The dynamic expansion of financial institutions and the rapidly increasing sale of insurance, credit and leasing products often results in the growth of overdue liabilities and fraud during the settlement of new insurance policies with external sales network agents.

Under such circumstances, the coordination of case collection becomes very complicated: terms are often exceeded, departments’ work is duplicated, employees are overworked and the company consequently loses some hitherto recoverable debts.

These factors prompted Comarch to create the Debt Management system – a modern and effective in-house solution that supports automatic payment reminders, court and debt recovery proceedings. As a result of implementing the system, customers benefit from a steady increase in the recovered debt ratio.
Main business processes

Comarch Debt Management is a comprehensive system for managing liabilities, its purpose is to group and organize a wide range of issues into one coherent solution. The system contains a common business framework that is established for most financial institutions. The following describes the basic functionality offered in the Comarch Debt Management system in the various possible stages of the recovery process.

Soft collection process
- planning telephone contacts
- sending reminders: SMS, e-mails and letters
- automatic registration of operation cost
- creation of installment schemes for payments
- monitoring of debt payments
- non judicial arrangement proceedings
- collateral management
- liability realignment
- review of the state of collaterals and reserves
- final termination of a contract.

Outsourced debt collection
- transferring of collection cases to external agencies or the sale of debts
- obtaining information about the activities of external agencies
- sending information about debt repayments
- calculation of commission for external agencies.

Legal proceeding
- generation of required formal documents (request for payment, enforcement clause, enforceable title, lawsuit)
- monitoring of upcoming deadlines
- automatic determination of the appropriate district court
- handling various court decisions.

Enforcement proceeding
- automatic determination of the bailiffs list related to a particular court (based on the debtor’s address)
- support for the debt enforcement proceeding process
- preparation of the order and documentation for a bailiff
- servicing the advance money on bailiffs activities
- monitoring of deadlines
- supporting communication with bailiffs
- handling various bailiff decisions.
The Comarch Debt Management system is a flexible solution, targeted to a wide range of clients dealing with various kinds of debts. Among the institutions of the financial sector for which our solution is dedicated are:

- banks and non-bank money loan institutions (overdue installments of credits, loans, debts on accounts and credit card debts)
- insurance companies (overdue compulsory or voluntary insurance premiums, insurance subrogation, unduly paid/fraudulently claimed benefits)
- financial service companies (return of overpaid/unduly paid commissions, fraud)
- soft collection and debt recovery companies (costs of the debt collection process, fees and interest charges on a debt).

**Profitability**

The Comarch Debt Management solution increases the efficiency of recovering overdue payments from customers, agent fraud and the temporary retention of cash payments. Furthermore, it reduces the cost of a single collection case.

**Comprehensiveness**

Comarch Debt Management is a comprehensive solution that takes into account adjustments to the specific needs of each client. The implementation of the system is preceded by an analysis during which all sources of data related with debts are identified, in order to be later integrated into one coherent repository of data. Then all recognized business processes of debt collection are configured.

**Flexibility**

The usage of BPM tools in the Comarch Debt Management system gives the customer freedom in modeling the recovery process. This applies to both ongoing collection processes and the creation of new ones that may occur along with changes in the customer business model. Additionally, the architecture of the system supports multiple currencies and multiple languages, which allows the system to be deployed in the foreign subsidiaries of a single capital group.

**Scalability**

The Comarch Debt Management solution consistently maintains its high rate of efficiency and adjusts effortlessly to the future growth of a customer’s business scale. The technical architecture of the system assures proper and efficient functioning of the application, regardless of an increase in the number of executed operations and simultaneous users.

**Knowledge sharing**

Our customers can take advantage of the many years of experience that Comarch analysts have, particularly in the domain of integration with external data sources and optimizing the debt recovery processes. Through the exchange of knowledge and experience at the stage of analysis, all processes and recovery actions can be optimized in order to maximize the benefits of the Comarch Debt Management implementation.

As a result of the Comarch Debt Management system’s implementation our clients obtain significant benefits from increased debt recovery.
System functionality

The Comarch Debt Management system is composed of complementary modules, allowing an easy adaptation to all the business needs of a customer. These modules are responsible, primarily for the management of debt collection processes, storing data (debts, the participants, documents and collateral), planning contacts with debtors as well as for mass printing or generating data packages for the external printing house.

Examples of system interfaces
- internal data source (transaction system, data warehouse, imports from a file)
- document archiving system
- Call Center application
- CRM (Customer Service) application
- SMS or e-mail gateway
- encrypted communication with external agencies dealing with outsourced debt collection activities.

Functional diagram of Comarch Debt Management
Support of debt collection process

The Process Management module by using dedicated BPM (Business Process Management) tools supports the management of actions within each stage defined in the recovery process. Comarch provides complete configuration of the process with the client’s current requirements using tools such as Oracle Workflow, FileNet Workflow or JBoss jBPM. Most of the subsequent modifications can be done by the system administrator without the need for support from Comarch.

