

EVENT-DRIVEN ENTERPRISE
MANAGEMENT SYSTEM



■ Commercial Finance (Factoring) Main Functionalities in iMX

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CANADA USA MEXICO UK MOROCCO SPAIN FRANCE GERMANY BELGIUM TUNISIA ROMANIA
BULGARIA UAE VIETNAM COLOMBIA



■ Event-driven Business Management System

iMX is the result of many years of research and development at the heart of the first European technopolis: Sophia Antipolis, on the French Riviera near Nice. iMX is an innovative software solution that handles – within its unique technology – 100% of the standard functions of several business industries as well as the specific requirements of each Client.

- **iMX** is the most effective system for managing a variety of financing and collection activities: Contracts, Accounts Receivable, Financing, Factoring, Credit Insurance, Credit, Operational and Financial Leasing, Commercial Loans, Amicable Collection (preventive, early, late), Legal Collection, Claims, Litigation, etc.
- **iMX** offers all users in those industries an unrivalled openness and versatility.
- **iMX** standard feature set offers the most extensive – both in width and depth – coverage of all operations from customers onboarding to contract termination.
- **iMX** integrates a Business Process Modelling and Workflow tool (iMX Expert System), a complete web portal for external access (customer self-care, funding partner access, online payments from debtors, instant messaging, etc.) as well as a fully featured dialer with interactive voice recognition, email communication and much more. Since these modules are integrated by default, they are easily activated in iMX with minimal efforts.
- **iMX** offers full multi-currency and multilingual support (the application is used in 50 countries and in 28 languages).
- **iMX** is supported by a dedicated CODIX team of top-notch technical specialists as well as on-staff business experts from your industry, always making the best implementation recommendations from a business stand point.
- **From** its inception, CODIX has had the strategy of continuous improvement of the iMX feature set. Year after year, a significant part of CODIX budget goes to R&D and standard enrichment of the functional capabilities of the iMX suite. iMX can be hosted by our Clients, or hosted externally in any data center, including in the Cloud.
- CODIX operations are ISO 9001:2015 certified.

TAILOR-MADE



- iMX offers customizable pieces for your puzzle that help you meet your organizational needs. Manage all business processes within a single technical structure specifically tailored to you.

SUPPORT



- iMX comes with hands-on support provided on a 24/7 basis with contractual SLAs. Trust iMX and trust us.

Technology

CODIX's technology is geared towards offering our customers a powerful and scalable business software package, with the maximum level of flexibility in the operations support and in the customization of the system as well as a full integration with their IT landscape:

- **Dynamic** redefinition of data structures by activity (debt collection, commercial finance, credit insurance) and/or customer. Irrespective of the nature of the data to be processed or its evolution, CODIX's technology allows for the systematic follow-up of the customers' needs and ensure theirs smooth evolution.

