

BONAIR®

Corporate Quarterly Magazine
#5 > March 2006

review

Implementation

> Quick credit decisions



The system that Bonair has created does not only meet our expectations, but it satisfies Bank's formal requirements as well. Our cooperation with Bonair has also been very satisfying. What we want to achieve in the future, is a smooth transition to the next generations of IT. This is not only a matter of fashion, but the matter of increasing flexibility and system functionality. Bonair has already begun preparing a new version of the system which includes a lot of improvements suggested by us, says Grazyna Szeflinska, the Head of the Credit Risk Department at Kredyt Bank. [page 6]

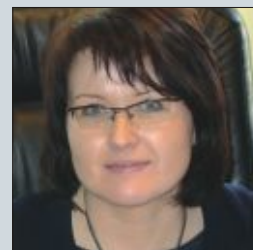
Bonair SA, a key Microsoft Business Solutions integrator, has been granted the Microsoft Gold Certified Partner title in



the following five areas: Microsoft Business Solutions, Data Management Solutions, Custom Development Solutions, Information Worker Solutions, and Advanced Infrastructure Solutions. The above verifies Bonair's highest competency level, as well as the highest quality of the company's services and delivered products. The company supports the integration of client's business processes based on the Microsoft technology. Bonair specializes in Microsoft Business Solutions products integration such as Axapta, Navision, CRM and XAL. Bonair provides services in the area of IT consulting, system and applications integration. The company also implements dedicated applications in the financial, public and industry sectors.

Implementation

> Revolution in logistics



The process of selecting the best integrated system offer lasted for about 1.5 year and consisted of several phases that sequentially eliminated the bidders. We have chosen Bonair solution because the company offered full compliance with our requirements and reasonable price for dedicated functionality development, says Katarzyna Olczykowska, the Head Accountant at the Pilicka Telephony Company. [page 3]

Ladies and Gentlemen

In the current issue of our quarterly magazine you will find a description of how the credit Application Processing System (APS) and the Decision / Scoring Engine have been implemented in Kredyt Bank. This is one of the largest automated decision system that we have installed in the banking sector, as it is used by more than 300 branches of the Bank. The system is growing continuously and its functionality is being constantly enriched.

In the last quarter an important event took place. Bonair was granted the **Microsoft Gold Certified Partner** title. This signifies that our competencies in as many as five (!) areas have been verified. The areas are as follows:

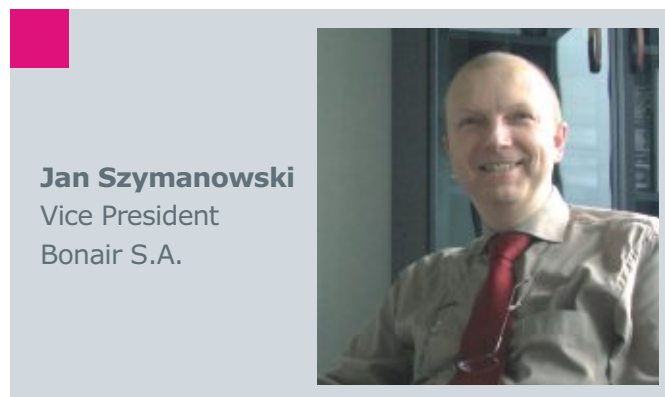
- > Microsoft Business Solutions
- > Data Management Solutions
- > Custom Development Solutions
- > Information Worker Solutions
- > Advanced Infrastructure Solutions.

Our company has one of the largest team dedicated to the Microsoft technology consultants with the highest level of expertise confirmed by relevant certificates and references. Our competences have been noticed in various competitions organized by Microsoft. For example, we have been awarded:

- > the first place in the Best Microsoft Axapta Consultant competition
- > the first place in the most interesting Microsoft Axapta Add-on (additional functionality module).

In the latter competition it was our competitors who evaluated our work so highly. Thank you!

It is my pleasure to inform you that in February 2006 we have received a prestigious **EUROPRODUKT** award in recognition for "The National Job Market Monitoring System and the Central Data Base of Job Offers". The project was completed



Jan Szymanowski
Vice President
Bonair S.A.

by the consortium formed by S&T, Bonair and RSI. This was the 9th edition of the competition which was organized by the Polish Commerce Society under the honorary auspices of the Ministry of Commerce, the Prime Minister, and the Polish Agency for the Entrepreneurship Development. The system have been designed and implemented for the Ministry of Labor and Social Policy. Described in Bonair Review #2 (June 2005).

