ADTEK INFORMATION SYSTEMS, INC.

AdTek Information Systems, Inc. founded in 1986, a member of the Capital Banking Solutions group, is one of the industry leaders in providing integrated software products and customized software solutions to the banking and financial services industry. AdTek has developed a family of highly flexible banking software solutions: **PowerBanker™**, a JAVA-based core banking system built on the highly successful **BankMate** banking solution and running on IBM Power7 platforms and WebSphere, **PowerCash™**, a WEB-based channel application running on Windows that provides Internet and wireless e-banking and **iPowerCash**, a multi-platform mobile banking solution. These products serve the complete and rapidly changing needs of numerous banking and financial service industry clients. AdTek is a major vendor in the international market for banking and financial services software systems, particularly with middle market domestic and international banks and U.S. based branches and agencies of foreign banks.

Corporate Headquarters

The corporate headquarters and main office of AdTek Information Systems, Inc. is located in New York City, at 500 Fifth Avenue, New York, New York 10110. AdTek also maintains an office at 10673 N Kendall Drive, Miami, FL33176 in support of its regional and Latin-American clients.

Business Alliances

AdTek is:
- an IBM Solution Provider
- a Microsoft Solutions Developer
- a SWIFT Partner Solution Member

These strong alliances with the major players in the computer field insure continued leading edge technological innovation in AdTek's developed solutions on all platforms.

AdTek Worldwide Presence

AdTek services its customers in the Continental United States, Canada, Latin America, the Caribbean and the Middle East.

PRODUCT OVERVIEW

AdTek offers the following leading edge solutions to the domestic and international banking communities and to US and International government agencies.

**Banking Systems:** **PowerBanker™** is our JAVA-based IBM Power7 integrated core banking solution. Our banking solution is comprised of a core banking module, a retail branch automation module, a wholesale banking and correspondent services module and specialized banking applications. Our core system is fully integrated to our Internet products and includes a browser-based front-end interface for both clients and bank users.

**Channel Applications** such as Branch Banking, Phone Banking, Smart Phone Banking, Cash Management, Wireless Services and Interfaces to ATM/POS, Call Center systems and Credit/Debit Cards. **PowerCash™**, our browser-based channel application provides Internet and wireless cash management and home banking solutions. PowerCash is fully integrated to PowerBanker and BankMate or can run on a standalone basis.

**ASP Services:** AdTek is an Application Service Provider supplying WEB Hosting and offsite processing services to our clients who desire to deploy their banking solution and Internet services on the Internet without the burden of in-house maintenance. We provide the full range of services from a complete virtual banking application to the individual channel solutions.
TECHNOLOGY

AdTek Information Systems' founding mission is to provide the international and domestic banking community with a state of the art, technologically innovative, user friendly integrated banking system. The result of this effort was BankMate, an integrated core banking system running on the IBM Power7 platforms with a DB2/400 database.

PowerBanker is a sister system that leverages the knowledge accumulated by AdTek over the past 25 years to provide the same functionality using modern leading edge technology. AdTek uses the latest technology available to deliver core banking functionality on a WebSphere Application Server with DB2/UDB, Oracle or Microsoft SQL Server database. PowerBanker’s client runs on Java SE using SWING technology.

The communication between the client and the Application Server is thru WEB Services using SOAP messaging protocol over HTTP transport protocol.

WEB Services is a major component of SERVICE-ORIENTED ARCHITECTURE (SOA) which leverages the rich world of Web services with its many partners and products. Web services are the technology of choice for SOA because Web services are open and enable you to make more of your existing resources.

PowerBanker’s framework is a Java EE-based implementation of three-tier distributed architecture (presentation, business and persistence) that ensures a clean division of responsibility with proven scalability and flexibility.

The Presentation Tier is a Java EE Swing-based client that communicates with the business tier through web services using SOAP over HTTP. The same web services can support non-Java EE Swing clients.

The Business Tier contains the PowerBanker business objects, and mediates access to the Persistence Tier resources. These components run on an IBM WebSphere Application Server and benefit most from services such as transaction management and connection pooling. PowerBanker’s Business Tier components are implemented as Stateless Session Beans (EJBs), which provide the maximum scalability possible for Java EE applications.