Data search

The system periodically starts an automatic process which searches the production systems for new overdue liabilities and all debt repayment transactions which have occurred. The data set that meets the search criteria (e.g. amount of debt or overdue time) are transferred to the debt collection system.

Debt collection processes

A key feature of the module is the capability to flexibly define the debt recovery process. Identification and analysis of all the customer’s current debt collection processes are performed during the implementation stage. After the implementation, system users have the possibility to modify the created process definitions and create new ones in the event of significant changes in the business model.

Process actions

In all processes there is a specific set of debt collection actions, defined in any level of detail depending on the concept of the customer organization structure. Each action is assigned to the appropriate team responsible for the particular process stage. This information is later used in task allocation for system users.

Depending on the specificity of the process, the action might be taken in parallel or sequentially. The initiation of one activity might be contingent upon the completion of another. For each action, it is possible to require the registration of certain documents, contacts, or the fulfillment of other conditions.

Operations under the action

Individual activities can be attributed to automatically performed actions, such as printing a document or the charging of additional costs. Moreover, a list of manually serviced actions might be assigned to each stage of the collection process, for example displaying a screen to modify a repayment schedule, prepare a document template or generate a report upon request.

Case updating

Constant monitoring of receivables and incoming payments in the source system provides up-to-date information that allows taking appropriate actions. Each modification to the debt data can affect current cases by updating, closing or even initiating other collection cases. Cases under legal proceedings may be supplemented with other overdue receivables or may automatically close after the full repayment of the debt. In some situations, a standard case might be converted to an “agent network cash fraud” case.

Manual case operations

The collection operator may execute a range of additional operations, including: registering correspondence returns, additional cost assignments, recovery registrations, collateral servicing, installment schedule changes, sales of debts, separation or grouping amounts due from several cases, partial debt redemption, and, in some cases, deciding whether to discontinue further proceedings.
**Contacts in the debt collection process**

The module enables the effective recovery of debts by supporting multiple channels of contact with the debtor (telephone, written letter, SMS, e-mail and meetings). Most processes are automated and can be tailored to particular groups of debtors as well as the specificity of the product or debt.

All the events relating to contact with the debtor (sending reminder letters, registered effect of a call, obtained promise from the debtor, etc.) are recorded in the system, taking into account specific data, results, related documents and the next planned contact (follow-up). Such a solution provides the possibility to view the full history of contact with the debtor and other parties to the case at any time of the debt recovery procedure.

**Debt classification**

A collection case in the Comarch Debt Management system is created by grouping newly found overdue liabilities from an individual debtor. This comprehensive approach to the debtor enables sending single reminders for all current receivables. The system automatically assigns suitable collection procedures and sets its initial stage based on customer information, the amount and nature of the debt. Special rules for setting different initial stages may be defined. Most cases start with the first workflow stage; however in some cases (e.g. blacklisted debtors) the reminder letter stage can be omitted and immediately initiate actions from later stage taken.

Additional functionality of the module includes:

- fully configurable types and frequency of contact actions depending on the specifics of the debt and debtors’ data, for example
  - lenient procedures and sober content of letters addressed to VIP customers
  - expedited procedures for customers who broken promises given in the past
  - quick registration of correspondence returns by using barcodes on printouts
  - use of communication with the Central Address Bureau in order to determine the debtor’s address.

**Communication with the court and bailiffs**

Moreover, the system supports communication with the courts and bailiffs, thus increasing the effectiveness of actions taken in legal stages and enforcement proceedings. Examples of system functionality in this area are:

- Generating reminders and recording complete information about upcoming trials, auctions, etc.
- Support of the communication process with courts and bailiffs
- Automatic determination of the proper court on the basis of a postal code.
Data in the debt collection process
Data management in the Comarch Debt Management system is based on the central registers, which provide current and complete information for all processes in the system. Each register enables the possibility of viewing historical data as well as reviewing changes made. In addition, built-in mechanisms ensure advanced searching of items by various criteria.

Browsing of collection cases
The system provides the possibility to view the details of the case - both general (balance, interest, costs, dates, a list of tasks to complete) and specific (action, payment, operator, participants in the case, contacts and documents related to the case). Most of this information is automatically recorded in the process, others may be registered by the operator (additional calls, planned meetings, incoming documents, new participants such as cessionaries).

Document register
The register is used to catalog all incoming documents (such as court judgments, regulation titles, justification) and generated by the system (such as correspondence with the debtors or lawsuits) to be maintained in collection cases. It is possible to link the electronic version of the documents and assign attributes - features of the documents. The list of categories and attributes can be freely extended by the customer.

Participants register
This register records the personal data of all participants in the recovery process (debtors, guarantors, the courts, bailiffs, law firms, collection agencies, etc.). It is possible to assign multiple addresses, bank accounts and other various attributes and information to each person, as well as create a relation between them. Moreover, customers can be assigned to defined segments. An additional register collects the personal data of the collection team workers, in order to enable the efficient management of their roles and access to the data.

