

SEG 3430 Information Systems Analysis and Design

Year 2004/05 Term 2

Project Specification

Phase I – Functional Requirements

Background

The credit card payment service is one of the core businesses in banking industry. The usage of credit cards is very popular all over the world, even on the virtual community – Internet. CBSH Bank is a global commercial bank based in Hong Kong. It plans to build an online credit card management system in order to handle such a large amount of information in an efficient way and provide better service to their customers.

Most commercial banks provide the following major online services to facilitate their credit card business:

- Credit card application
- Online credit card payment
- Special offers to customer, e.g. Cash Dollars
- Credit card transaction checking

With the advance of information technology, CBSH is planning to extend the above services through the Internet. The information systems development team of CBSH is going to conduct the feasibility analysis, system analysis and design of the online Credit Card E-Management System.

Application for Credit Card

In order to obtain a CBSH credit card, customers may make the application by filling up an online application form through the Credit Card E-Management System. In the application, they need to specify the type of credit card that they want to apply, e.g. Platinum, Gold, or standard. The differences among them are the requirement on the minimum personal annual income, credit limit and annual fee. Information, such as personal contact information, current employment, and financial status, is also required in the application.

Once CBSH accepts the application, it will send a confirmation mail to the applicants and state the available date, expiration date and credit limit of the credit card. When the applicants receive the mail with the credit card, they need to call the Credit Card E-Management System to activate the card with their HKID cards and credit card numbers.

Credit Card Transaction

The Credit Card E-Management System allows customers to check their credit card transactions online after login to their accounts. No matter the purchase is held traditionally in a retail store or online, all the transaction records will be available at the Credit Card E-Management System once CBSH receive the transaction information from the Card Brand, such as VISA or MASTER. The transaction dates, the names of merchants, the amount transferred are available for customers to review.

In typical credit card payment procedures, customers present their credit cards to merchants or submit the information of credit card number, expiration date through the e-shops of merchants. (Customers have their accounts at the issuer banks and merchants have their account at the acquirer banks. A bank can be an issuer bank and an acquirer bank.) Merchants calculate the amount of purchase and ask for approval from the Card Brand company. If the request is approved, merchants keep a sale slip and send it to the acquiring bank. The acquiring bank requests the Card Brand to clear for credit amount and receive payment. The Card Brand will then ask the issuer bank for clearance and the amount will be transferred from issuer to Card Brand.

Special Offers

In every purchase through credit cards, customers are rewarded with some cash dollars. CBSH reward \$1 cash dollar for every \$100 payment. Customers may use their cash dollars in the cooperating shops while they use their cards to purchase again. Expiration date is applied to the cash dollars that are accumulated in the customer accounts.

When the customers goes to the cooperating shops and buy products with CBSH credit card, the shopkeepers will ask customers whether they want to use their cash dollars as part of their payment. The shopkeeper can check the amount of cash dollar

