Trilobita **Informatics**

— EFFICIENT INFORMATION TECHNOLOGY —

Trilobita Informatics Excl. Co.

IT solutions for leading-edge companies

Since its foundation in 1997, Trilobita has been operating as a major solution provider for Hungarian medium-sized and large companies. In our work we have been driven by the efficiency, precision and quality orientation-trio as a key principle. The integrated unity of technologies selected and methodologies applied by us has always been the key element of our operation.

Our project methodology is proof that each step of the projects managed by us is planned and documented from the establishment of the initial need to the closing of the project.

The electronic document management solutions (EDMS) covering all aspects of document management in large companies, process and project management solutions and commission management applications are among our key competencies.

In our projects, we rely on our mosaic of hundreds of applications and develop individual large corporate systems that are suitable for covering all the needs of the particular company and for offering the most effective IT support for the tasks of the work processes constitute on the focus of the project.

During our more than 20 years of history, we have successfully implemented systems in a number of the main large companies operating in Hungary. Some of our clients including Lapcom Ltd., UniCredit Bank Ltd., or the Magyar Lapterjesztő Ltd. still use our systems which were individually developed and customized for them many years ago.

Our technology and applied methodologies allow us to serve our customers irrespective of their activities. Consequently, our references cover a number of business areas. We delivered document management solutions to two leading commercial TV channels in Hungary (RTL Klub, TV2) and also developed a commission calculation application for UniCredit Bank.

20+
years in the IT market

100+
corporate clients

References

During its more than 20 years of history, Trilobita developed individual IT solutions for numerous companies. Following the development of smaller systems, in 1999 we began focusing on large enterprise systems.

During our projects representatives of various business lines became our customers and therefore the range of business problems to be resolved also covers a rather wide scope.

Our experts are available with project management and other advisory services to our customers from the first phase and needs specification of the projects to the last step, i.e., the implementation of the developed system. Our customers also often rely on our support after the implementation of numerous systems developed by us.

Banking and financial companies

OTP Bank Plc., UniCredit Bank Ltd., Bank of China Ltd., Credit Agricole Ltd.

Chemical industry and energetics

MVM Group, Gedeon Richter Plc., PannonPharma Ltd.

Building and utility

TriGránit Group, Arcadom Ltd., Aqua General Ltd., Antenna Hungária Ltd.

Manufacturing

Linamar Hungary Ltd., Richard Fritz Holding, Káta CNC, Martin Metal Product Ltd.

Media and publishing

Sanoma Budapest, TV2 and RTL Klub Television, Lapcom Ltd., Magyar Lapterjesztő Ltd., PAUKER Holding LLC

Other industries

Hidrofilt Ltd., Transmoduls Ltd., HungaroSpa Hajdúszoboszló, Aquaworld Ltd., Hilltop Neszmély Ltd.

Our services

Advisory services

Based on the requests of our clients, we assess and analyse business needs, make proposals for the implementation and assessment of the systems to be implemented and for the review of existing systems.

Advisory services

With the help of our project management methodology we can offer outstandingly efficient project management and coordination to our clients in our research-development and IT projects.

Development and testing

Our development methodology combines the elements or classic waterfall and agile methods, flexibly adjusting to client and project needs. Numerous complete system modules increase the efficiency of our development and testing work.

Implementation

In our projects we implement the IT solutions that suit best the needs of our clients and are capable of effectively supporting the business processes of the company in phases.

Design

In our solutions we concentrate most intensively on creating the most ergonomic user interfaces, the matching of screens and functions with the work processes of users and we aim for industry and platform independent solutions starting from the design phase.

Support

Following the closing of implementation projects we provide maintenance and support services to our clients for all solutions delivered by us. Our goal is to build long-term successful co-operation with our clients.

Large corporate IT solutions

Our large corporate systems are deigned for the major business areas based on individual needs, within the framework of customized development projects.

When developing individual IT solutions, our company tries to satisfy all needs of our clients and therefore in each project we make an offer from the technologies and solutions applied by us which in our opinion suit the best our clients' needs on individual basis, following technical considerations..

Competencies

Document-, file- and case management

The storage and management of documents and confidential files at medium-sized and large companies, support of document management processes, case-based workflow support, task and job list management.

Archiving solutions

Managing the archiving of paper-based and electronic documents in bulk, implementation of authentic archiving solutions, archiving process and workflow support.

Process management solutions

Management of business processes with the support of workflow and ticketing solutions.

Commission calculation and management applications

Calculation of commission for periodic sales, commission model and scheme management, commission projection and test options management and bonus commission management, support of sales competitions.

Project document management - project management

Consistent storage and management of project related documents, project portfolio management.

Support of purchasing processes

Management of purchasing projects, supplier management, storage and management of documents of purchasing, support of the authorization of processes, purchase monitoring.

Process-based decision preparation solutions

Design and support of decision preparation processes, management of review and authorization procedures.