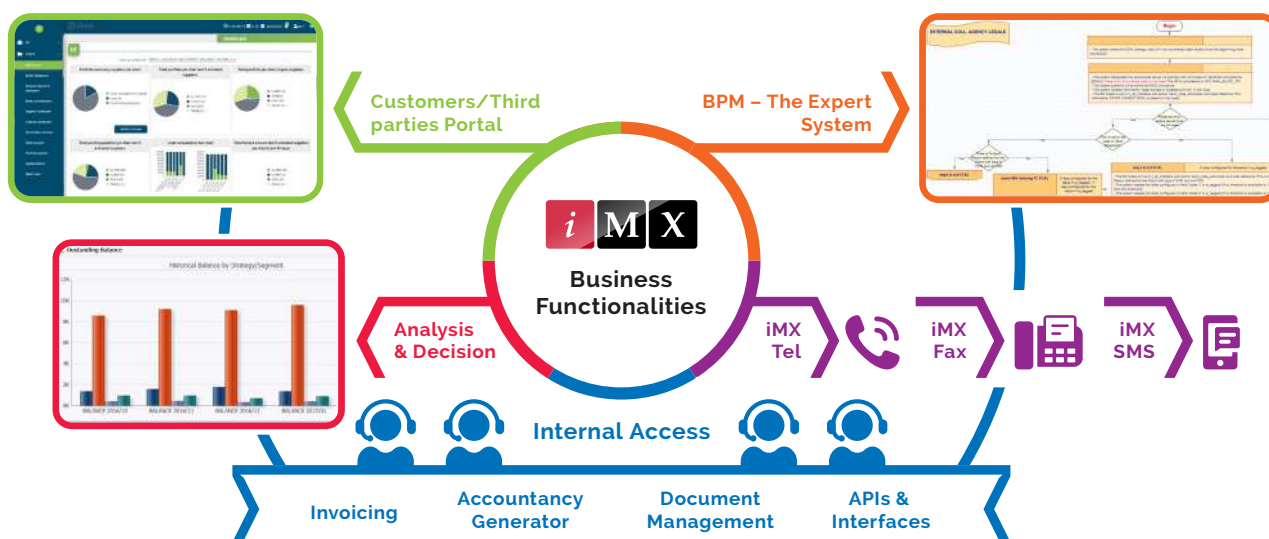
- **All data** and business objects stored in the database can be used in the rules of CODIX's Expert System (Business Process and Workflow Modelling tool). The Expert System is a smart-rule processing engine, which automates the allocation of tasks and cases/accounts to users, the execution of business processes and workflows, complex calculation formulas and the text generation process.
- **Every** event entering the system (after keyboard input or data interfacing with another system) is handled in real time by the Expert System. The Expert System meets users' expectations by automating repetitive tasks while enabling users to focus their efforts on value-added tasks requiring strong professional skills. Operations Managers will notice the increase in productivity and service quality resulting from the implementation of CODIX technologies.
- **Reliable** and stable technologies: UNIX (AIX, HP/UX, SUN SOLARIS) or Linux (RedHat, Suse, Oracle Linux) operating systems and the Oracle Database ensure scalability from thousands to several millions of cases within a fully secure management environment.
- **Native** integration: all the tools the user needs are integrated in a unique user interface - text processing, fax, document management module, email and telephony, SMS messaging.
- **A pure web** architecture: iMX runs on a «Thin Client» model requiring only a web browser on the users' workstations. The front-end piece is based on:
 - ✓ Web Technology Components (Spring MVC, Angular)
 - ✓ Java applets: Java text editor (CODIX) and display tool for case integrated images (CODIX) that communicate with iMX back-end components via REST services and a proprietary service BUS
- **The inter-connection** with other systems (such as general accountancy systems, credit insurers EDIs, SWIFT/SEPA, etc.) is made via all possible protocols and methods (SOAP and REST services, queues, flat or XML files over FTP, DB Connect, etc.).
- **CODIX's** unparalleled level of support is provided via secured remote maintenance.

Software Modules

The iMX software consists of 3 core modules:

- **iMX** Internal Access for back office operations (internal operations users)
- **iMX** External Access: self-care web portal for your customers, debtors and business partners
- **iMX** Analysis and Decision (Business Intelligence/reporting tool)

All the tools a company uses for communication with its customers and partners are natively integrated and available in iMX: mail, fax, telephony, SMS, social media, avatar, etc.

