card Management System helps banks get a return on their investment by taking advantage of an existing smart card's full micro processing potential and maintaining its live functionality.

Through a series of logical steps, financial institutions can enhance their efficiency and services without disrupting current operations. These new services – which could include providing additional features to the Bank's own Bankcards or installing banking applications onto other 3rd party smart cards – make a Bank more competitive as they raise customer satisfaction and attract new customers.

A full smart card system solution, the Smart Card Management System also provides vital services such as troubleshooting features and management services.



## THE SERVICES

**Consultancy** Modular Corp guides the Bank through the implementation process from application selection to activation.

**Post Issuance Service** activates add-on applications for existing cards.

**Card Services** The Smart Card Management System manages the registration, inventory and secure distribution of Bankcards.

**Troubleshooting** An integrated system tool provides troubleshooting for Bankcards.

## SYSTEM: HEADQUARTERS

In charge of all system administration, including backup and user maintenance, Headquarters also houses the Secure Access Module (SAM), a dedicated microprocessor unit that enables active authentication.

**Blocking facility** Ensures secure distribution of Bankcards by preventing unauthorised use.

**Central monitoring** Includes an online feature for status inquiries and reports and makes stock level information from all branches available at the Headquarter.

## SYSTEM: BRANCH OFFICES

Issue the smart cards with personal and pin information encoded on the chip.

**Post Issuance** Activates new applications with Post Issuance (either over the counter or at a terminal such as an ATM or dedicated Kiosk)

**Blocking and Unblocking** Prevents unauthorised use of cards.

## IMPLEMENTATION STRATEGY

The strategy takes several steps:

### Identify the add-on application with

**Post Issuance** Determines whether the new application is the Bank's own product or whether it is a joint product under a strategic alliance with a 3rd party.

**Post Issuance Activation** Determines whether the cardholder will have to activate the new application at a branch or co-issuer's outlet, or whether they will be able to activate it at their leisure at an ATM or Online Kiosk.

**Integration Plan with Bank's Legacy System** Determines the functionality requirements. At this stage the Bank picks and chooses Smart Card Management System components to compliment the Bank's existing card management system. This is also the stage at which system requirements and issuer/cardholder benefits are outlined.

**Realizing Bankcard Post Issuance Capability** Enables the add-on application on a live bankcard as determined at the Post Issuance Activation Stage.

**Complementing Bank's Card Management System** Provides for central monitoring of Bankcard inventory and secure deployment of Bankcard to bank's branches for instant issuance without PIN mailer process.

**BRIEF BACKGROUND** With a strong commitment to R&D, Modular Corp Sdn Bhd specializes in Smart Card technology and related application development as well as systems training and consultancy services.

Modular Corp's position as the pioneer within the smart card technology sector has been strengthened by the completion and implementation of several "world's first" applications including:

**1991** Launched the world's first application to carry customer's savings account passbook information on smart card for Bank Islam Malaysia Bhd (BIMB). More than 10 years later, that technology remains the most reliable and secure form of electronic banking in the world.

**1997** Launched the world's first multipurpose smart card, ID-Mas, demonstrating personalization, payment, security access, medical data, visitors' log, and immigration system.

**1998** Implemented the world's first multipurpose smart card project at Universiti Putra Malaysia.

**2002** Under the PMPC Project, banks commence rollout of smart cards to their customers.

**2003** Number of smart cards delivered to Malaysian banks reaches the 9 million mark.

MODULAR CORP (M) SDN BHD (162691-D) Unit L4-E-3B, Enterprise 4, Technology Park Malaysia, Bukit Jalil, 57000 Kuala Lumpur, Malaysia.  
Tel: (6)03-8996 9001 | Fax: (6)03-8996 7600 | enquiry@modular-corp.com | www.modular-corp.com

**MODULAR TECHNOLOGIES INDIA PVT LTD** Indian Corporate Office: City Tower, 117, Sir Thiagaraya Road, 5th Floor, T.Nagar, Chennai-600017. Tamil Nadu - India  
Tel: (91) 44-28155123 | Fax: (91) 44-28155132 | modulartech@vsnl.net | www.modular-corp.com