In February 2006 we have participated in an annual ProClarity partners conference in Sun Valley. The conference was dedicated to the new 6.1 version of ProClarity for MS SQL 2005. The presentations delivered by the users of the large ProClarity installations were of special interest to us. In this respect the Veterans Health Administration system, which supports over 1,000 users preparing SQL-based reports and analyses while the data base is growing by 1.5 mln documents daily, was outstanding.

I hope that you enjoy this issue of our Bonair Review.

Jan Szymanowski

Conferences, presentations, seminars

Microsoft Industry Solutions Days 2006



April 5, 2006, 8:30 -17:00, Marriott Hotel Ballroom, 1st floor, Al. Jerozolimskie 65/79, Warsaw

At 15:50, **Bonair's presentation** starts.

Bonair is going to present its analytical and reporting solutions that have been created with the use of the ProClarity Analytics platform for the ERP Microsoft Business Solutions – Axapta system.

To sign up, call (022)7636101 or visit:

www.microsoft.com/poland/seminaria/rejestracja.msp

There is no entrance fee but signing up is necessary.

2nd Finance Directors' Forum

April 25-26, 2006, Polish Business Council Club, Sobanski Palace, Al. Ujazdowskie 13, Warsaw

Among topics to be discussed are:

- > Legal responsibility of financial directors
- > Managing financial liquidity and currency risk
- > Financial instruments.

During the Forum, **Bonair's presentation** is going to take place. The topic: ProClarity Analytics Platform – benefits of Business Intelligence solutions. Examples of ERP – Microsoft Business Solutions – Axapta data analysis.

Systems for telecommunications companies

For the telecommunication sector, Bonair offers **Tekelec** and **DITECH COMMUNICATION** solutions.

Tekelec has a leading position in the areas of signaling and number portability. Tekelec's signature product is the SAS 7 Eagle system, Multiprotocol Signaling System, that works with the ETSI and ANSI standards, as well as with newer solutions (3G telephony).

DITECH COMMUNICATION manufactures telecommunication equipment for mobile and fix line operators using commutation, mobile or VoIP technologies. It specializes in manufacturing and implementing platforms to reduce hybrid echo and background noises. Quad Voice Processor (QVP) is the most demanded system used to eliminate echo and highly improving voice quality. QVP is fully compatible with all currently in place telecommunication standards.

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Axapta in the Pilicka Telephony Company

> Revolution in logistics

A proper calculation of the value of the Pilicka Telephony Company's fixed assets has been for the company the most important issue. In order to address it, the Axapta system has been installed.

Before Axapta was implemented in the Pilicka Telephony Company, two DOS- based systems had been in place. One of them serviced accounting and another was responsible for managing warehouses. Since the two systems were not linked, each module used its own index cards. Therefore, there were double card indexes that kept track of recipients, suppliers, materials and products. Preparing monthly reports was difficult because it was necessary to coordinate data from both systems. *We didn't have an option of integrating both systems into one which would have made it possible to enter data only once*, Katarzyna Olczykowska, the Head Accountant at the Pilicka Telephony Company says. This is why the company decided to implement a new system. *Not only did we want to modernize our system's ability to handle accounting, logistics, HR, but to facilitate other company activities as well. For example, we wanted to have electronic invoice ledgers*, says Katarzyna Olczykowska. Axapta turned out to be a suitable solution.

Among other transactions Axapta processes purchases of all necessary goods the company needs to provide its services and to enhance the growth of the company's infrastructure. Axapta also handles various warehouse activities and operations involving company's fixed assets. Axapta enables monitoring of the financial side of investment, as well as makes it easy to locate individual fixed assets (such as transmitters, aerials; installations used to connect clients to the infrastructure, access points, etc) at any desired moment. In order to make such

Implementation facts

> **What:**

The Axapta system, along with Forms and HR modules developed by Bonair service the following areas: financial accounting, property assets, exchange rate gain or loss calculation (for purchasing fixed assets), and logistics including purchase orders, tax calculation, electronic payments, electronic bank statements importing, electronic invoice ledger and salaries; 27 licenses.

> **Where:**

Pilicka Telephony Company – a local telecommunications operator that provides phone and Internet services in the area of the former provinces of Radom, Piotrkow, and Tarnobrzeg. The headquarters are located in Radom. The number of subscribers: 37 thousand.

> **When:**

June – July 2004 – system analysis and modeling
 August – September 2004 – testing
 November – December 2004 – training
 November 2004 – March 2005 – transferring data from the old system to the new one, and preparing the opening balance
 June 2005 – launching the complete system



functionality possible, it was necessary to modify certain parts of the system and, in certain situations to add new functions.