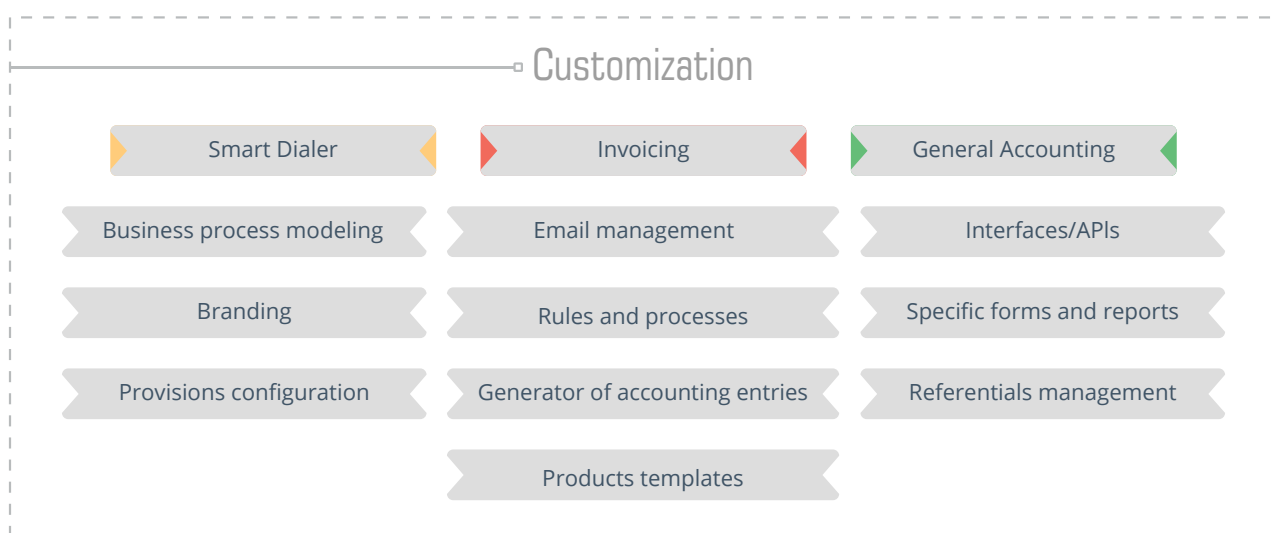


Customization

Each iMX implementation is customized to our Client's specific needs. There are 5 levels of customization:

- **Setting up** an Expert System unconstrained by the nature or the number of its management rules – for case/account management, calculation or case allocation as well as for the “texts” issued by the system (letters, emails, faxes). CODIX always offers a comprehensive standard pre-parameterized set of business processes covering the whole spectrum of the operations. During the customization phase, this default set is reviewed and amended to tailor the procedures to the Client governance, the local market practices, etc.
- **CODIX's** technology enables the handling of any information both on involved parties and on case/account documents levels. The large library of available screens helps meet most needs and can also be tailored to meet potential Clients' specific requirements.
- **The standard** data formats supplied by CODIX meet the requirements for data exchange between iMX and the rest of the information systems, such as the accounting system. However, a tailor-made “data injector” may be needed as part of the iMX integration.
- **The iMX Plug&Play** solution comes with a set of standard activity reports. These may be adjusted and additional ones may be added as part of the customization.
- **The look** and feel of the external web-based front-end (iMX Extranet) is aligned with the client's graphical scheme.

A well-proven setup procedure ensures the success of every CODIX project.



■ Lines of Business

The iMX solution caters to the needs of a wide range of businesses, activities and products:

Debt Collection	Commercial Finance	Leasing	Personal Finance
Amicable Collection	Factoring/Receivables Finance	Auto Finance	Non-allocated Loans
Accounts Receivable Management	Asset-Based Lending	Equipment Finance	Allocated Loans
Preventive Actions	Invoice Level Financing	Loans	Point of Sale
Late Collection	Reverse Factoring/Supply Chain Finance		Revolving
	Purchase Order Financing		Real Estate Loans
	Amortizable Loans		Mortgage Loans
	Non-amortizable Loans and Credit Lines		Debt Consolidation
	Co-financed Loans and Multi-funders		Credit Insurance
	Commitments by Signature		
	Procurement Finance		
	Credit Insurance		

■ Continuous Investment in our iMX Solution

The iMX functional coverage is constantly enhanced by our Business Experts in order to anticipate the market needs and the features our Clients will need tomorrow.