The Persistence Tier includes the Database Management System. While outside the control of the Application Server the latter provides interfaces through JDBC to an IBM DB2 Universal Database running on Power7 platforms and is responsible for pooling of connections and transaction management across resources.
BANKING SYSTEMS – OVERVIEW

PowerBanker™ is a powerful, dependable, scalable, integrated banking solution that meets the deployment requirements in traditional and non-traditional banking environments. A very strong back-office system, PowerBanker provides a full-scale solution for virtual as well as conventional banking deployment. Our channel interfaces are the result of alliances with strategic business partners who are leaders in their respective fields to provide a fully integrated automated multi-channel, customer-centric banking solution.

A Full Scale Banking Solution

PowerBanker provides for unparalleled customer service with full-scale solutions in the following banking business areas:

- General Ledger, Financial and Regulatory Reporting
- Customer Relationship Management
- Treasury and Capital Markets
- Commercial and Corporate Lending
- Risk Management
- Customer Retail Services
- Private and Corporate Banking
- Correspondent Bank Services
- Trade Finance
- Electronic Fund Transfers
- Administrative Services

Core Banking Services

The following is a list of the more popular application modules in a standard BankMate or PowerBanker system.

Base System

- General Ledger
- Customer Information File (CIF)
- System Profile
- System Security

Administrative Services

- Fixed Asset/Inventory Management
- Income/Expense Amortization Management
- Asset/Liability Management
- Budgeting
- Cost Accounting
- Official/Expense Checks
- Electronic Memo System
- Data Import/Export Utility

Correspondent Services/Retail/Private Banking

- Customer Enrollment
- Demand Deposit Accounts & Savings
- Time Deposits
- Due From Banks/Due to Banks
- Check Processing and Clearing Services
- Automated Item Processing
- Check Reconciliation
- Checkbook Management
- Stop Payment Orders
- Checks on Collection
- Sweep Accounting
- Teller System
- ACH
- Account Analysis
- Fiduciary Contracts

Commercial Lending/Advances

- Credit Profile
- Line and Commitment Management
- Global Risk Management
- Cluster Analysis
- Commercial/Consumer Loans
- Mortgage Loans
- Discounted Loans
- Time Loans
- Participations
- Non-Performing Loans
Treasury
- Fed Funds/Money Market Investments
- Foreign Exchange
- Securities Portfolio Management
- Debt Management
- Future Rate Agreements
- Stock Management
- Safekeeping
- Interest Rate Swaps
- Repurchase and Resale Agreements
- Counterparty Limit Management

Trade Finance
- Letters of Credit (Import & Export)
- Standby Letters of Credit
- Bankers Acceptances (Bought & Sold)
- Collections
- Reimbursements
- Credit Risk Management

Electronic Funds Transfer (EFT) Interfaces
- Telex/Facsimile Interface
- SWIFT Interface
- Fed Wire Interface
- LVTS Interface (in Canada)
- Proprietary Interfaces With Money Center Banks’ Cash Management Systems
- OFAC Filter

Risk Management
- Customer Relationship / KYC
- Customer Enrollment
- AML/CFT Support
- Risk Management with Counterparties
- Risk Management with Clients

Integration to Channel Applications
PowerBanker and BankMate allow the banks’ customers and potential customers to be in contact with the bank via any of the following delivery channels:
- Internet via a Web site
- Internet via e-mail
- Telephone
- Mobile Smartphones
- iPhone / iPad version published on iTunes
- Call Centers with CRM support
- Wireless devices
- ATM and POS terminals
- Unmanned branches and kiosks
- Manned branches and point of sales
- Facsimile
- Regular mail

PowerBanker™ is a Trademark of AdTek Information Systems, Inc.
CHANNEL APPLICATIONS

AdTek Information Systems provides delivery channel applications that are fully integrated with its e-banking systems: **PowerCash**™, a Web-enabled, browser-based front-end channel platform providing cash management, home banking, correspondent services and remote banking services. **PowerPhone™**, a touch-tone phone information provider using regular or mobile phones. In addition, AdTek has developed Application Program Interfaces (API) to the most commonly used customer touchpoints, such as ATM and POS networks, Call Centers and Customer Relationship Management (CRM) systems.