Receivables and payments register
In the context of each conducted case the register stores the details of related receivables, payments and arrangements. A specific time limit for payment is assigned for each liability and each payment is divided into specific debt items (ex. unpaid capital, unpaid contractual interest, unpaid penalty interest, unpaid fees and commissions). The order of payment arrangements is configurable.

Collateral register
The purpose of this register is the collection of information about the set up of collateral for bank debts (mortgages, guarantees, deposits, promissory notes, etc.) The range of the data presented allows, for among others things, the preview of collateral details depending on its form, the book value of the collateral, the frequency of value updates as well as the history of the collateral use.

Search of collection cases

Payments in collection case
Task organizer
In addition to the automation of activities in the area of debtor communication the Comarch Debt Management system also supports the organization of work for dedicated groups of employees. The basic functionality of the module includes:

- automatic planning of a timetable for action for particular cases and tasks for each day (e.g. a list of telephone contacts for teleoperators)
- setting reminders for each of the recovery actions in the collection case.

Each collection case is subsequently assigned to operators from a specific group. Case allocation rules are user-definable. For example, pending cases can be assigned to the user with the least number of ongoing cases. At the beginning of each day, the collection team member receives a list of current cases that need to be serviced and proceeds to complete each task sequentially. The collection team manager may change the automatic task and case assignment if necessary.

Support for external debt collection
For many branches of financial institutions involved in debt recovery a crucial element is efficient and timely communication with external agencies. The Comarch Debt Management system with built-in interfaces for data exchange significantly optimizes this process and improves the effectiveness and coordination of all collection process actions taken by the generation of reminders as well as recording complete information about the status of cases. Additional opportunities for the module include:

- automatic pre-selection of debts for an external collection agency
- encrypted data exchange with external debt collection agencies
- calculation of commission for external workers according to configurable rules
- providing information about received payments related to the repayment of debt
- support for the selection process of debts intended for sale.

Functional schema of the external debt collection support process
Printouts
The module offers the following functionality:
• defining print templates
• managing print templates (editing, versioning, testing)
• generation of documents on demand
• handling mass printout operations
  • subcontracting mass printouts
  • support for multiple paper trays (ex. with logotype, background, money receipts)
• creating files for external printing
• the ability to print bar codes.

A key element of the module is a template editor, allowing the use of various data sources to complete the documents.

Calculator of liabilities
This module supports the calculation process for all financial operations in the system, including the cost of recovery, debt balances, interest and realignment. Among its key functionalities are:
• automatic calculation of costs related to a particular operation during recovery
• calculation of bonuses for recovery personnel and commissions for external workers
• simulation of penalty interest value at the desired date and calculation of interest
• changing of the penalty interest rate with archiving the change history
• establishment of a new repayment schedule
• conversion of value in various currencies.

Reports & analysis
The Comarch Debt Management system has a rich functionality, allowing customers the creation of new templates for reports using data collected in the system. Moreover, the module enables definition and execution of operational reports and the conducting of analyses. This flexible tool makes the customer independent from the system supplier and provides an opportunity to quickly carry out the necessary data summary and required analysis. It is also possible to generate data packages for external analytical systems.
Architecture

Comarch’s solutions for the financial market are service-oriented, capable of using BPM tools and based on high-quality components. The system architecture is based on coarse-grained integration and communication.

Technical architecture
The concept for the technical architecture is based on the Oracle database. Thanks to this solution, all the data is centralized and stored in one place, where it can be accessed by any authorized user (debt collection department workers, call center operator, legal advisor, etc.). All external business users (branch employees as well as mobile and external workers) use the system via an Internet browser. System includes an extensive administrative module which helps administrators configure business solutions and optimally parameterize the work.

Logical architecture
In order to provide a high level of modularity, scalability, flexibility and easy integration with other systems, service oriented architecture (SOA) has been chosen. For implementation of SOA, Comarch decided to use tools based on Java. By applying this platform, the system has not only gained the ability to integrate with many different technologies (EJB, TopLink, Java Classes, WebServices, Portlets, Struts, JSF, JSP, Hibernate), but also the possibility to install it on all application servers supporting J2EE standards.

Logical multi-layered architecture:
- Presentation layer: Java Server Faces
- Business logic layer: EJB, Spring Framework
- Data access layer: Hibernate
- Data layer: Oracle

The Comarch Debt Management System’s architectural scheme
Comarch is a leading Central European IT business solutions provider specializing in forging business relationships that maximize customer profitability while optimizing business and operational processes. Comarch's primary advantage lies in the vast domain of knowledge accumulated in and applied to our software products. These products incorporate highly sophisticated IT solutions for businesses in all vertical sectors. Comarch has a multinational network of offices employing over 3500 highly-experienced IT specialists in Europe, the Middle East and the Americas.