Launching a new offer/product in a timely manner is one of the competitive advantages iMX provides to our Clients. This is made possible through the highly adaptive parameterization capabilities of iMX as well as the unique ad-hoc (per Client) release strategy offered by CODIX.

iMX is used today in more than 50 countries and that number keeps increasing thanks to our global Clients. An important aspect of CODIX's product strategy is to integrate as a standard iMX feature any change necessary in order to comply with:

- **any local regulation in any country where iMX is used**
- **any practices best adapted to a local market**

■ Delivery of Complete and Integrated Systems

All the advanced business features come with the standard version of iMX. The full technical integration with all the systems of our Clients' IT landscape is a systematic component of all our implementation projects.

■ Projects Under Tight Control and Controlled Budgets

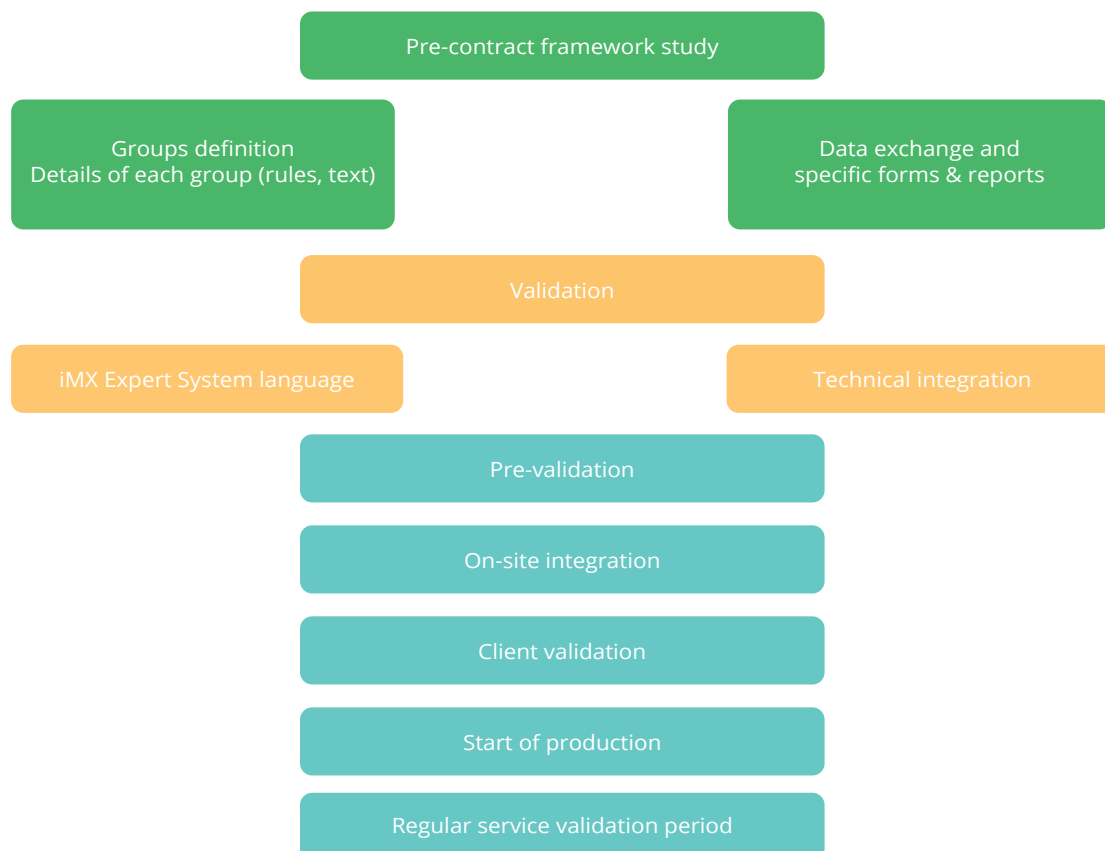
Thanks to a team of experts seasoned in business and IT and thanks to a well-proven set-up methodology, **CODIX guarantees successful implementation of each project.**

All projects are implemented within set time frames/on a fixed basis, and CODIX commits to the global budget for the agreed scope from the very beginning of any project.