POWERCASH – AN OVERVIEW

PowerCash™ is a WEB-enabled, browser-based front-end channel application providing customers and potential customers as well as the bank’s users with the ability to do e-banking using Internet technology. Customer access to the bank is via the Internet, a private Extranet, or wireless devices such as Smartphones.

Depending on customer category, PowerCash functionality is organized into four major areas:

- Home Banking for retail customers
- Cash Management for private banking and corporate customers
- Correspondent Services for correspondent banks
- Marketing and Enrollment services for existing and potential clients

The **PowerCash** interface is fully integrated to the banks own web site. A potential customer can enroll and open accounts starting from the banks’ public web page. The enrollment option is presented with the banks’ terms and conditions.

Bank customers select a user ID and password allowing them to immediately inquire on their accounts after the opening procedure has been completed. Promotional tools are available, such as the immediate crediting of a new customer with an enrollment bonus posted at account opening. The proper validations are provided to complete the enrollment process with all the necessary legal documents before any amount can be withdrawn.

A new user can immediately order a checkbook from the **PowerCash** ‘checkbook order’ option. The client is presented with a choice of checkbook models (number of checks in a checkbook, imprint, cover, etc.), number of checkbooks and check design. The checkbook order function in **PowerCash** can be integrated with the checkbook manufacturer to provide automated checkbook ordering and fee charging.

Users can transact with the bank using different available touch points. For cash transactions, the bank can use ATM machines that are owned by the bank or part of a broader network. Cash withdrawals are made possible from any location equipped with an ATM. The bank can issue its own branded plastic card or a card from a network such as Visa and MasterCard.

Bank clients can inquire on their account balances from any touch point. The Internet option provides full-blown functionality, such as an account statement for any period of time that is in the archives (could be any length of time). A client can also download account statements in different PC formats (QIC–Quicken, Microsoft Money, Microsoft Excel, Lotus, ASCII or any PC compatible software) at their convenience. The Internet inquiry option also provides the ability to inquire on credit or debit cards issued by the bank, owned by the client but managed outside of PowerCash.

Wireless phones compliant with WAP that deliver Internet access via a mini-WEB browser or specialized “apps” (iPhone) can access a client account and provide up to date account balances and account statements.

WEB based PDA Wireless services also provide access to a client account for account balances and account statements, as well as other information services.

The banks’ account officers can send e-mail to clients from within PowerCash to an Internet e-mail address or WEB-enabled wireless device.
address. Automatic e-mail notifications can also be sent according to client requests. E-mail can cover a multitude of purposes, such as informing a client of a credit or a debit posted to their account.

**PowerCash** is technologically innovative and is adaptable to the ever-changing requirements of the banking community needs.

**PowerCash – Private Banking and Corporate Cash Management**

The PowerCash Private Banking and Corporate Cash Management module offers the following services:

- Customer account inquiry (balances, statement)
- Checkbook ordering
- Stop payments on checks
- Account linking
- Fund transfer between linked accounts
- Wire transfers, via SWIFT and Fed
- Letters of Credit opening, amendments
- Bank Marketing and Newsletter Services
- Automated File Transfers
- E-mail Services
- User Administration and Audit

**PowerCash – Correspondent Banks Cash Management**

The PowerCash Correspondent Banks Cash Management module offers the following services:

- Customer account inquiry (balances, statement)
- Stop payments on checks
- Fund transfer between accounts
- Wire transfers, via SWIFT and Fed
- Bank Marketing and Newsletter Services
- Automated File Transfers
- E-mail Services
- User Administration and Audit

**PowerCash – Home Banking**

The PowerCash Home Banking module offers the following services:

- Account opening (demand deposits, savings)
- Checkbook ordering
- Time Deposit Opening
- Customer account inquiry (balances, statement)
- Stop payments on checks
- Account linking
- Fund transfer between linked accounts
- Wire transfers, via SWIFT and Fed
- Bill payment
- ACH transactions
- Credit and Debit Card reporting of balances and transactions
- Bank Marketing and Newsletter Services
- Automated File Transfers
- E-mail Services
- User Administration and Audit

**PowerCash – Marketing and Enrollment Services**

The PowerCash Marketing and Enrollment Services module can be used in virtual banking deployment over the Internet. In addition to the above listed functions, customers can inquire on general information, rules and regulations and account conditions published by the bank, and then follow an enrollment process that ends with the automatic creation of a temporary user ID and the opening of accounts. The new customer cannot use such accounts until their application has been processed and approved by the bank.