Cloud-based software solutions

Group level solutions, standard cloud-based solutions for groups to exploit the advantages of sharing common resources and repositories, service-based solution supply on own or leased servers, support of building private clouds, operation of cloud-based services.

Technology

In certain cases the technologies selected by our company represent more difficult yet more liable ways, therefore we guarantee quality to our customers with strict design and development conversions.

The applied conventions cover the following areas:

- Fault tolerance and fault detection conventions

- Design conventions for testability

- Testing conventions

- Standard database object and variable naming conventions

- Procedure, parameter admission, parameter transfer and cycle organization conventions

- Source code commenting conventions

- Standard user documentation preparing conventions

Clean technologies supporting application integration

Why is it important to have „clean" technology?

After a while, each company tries to establish a constant and clean IT infrastructure which guarantees a real business advantage.

The various applications must be integrated on a standard technology basis, in a consistent framework.

Companies developing regional systems, including also our company, must try to ensure that their solutions integrate into the customer's existing IT systems with standardized application integration technologies.

The clean technologies and standard middleware layers greatly contribute to the reduction of operational and maintenance risks.

Why should you use a technologically consistent development environment?

Using a consistent and simple development environment (see the technology figures) may require a longer development period, but it guarantees simpler management if the generated code and increases the opportunities of further development.

Furthermore, financially it is extremely important that such technologies maximize maintenance and also valuably extend the life cycle to the system.

Platform, database, and display independent technology

This technology is offered to customers who need a database and environment independent, high-tech ergonomic, online, large corporate system. Our platform, persistence, and display independent technology consists of five main logical layers.

The persistence layer is responsible for data storage, management, and supply. Practically any currently widespread database management system may be selected as the persistence layer: ORACLE, MySQL, MSSQL, DB2, Maria DB etc.

The ORM (Object-Relational Mapping) layer guarantees consistent access to stored data (Hibernate). This layer makes the other components of the system independent of the method of data storage.

The business logic layer is responsible for the enforcement of the internal rules of the application. That is where the processes relating to the system are modeled and the business processes are executed.

The coupling layer is responsible for the transformation of the data defined by the business logic and for the transmission of the data to the appropriate view layer. This layer classifies and packs the data to be transferred into XML format.

The presentation layer is responsible for the communication with the user. The user sees only that layer, and therefore it is important that that layer should determine the ergonomic and graphic display of the application.
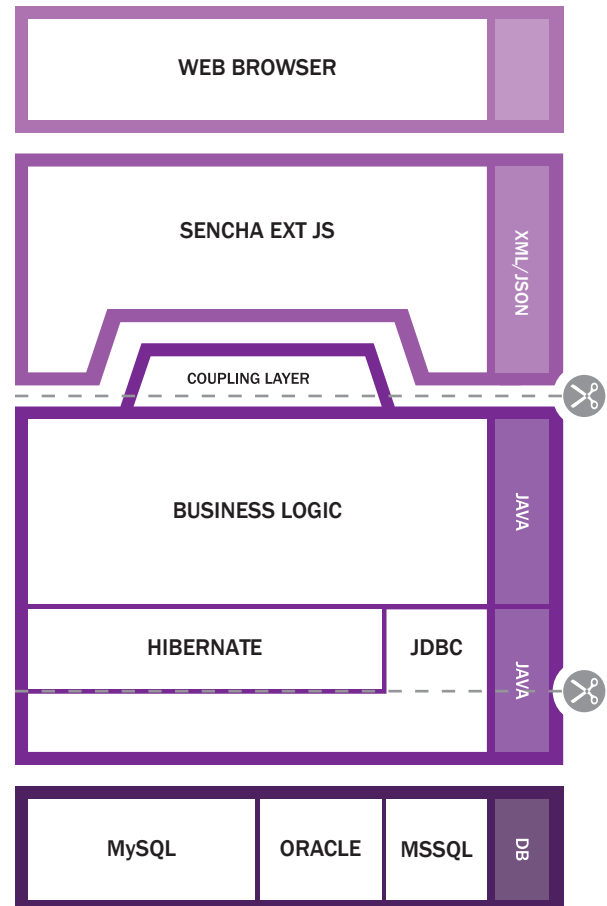
The application may be „cut" among the dotted lines shown in the figure. Thus the display layer and the database layer may be changed without modifying the business logic of the system. That means that when we intend to develop a web application with the same functionality but running on PDA for our existing RIA - based system, we can do so more effectively and simply, by writing a new ergonomic layer without modifying anything in the business logic or in the levels below it.

In terms of application integration, it is also important that owing to persistence independence, the databases and surfaces of other applications can be used without any change. We can use the common resources of application parts (e.g., partner management, company structure etc.) nativelyextend the life cycle to the system.

Advantages of the technology

User-friendly, ergonomic interfaces, easy use

While designing and building the systems developed by us we tried to build an ergonomic user interface and to match screens and functions to the user work processes.