The level of customization of the iMX system is adapted to the Client's context and needs, from pure Plug-and-Play implementations to much more customized implementations. In any scenario, it is always the same iMX system that is delivered. Only the level of the changes to the default Plug-and-Play configuration and parameterization as well as the quantity of interfacing differ. This means that the system will be able to evolve as our Client evolves, extending the level of customization as the needs of our Client evolve. The whole iMX "toolbox" and power are available to each and every Client of CODIX.

■ Our Implementation Methodology

All the advanced business features come with the standard version of iMX. The full technical integration with all the systems of our Clients' IT landscape is a systematic component of all our implementation projects.



More than Just Clients

Ever since its foundation, CODIX has been attracting the interest and attention of the biggest companies in France and abroad due to the efficiency, scalability, robustness and openness of its iMX solution. These qualities have convinced large corporate groups, leaders in their respective lines of business, to adopt our technology.

Thanks to its self-owned and self-funded structure, CODIX can be very adaptive and reactive, and always does everything possible to foster a fully collaborative long-term relationship and partnership with everyone of its Clients, from start-up businesses to very large international groups.



■ Suppliers Financing Business Process

Prospect management

- **Input:** creation of the prospective contract (domestic, import and/or export), contract drafts and proposals to internal committees and to the prospect
- **Follow-up** on commercial actions (appointments, documents to collect, etc.)
- **Check of debtors'** quality (opinion limits) in case of order and receivables financing
- **Revaluation of other types** of assets to be financed based on market rates
- **Simulations of funding**
- **Analysis of supporting** documents and estimation of risks and warranties: scoring of prospects
- **Use of the external database** for KYC and debtor analysis

Management of guarantees

- **Registration** of the signed Contract
- **Contract Activation**
- **Opening of debtor accounts** and limit confirmation
- **Follow-up** on the lifecycle of the contract (amendments, revisions, renewals, termination, nonperforming IFRS9 concepts)
- **Registration** of a dedicated collection account

Contract Management

- **Registration of guarantees**
- **Automatic follow-up on guarantee renewals**
- **Management of co-borrowers and guarantors**

Commissions evaluation for the producer, co-factor, provider

- **Estimation** of commissions and costs to pay, reporting
- **Issues** related to the commission payments and factoring costs

Receipt of third party invoices (lawyer, bailiff, etc.)

- **Registration** of invoices sent by third parties
- **Issues related to third party payments** after validation and deduction of costs

Invoicing third parties (co-factors, clients)

- **Estimation** of the commissions to be collected (factoring commission, financing commission, commission per credit transfer, per document handled, per request approval, per cheque handled, etc.) and invoicing
- **Estimation** and invoicing of costs and services
- **Periodical** readjustment of commissions and invoicing
- **Follow-up** on third party payments on issued invoices, capture of payments

Debtor accounts creation

- **Manual or massive upload**
 - ✓ Control and validation of the information provided for each debtor (address, tel., RIB, national ID, etc.) using external databases like Graydon, Coface, Equifax, D&B, etc.
 - ✓ Automatic or manual validation according to preset criteria
- **Management of debtor groups**
 - ✓ Information collection and archiving
 - ✓ Debtor notification in case of a disclosed contract

Modification, closing and legal management of debtor accounts

- **Modification** of the structure (merging, suspension, etc.)
- **Closing** (according to various criteria: blocking purchase, outstanding balance at zero, etc.)
- **Purge** (closed since x time, etc.)
- **Blocking** debtor accounts
- **Management** of the legal phase with management of lawyers, bailiffs, etc.

