

«INVERSION COMPANY»

Payment Card Service Software

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«Inversion» Closed Joint Stock Company was established in October 1990 and is now one of leading companies on the Russian bank software market. Its software products are used in over 300 Russian banks. The core activity of the Company is development of software for all-round automation of bank business. Software products developed by «Inversion» Company are used to automate all aspects of bank activity. It is concerned with both servicing individuals and legal entities, and interfacing the banks with other financial agencies, payment systems, state organizations, tax authorities and the Central Bank of Russia.

Head office of the Company is located in Moscow. «Inversion» Company has representative offices in the following Russian regions: Saint-Petersburg, Ekaterinburg, Krasnodar, Novocherkassk, Rostov-on-Don. The Company has one's own training center, host system of support.

«Inversion» Company is member of Association of Russian banks (ARB), member of Association of Russian regional banks (Association «Russia»), member of consortium «Standards of bank activity quality», Accreditation Certificate SSBS.0021.RU of expert and certification center of certification systems for bank technologies MEKAC.

The Company is given the status of ORACLE Certified Solution Partner and SCO.CALDERA Authorized Partner.

Major software products developed by the Company are listed below:

- «BANK 21-st CENTURY» — automated bank system;



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- «InvoCard» — program system for servicing payment cards; it relates to programs of Card Management System (CMS) class;

- «InvoLoans» — program system for servicing bank loans of individuals; it relates to programs of Loan Management System (LMS) class;

- «InvoRetail» — program system for automation of all other retail banking operations (except payment cards operations and operations with crediting of individuals).

Automation of retail banking is one of the company core businesses. The model of retail bank communication with individuals utilized in «Inversion» company software includes a kernel which is based on the bank back-office and implements technologies of servicing of clients and client environment, i.e. consumers of banking services, as well as means for provision of banking services to consumers.

«InvoCard» CMS — Optimal Tool for Card Business Automation

«InvoCard» Card Management System, a new-generation software system proposed for operations with payment cards, includes the following software modules:

- «InvoPrincipal» to serve card operations of a sponsor bank and a principal member;

- «InvoAgent» to serve card operations of an agent bank;

- «InvoCenter» to serve the center of processing of agent bank card operations.

«InvoCard» CMS is a multi-card software system facilitating

integration of a new payment system in operating mode with some additional settings. Connection to a new processing center is also implemented in operating mode without interfering in developed bank operation processes. Payment cards of all international payment systems (MasterCard, Visa, American Express, JCB, Diners Club), as well as Russian payment systems (Union Card, ACCORD, SBERKART) are serviced in routine mode. Data exchange is maintained between any Russian processing centers and processing centers utilizing TPII, CardTech, MAGIX, COM-PASS PLUS, OpenWay, TransMaster, SmartVista software.

«InvoCard» maintains on-line multi-branching which provides for storage of all necessary data on cards, accounts, clients, account entries, transactions, authorizations etc. in a single database for the leading bank, its branches and divisions implementing ON-LINE communication with the central database.

«InvoCard» was initially designed as a format-independent software system; therefore, it includes a special interface module facilitating setup of formats of any other front-offices in the system. All transactions from the outside back- or front-office are subject to sampling by description of a certain format, internal representation and further sorting by account entries in accordance with transaction processing schemes.

«InvoCard» is a flexible instrument used to service salary projects of the bank. It allows implementing unique bank salary schemes and utilizing credit cards

within salary projects. The client can receive all information on payment cards via Internet banking system. There is a special function to implement co-brand projects and effect payment of community and other charges via automated cashpoints.

«InvoLoan» LMS — Full Spectrum of Public Loan Facilities

Today, retail business is mainly characterized by rapid development of consumer lending. «InvoLoan» Loan Management System presented by «Inversion» Company on the banking software market is a system intended to automate all types of individual lending — mortgages and car loans, consumer loans, credit lines, overdrafts and credit cards.

«InvoLoan» LMS software product includes the following modules:

- **Credit back-office — Bank Back-Office software** — to serve operations on individual lending in a bank;
- **Credit front-office — Trade Company software** — to service operations on individual lending in a trade company.
- **Overdrafts** — to service payment card overdrafts;
- **Credit Card** — to serve credit and credit-debit payment cards;
- **Factoring** — to serve factoring operations;
- **Securitization** — to implement partial and full lending and to manage loans granted.

The following options of individual lending can be implemented:

- lending via a trade company (shop) without visiting the bank office;

- client lending in the bank office.

The first option is the most perspective one for consumer lending as it makes this process customary, familiar and understandable for the population.

The credit back-office (as any other back-offices) maintains multi-branch one-line operation of the bank. The bank is presented as a two-level structure. The first level is taken by the head office and branches, and the second level — by divisions and complementary offices. Front-office credit modules can communicate with bank divisions as follows:

- one-line, via fixed communication channels;
- one-line, via session communication channels;
- off-line, via session connection for data file exchange;
- autonomously, with data exchange by fax or phone.

The philosophy of the individual servicing system is based on the following principles:

- common information and functional space for any retail business service software;
- independent operation of each «InvoRetail» component;
- maintenance of multi-branch one-line operation of the bank by the credit back-office and any other back-offices.
- complete independent configuration of any operations under loan agreements within the credit system;
- compliance of all payment operations under loan agreements with **account entry generation schemes**;
- implementation of a flexible algorithm for charges withholding

(typical for all «InvoRetail» subsystems) within «InvoLoan» subsystem.

Credit Cards — New Approach to Individual Lending

Today, banks offer their clients various types of card products: debit and credit cards, instant issue cards and loyalty cards, various co-brand projects and discount programs.

Credit cards represent an integrated bank product requiring professional knowledge and skills for operation in such retail businesses as plastic cards, lending, deposits, and payments. Sound interface, generality and continuity of development of new solutions within «InvoRetail» subsystem allow mastering of adjacent applications by any bank officer utilizing our product.

Common information and functional space considerably extends system capabilities. Combination of «InvoCard» Card Management System and «InvoLoan» Loan Management System enables the banks to develop and implement various types of bank loans with improved efficiency of any lending stage, simplified lending procedure, and extended spectrum of bank facilities based on plastic cards.

Credit cards are opened and serviced within «InvoLoan» system. Credit cards can be opened automatically after concluding a loan agreement.

The most interesting options for the bank are options of grace period servicing of credit cards being implemented within «InvoLoan» software system. ■