Basic functions assisting in the use of the system:

- Screens appearing/disappearing subject to authorization

- Unique start screen set up

- Data forms, directly accessible for email notification

- Use of individual and group job lists

- Position sensitive Online Help with user information relating to the particular screen

- Individual or central definition of the columns and the order of columns in reports

- Positioning information icons and texts in the screen

- Automatically completed fields, format control, data displayed according to the organizational unit in the drop-down fields

## Integrated customizing and configuration options

Owing to the integrated customization functions of our solutions, after implementation the system operators and administrators can use a number of configuration and modification options. None of them require any developer resource.

- Entry of individual fields into the data sheets of the system

- Extension and modification of the drop-down fields (master data) of the system

- Process modification and creation

- Functional and data level authorization modification, the establishment of new roles

- Uploading and configuration of templates

- Addition and modification of labels

- Identifying format modification

- Automatic loader management

- Partner data loading, integration

- Language label modification (field names, descriptive and information texts

Standard data connections with external systems

Our applications can communicate with external systems in different ways: through a standard web service interface, XML/JSON based HTTP/HTTPS requests, XLS data file and import/export, loading channels.

All functions of the system are accessible with XML/JSON based HTTP/HTTPS requests, which the system typically uses for communication with user clients. Data communication through secure channels is natively supported.
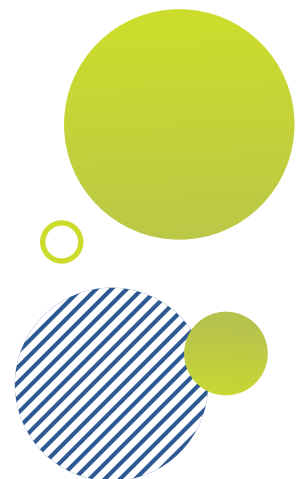
A project with Trilobita

Phase 1: Contact, identification of customer needs

In the first step of the Trilobita projects, our future customers learn about our company and services as well as the main components of the high-level technological portfolio used in the implementation of our solutions with the involvement of our business line managers. During the introductory meetings, we also intend to enable our customers to gain assurance of our professional skills and commitment through our references and experience.

We try to build satisfactory customer relations and trust already in this phase of the project. Communication with future customers is always a two-way process because it is absolutely necessary to learn about and recognize customer needs to establish a project.

Outlining the alternative solutions is the next step after the definition of needs. The additional IT needs required for implementation are analyzed with the involvement of consultants and then we prepare the requirement specifications with the involvement of the customer's experts to constitute the basis of our proposal.

Phase 2: Proposal phase and contract

Our issued price proposals contain the solutions developed on the basis of the consultations with the customer in detail, in a transparent structure. The technical content reflecting the contract notice and preliminary technical specification is a major component of our proposal.

The project is documented according to the ISO standards and in compliance with the quality policy principles applied and accepted by the company already in this phase.

If our proposal is accepted, a contract is prepared containing the main terms and conditions of the project and the obligations of our company and our customer.

Phase 3: Project establishment, system design

On the basis of the technical content and schedule included in the contract, our project manager establishes the project and allocates the tasks to the project participants to be performed in the various phases of the project.

At the requirement specification meetings, the customer's experts define their professional requirements. In the course of requirement specification, the primary objective is to match the expressed requirements and the objectives indicated in the contract. That matching is performed by the project manager.

As a result of the system design meetings, we prepare a draft system design with the UML methodology to be checked by the customer's experts.

Phase 4: Approval of the system design, test scenario

In order to demonstrate the contents of the prepared system design with illustrations, we prepare various screen designs. Once they have been studied and evaluated, the system design is approved.

The system design is the basis of test scenarios and a conversion plan. The test scenario contains the steps of the complete system level testing of the built solution.

Phase 5: System development, system tests

All our systems are developed with a cyclical model. The built system functions go through functional tests, according to the result of which the system design is modified and the system is improved accordingly. The built functions are corrected regularly during the development period.

The project manager tests the cooperation of the built and tested functions with the data defined earlier in the test scenario and makes a decision on the delivery of the project.

Phase 6: Implementation, training, project closing

All our systems are delivered on the basis of the previously approved test scenario. Following a successful test, our project managers outline the potential project risks associated with implementation and prepare the management on how to avoid them.

Following the implementation of our systems user training may take place according to the requirements, even in multiple groups. The user manual of the system, built during the project helps accelerate the learning process of the users.

Once the system has been filled with live data and speed has been optimized, the project is assessed and closed in cooperation with our customer.the customer's experts.

Do you plan to implement an IT system?

Contact our members of staff already in the design phase!

Our experts can effectively support your endeavors in preparing projects, both in terms of professional or information technology issues.

· We can demonstrate you our existing systems built for different size companies and different business needs.

· We also help to model practical problems in order to find the best IT solutions.

· We offer to provide support in defining the functional needs.

· We make out proposals on our sound professional basis, to suit the individual needs of your company.

Contact

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