Credit risk protection

- **Management** of credit, opinion and financing limit, financing limit requests for each debtor or group of debtors
- **Automated decision** process based on scoring or Credit Insurer protection or co-factor-provided credit limit
- **Automatic or manual decision validation and activation**, based on contract parameters
- **Automatic client identification** (for unpaid invoices)
- **Ensure the client portfolio diversification** by inserting a concentration rate in the contract Debtor notification in case of disclosed contract parameters
- **Client notification of decisions**

Processing receivables assignment and orders

- **Receipt of receivables/sales orders** (on paper, electronic, extranet, etc.) by remittance or by complete ledger comparison
- **Capture** (of physical invoices) or integration of data files/messages (coming from external sources)
- **Issue acknowledgement receipts**
- **Multilevel checkup of remittances** (consistency compared with parameters factor, client, debtor, contract, account)
- **Correction of inaccuracies**
- **Validation of receivables** (manual or automatic according to preset criteria)
- **Handling of new elements** by shadow ledgering or new sales, with or without bundling, as selective invoice discounting or as factoring
- **Triggering of financing calculations**, risk protection calculations, and portfolio updates
- **Acceptance**, rejection, putting on standby of receivables (automatic according to preset criteria with manual modification/validation according to preset parameters)
- **Automatic opening** of debtor accounts (according to preset criteria)
- **Issuing of documents** according to the parameterized periodicity (slip of details for receivables remittances, letter for reassignment of receivables, credit notification, debit notification, purchase report, client and debtor notifications)

Supply chain finance (reverse factoring)

This product uses mostly similar iMX tools and features as receivables finance (listed here above and below)

- **Capability for the buyer** to upload the payables
- **Capability for the supplier** to request funding on receivables or systematic payment to suppliers (based on buyer and supplier agreement set-up)
- **Modern web-front** for both the buyer and the suppliers
- **Broker commission** as extra payment days for the buyers
- **Capability for the buyers** to repay late (and pay interests)

Inventory acquisition

- **Receipt of stock details** (from the client, logistic platforms, transit agents, etc.) digitally or on paper
- **Manage** different categories of stocks (in progress, finished, etc.)
- **Re-evaluate** their value using market rates, if any
- **Issue** acknowledgement receipt
- **Definition** of fundable amount
- **Combined** with the receivables finance, it fully covers the ABL (Asset-Based Lending) as most commonly proposed in the USA and Europe

Other assets

- **Any other type** of asset can be used as collateral for funding, such as machinery plants, vehicles, tax credits, etc.
- **They are revaluated** as for any other type of asset to define their contribution to client's funding

Authorized overdrafts

- **On top** of collaterals it is possible to define some authorized overdrafts (called non-formula limits) to increase funding

Financing

- **Real-time** fundable amount (globally and invoice) following preset parameters (scoring, approval by a set of client/debtor, approval by a group of debtors, litigations, ceiling of financing by the client, by a group of clients, etc.)
- **Automatic or manual** financing following management parameters
- **Possibility for manual** or automatic provisions taking visible risks into account (guarantee funds, reserves, etc.)
- **Automatic or manual** processing of expired approvals
- **Definition of different** financing rates depending on the collateral type and quality
- **Definition of caps** for different categories of collaterals (for instance the inventory cannot be more than 25% of the receivables)

Outflow towards the client

- **Capture of payment requests** (automatic estimation of allocations by payment method as stated in the contract)
- **Advances management**, fixed-term advances, bank warranty
- **Validation of disbursements**

Allocation of debtor payments

- **Setting debtor's exchange media** (record agreements on exchange media, issue of exchange media)
- **Receipt of debtor payments** (dematerialized, materialized, confidential), processing of rejected payments
- **Client letter for direct payments**
- **Automatic matching**
- **Automatic, semi-automatic, manual allocation** (following preset rules: age of account, amount by case, by client, by debtor, by invoice)
- **Estimation** of prospected payments following discounts, credit notes, litigations
- **Report on allocated payments per Client**
- **Report on allocated payments per Factor**
- **Notification** of adjustment to clients

- **Cancellation** of allocations
- **Management of non-allocated payments**
- **Management of debtor reimbursements**