The Virtual Banking component in PowerCash offers the following services for both corporate and individual customers:

- Customer enrollment
- Account opening (checking accounts, demand deposits, savings)
- Bank Marketing and Newsletter Services
- E-mail Services

**Multi-Level Security**

To support the Bank’s need for the utmost security, PowerCash provides multiple levels of security.

- Internet Server Security using SSL
- Network “Firewall” Security
- Internal PowerCash Client Security

*PowerCash™ is a trademark of AdTek Information Systems, Inc.*
POWERPHONE - AN OVERVIEW

PowerPhone – A Phone Banking System

The PowerPhone™ module allows Bank customers interactive access to their accounts via touch-tone phone from anywhere in the world. It is fully integrated with all other modules of BankMate or PowerBanker and may be easily customized to give instructions and account information in the language of the Bank’s choice.

Key Features and Benefits

PowerPhone is designed to improve the Bank’s service delivery in a cost-effective manner. With a simple set of instructions, the customer may call on a touch-tone phone, enter his or her CIF number and PIN, and choose options from those announced. Customers may call as many times as they wish to receive account information without the intervention of Account Officers or other Bank personnel. Some of the most important features and benefits of this module include:

- Fully Secure Access Control Through Bank-Controlled PIN
- Availability of Balance Information for all Accounts the Bank Chooses to Make Available
- Availability of Statement Information for all Accounts the Bank Chooses to Make Available
- Availability of Balance and Statement Information for Accounts held in Local and Foreign Currencies
- Instructions and Account Information in the Languages of the Bank’s Choice
- Downloads to PowerPhone Database on a Timed or Delayed Basis

Fully Secure Access Control Through Bank-Controlled PIN - To access account information, Bank customers require their CIF number and a secondary Personal Identification Number. The PIN is made available by the Bank and must be added to the PowerPhone database prior to customer access. In addition, modification and deletion of CIFs, PINs, and which accounts are to be made available to the PowerPhone database is controlled by the officer assigned to this duty by the Bank.

Availability of Balance Information for all Accounts the Bank Chooses to Make Available - The customer chooses the inquiry from those options announced. PowerPhone announces the current balance, whether it is debit or credit and the currency. Customers may then make further inquiry or hang up.

Availability of Statement Information for all Accounts the Bank Chooses to Make Available - PowerPhone announces the most recent Bank-defined number of transactions posted to the account. The customer may request additional transactions, announced in sets of a Bank-defined number, as far back as the Bank wishes to make available. Customers may then make further inquiry or hang up.

Availability of Balance and Statement Information for Accounts Held in Local and Foreign Currencies - As with all BankMate or PowerBanker applications, PowerPhone is multi-currency. Bank customers may receive transaction and account information in the currency in which these accounts are held. You may have as many currencies for each customer as the Bank provides.

Instructions and Account Information in the Languages of the Bank’s Choice - PowerPhone’s easy-to-use set up allows the Bank to record information in the voice and language or languages of your choice. This feature allows you to customize the service to your unique requirements. For immediate implementation, we deliver the application with our own pre-recorded instructions and account information in English.
ATM INTERFACE – AN OVERVIEW

Introduction

BankMate and PowerBanker offer two types of interfaces to ATM networks: a batch interface, used when the ATM network is outside the bank (public networks such as NYCE and Cirrus), and an on-line interface, used when the ATM network is controlled by the bank and is directly connected to the central system (for example, in the case of cash machines).

BankMate and PowerBanker also provide support for plastic card based products connected to the bank via an ATM/POS network.

Batch Interface

BankMate and PowerBanker provide a batch interface through an import/export function (positive balance file). The import function receives data from the ATM network in the form of a file containing the transactions completed by customers over the network. The data is used to post the transactions to the customer accounts. The export function ships to the ATM network data related to newly activated cards, limits on existing cards, stops, cancellations ... etc. The frequency of interfacing between the central system and the ATM network is at least once a day, and can be multiple times a day, like every hour.

With a batch interface, the bank must assign a limit for cash withdrawal to each card. This limit can be based on customer relationship or blocking of an equivalent amount in a special account or out of the customer current account (permanent hold).