Debtor risk follow-up

- **Revaluation** of debtor risk according to new information provided
- **Review of credit or financing limit** (request increase, decrease, revision, new, cancellation)
- **Management of and follow-up on non-payments**
- **Recovery chance study**

Reminders to debtors

- **Search** for and follow-up on out-of-court settlements
- **Reminders** (by fax, email, telephone, mail)
- **Formal notice**
- **Amicable recovery**

Contract follow-up

- **Request for evaluation** of contract-related risks
- **Issuing** of reports on the client-related risks
- **Processing** bankruptcies
- **Adjustment** of management parameters
- **Study of contract's profitability**
- **Study and analysis of client requests**
- **Revaluation** of the client portfolio

International

- **Complete and seamless integration** with FCI messaging system
- **Management** of local debtor accounts
- **Recovery management**

Contract revision

- **List of contracts** to review/renew
- **Readjustment** of price grids
- **Form for the re-evaluation committee**
- **Adding new clauses**
- **Covering letter**
- **Information letter to the producer**

Contract cancellation

- **Capture** of cancellation and modification of management parameters
- **Follow-up** on advance notifications
- **Balance** of all accounts

Archiving

When it expires, the case is archived at the user's request or according to the Expert System rules. Nevertheless, an archived case is stored in the active database, with all the proper information to be used for statistical purposes.

Client litigations

- **Third party security pledge** (declaration of sums held, demand for pledge release request, etc.)
- **Litigation management** – IFRS9 non-performing contracts and delinquencies (overdues)

Credit insurance

- **Follow-up on client's** credit insurance policies
- **Follow-up on internal** credit insurance
- **Follow-up on external** credit insurance
- **Revaluation of debtor risk** according to new information provided
- **Revision of credit or financing limits** (request increase, decrease, revision, new, cancellation)
- **Follow-up on late payment**
- **Client indemnification** in the case of non-payment

Monitoring

- **Requests for follow-up** based on specific risks, populations, etc.
- **Requests for set-up of planning:** follow-up on a population, increase of a population, selling insurance to a given population
- **Setup of follow-up indicators**
- **Statistics by population**

Periodical processing

- **Automatic re-estimation** of scoring for the client and debtor
- **Issuing contractual documents** (debtor account statement, client account statement, etc.)

■ Commercial Finance Cases

Contract case(s) and client account case(s) are created after a review or at the signing of the contract. Client/debtor cases are created throughout the whole duration of a client's case.

- Automatic assignment of the case number
- Assignment of a case manager through Expert System rules according to the authorizations and the profile
- Unlimited number of actors with a unique base of individuals

When introduced into the Expert System, the case is automatically processed without the participation of its manager and according to events. At any moment, the manager can take control over the case and process it manually in order to deal with peculiar cases not described in the Expert System rules.

Every case manager has a schedule, i.e. a list of cases in which (s)he must intervene because no actions have been carried out by the Expert System. Messages come either from the Expert System or from a manual action by the case manager or by another user. Some actions have deadlines for handling. If not respected, the system posts a message in the mailbox of the case manager's supervisor. Thus, pending cases are accurately followed up.

At any moment, the user can view the «chrono» – a history list of all events that have occurred in the case, sorted in reverse chronological order to facilitate the search on recent events, with the option to:

- Access the contents of all the issued texts (letters) with the option for immediate reprint
- View all received documents with a possibility for printing (optional document management module)
- View details of all accounting and management elements present in the case.