On-line interface

The ATM network has a real-time communication connection to the central system. Depending on the ATM hardware, the bank can offer the following services:

- cash withdrawals
- balance and statement inquiry
- transfer between accounts
- stop payment orders
- checkbook orders
- printing or receipts, confirmations and account position and history
- bill payments
- cellular phone prepaid recharges
- marketing and product information

An ATM terminal is usually equipped with a touch-screen panel that accepts menu selections and a touch-screen numeric pad layout to allow a customer input a PIN number or an amount (check deposits and account transfers).

ATM terminals require programming at the terminal level, using a special script language. When connected on-line to the central system, they can provide real-time information on account balance and statement.

Cash withdrawals: This service, along with balance inquiry, is part of the basic functionality that must be available with an on-line ATM terminal.

Balance and statement inquiry: This service provides real-time information on account balance and activity, including transactions that were performed on a customer account at the ATM terminal a short time ago. The bank may decide to limit the number of transactions displayed or printed, based on the logic supported by the ATM program. BankMate and PowerBanker can provide unlimited archive information, for as back in time as account history permits.

Transfer between accounts: A customer may initiate transfers between accounts, for example to fund an overdraft in a checking account from a savings account. This action will check for funds availability. Subsequent inquiries will reflect balance changes and show updated account history.

Printing or receipts, confirmations and account position and history: A customer may request a written confirmation for the actions and transactions performed at the ATM terminal. The terminal must be equipped with a built-in printer. BankMate and PowerBanker can also provide statement information that can be printed.

Marketing and product information: The bank can post information on new products, interest rates or any promotional material that will be displayed at the ATM screen upon request by the client. Marketing information can also be printed.

Funds validation: Cash withdrawals and transfer transactions are subject to funds availability checking before the transaction can take place.
ANCILLARY APPLICATIONS

BankMate and PowerBanker are complemented with AdTek-developed ancillary applications that bring office functionality to the core banking services. PowerTracker is a document management system and e-Spooler provides electronic support to the core banking system’s generated output.

POWERTRACKER – AN OVERVIEW

PowerTracker is a document management and tracking system developed by AdTek Information Systems Inc. PowerTracker runs on Microsoft Windows platforms.

The main functions of PowerTracker are:

• Stores images and PC documents in a client server environment
• Full integration with BankMate and PowerBanker
• Assigns links to BankMate and PowerBanker based on the nature of the document

Links can be established with:

• The customer CIF ID number
• A loan number
• A letter of credit document reference number

PowerTracker provides for a user to create associations between PC documents and banking information located in BankMate or PowerBanker.

PC documents are:

• Images or scanned documents stored as images
• Spreadsheets

• Word processing documents
• Databases

Integration with BankMate and PowerBanker provides the facility for a user who is inquiring on a customer or a banking transaction to review all the documents associated with this customer and/or the transaction.

Typical applications in BankMate and PowerBanker are:

• Customer signature cards
• Document tracking associated with loan applications
• Document tracking associated with letter of credit management
• Document tracking associated with outstanding loans and advances
• Correspondence generated on the PC associated with a customer or a banking transaction
• Spreadsheets and graphics associated with a customer business or a banking transaction
• Any other type of document that is viewable on the PC.

e-SPOOLER – AN OVERVIEW

BankMate e-Spooler allows users to store iSeries-generated BankMate/PowerBanker reports on a PC server running internally at the bank on a LAN or WAN. Every user with a standard Web browser and the proper authority can access all their allowed banking reports online. Reports can be stored in HTML or Acrobat PDF format, ASCII text format or CSV format. Reports can be automatically delivered to recipients via e-mail, or recipients can be notified of new report availability by e-mail with a direct hyperlink in the e-mail body. Customer correspondence (statements, confirmations and advices) are made available to clients thru PowerCash, our web-based e-banking solution.
To deliver complete flexibility to its clients, AdTek Information Systems has developed Application Program Interfaces to its core banking applications PowerBanker and BankMate in order to provide full integration with ancillary products such as Call Center and Customer Relationship Management systems, and/or centralized banking systems when BankMate / PowerCash is used in a departmental setup.

Using the provided API’s, bank employees are presented with a transparent access to customer information whether it is coming from AdTek products or from other places. API’s also provide for update/posting functionality in BankMate, either in real time or deferred mode.