A scroll menu allows direct access to all business processes as well as to iMX functionalities:

- Texts: a set of texts allowing the printing or the personalization of any letter in the case through the CODIX's Text Editor
- Express: for fast sending or free text mail to any party in the case or to an individual available in the database
- Access to other cases of the same party (client, business provider, supplier, etc.)
- Data entry (or receipt by interfaces) of any fund transfer: incoming payments with controlled allocation in client-debtor account cases and automatic matching on receivables, refunding (transfers, cheques), case-to-case transfer
- Modification of the matching of debtor payments on receivables
- Other data entry (for example, notes on a phone conversation)
- Case form: display and update of all the data in the case:
 - ✓ Involved parties, contract, assets, etc.
 - ✓ Addition of involved parties (third parties or other)
 - ✓ Additional document and data entry in the case
 - ✓ Display of the Expert System: current and past cases
 - ✓ Case account view
 - ✓ De-archiving of a case
- The system administrator can customize the menus of each user and grant them authorizations
- The user has a permanent online help and pop-up function buttons

Data exchange (standard or specific interface)

- Automatic creation of data (cases, individuals) with incoming information from other information systems of the company – e.g. migration
- Information retrieval (receivables, debtor payment, bank account statements, limit requests, FCI messages, etc.) and sending data to other systems (outgoing payments for a bank, limit decisions, client statements, FCI messages).

Extranet

- Clients can:
 - ✓ Check their current account, debtor accounts, consolidated account
 - ✓ Follow their receivables remittances, financing
 - ✓ Input or send by file their requests to open/close a debtor account
 - ✓ Submit their new receivables
 - ✓ Request funding
 - ✓ Communicate with their respective case manager
 - ✓ Download their statements
- Debtors can:
 - ✓ Check their accounts by client
 - ✓ Make online payments
- The company users can connect remotely to access the application and all of its functions.

iMX allows handling of all the data and management rules for the Factoring, ABL, ID, SCF, Reverse and Credit Insurance businesses.

The company and staff

Management of the basic features of each company and of the system's users:

- Passwords
- Connecting of printers to workstations
- Task priorities by user
- Customized menus
- Application authorizations by user
- Management of authorizations
- Management of absences and leaves and transfer of schedules to available users for a set period

The system follow-up

- **Management of print works:**

iMX has an extremely powerful queued tasks manager, which easily enables all operations with texts in the print queue:

- Change of printer, type of paper, priority
- View queued for printing texts
- Retrieval of printed texts for re-printing
- Management of task queues
- Follow-up on interface executions and reports

The same tool also handles fax management.

Listings & reports

Standard or specific statements or reports, in real time or scheduled.

■ Accountancy and Invoicing

Accountancy

iMX has a powerful parameterization tool that allows the generation of any accountancy transaction from any event occurring in a case during its life cycle: movements are recorded in the Production general accountancy of iMX and/or sent as a flow of book entries or Reports on Accountancy Events to other applications, which ensure the management of general and budgetary accountancy, cash, etc.

The case accountancy is handled in real time.

iMX is delivered with a full module for general accountancy processing, which, among other features, allows a full accountancy audit (direct access to the event behind the entry and to the concerned case) and all kinds of print works (ledger, books, balances).

This module is completed by a flexible outgoing interface capability to any accounting software package.

Invoicing

In addition to its flexible management of Client/Debtor accounts, which can be customized, the invoicing module allows an easy definition and customization of invoicing principles, automation and control over calculations, management of commission payments to producers, co-factors, providers, etc. This module offers full customization (invoicing items, periodicity, type of compensation, statements, etc.) **and handles the issuing of the end-of-period official invoices with all international VAT rules, compensation methods, etc. All tools to manage those accounts receivable are also available in iMX.**

■ Risk Management

iMX is the ideal tool for the management of different involved parties. It facilitates the decision making process based on predefined parameters and control rules.

From prospecting to termination of the contract, iMX follows these different stages through specific procedures.

Each party requires appropriate control rules to ensure effective risk management and to be protected against unexpected situations.

Given its international experience, iMX places great emphasis on risk management and remains flexible for any type of change that aims to improve certain controls and make them operational.

■ Contact

CODIX

200, rue du Vallon
Sophia Antipolis
06560 VALBONNE
FRANCE
Phone: +33 4 89 87 77 77
Fax: +33 4 89 87 77 00
Email: info@codix.eu
sales@codix.eu