A requirement to reflect an internal flow of fixed assets in the system turned out to be a significant programming challenge. In reality, fixed assets can be released from a warehouse and installed at a client's house first, and then removed, if the client cancels the service. If this happens, the fixed assets are either reinstalled at a different client's location or they are disassembled. Next, these disassembled parts are moved to a warehouse, and then they are used for manufacturing new devices or installations. The values of such devices or installations vary: installations made with brand new elements are more valuable than the ones made with old elements. In order to enable the system to consider such nuance details while estimating the value of particular fixed assets, it was necessary to prepare a cohesive mechanism that assigned specific values to particular elements of fixed assets.

>> Complicated calculations

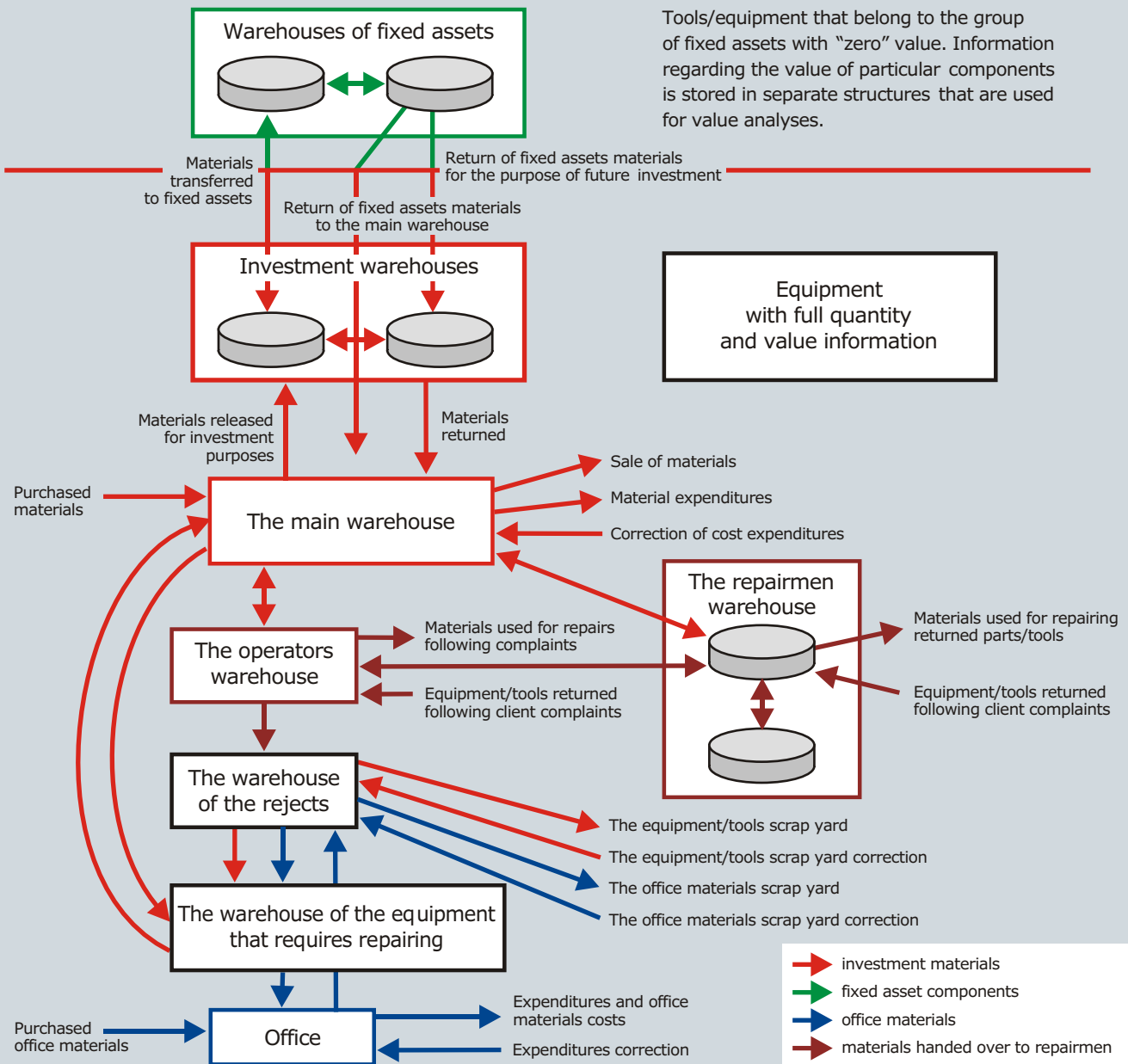
The most important process for the company is to register the proper values of newly acquired fixed assets that consist not only of investment warehouse materials, but of external services, intermediary costs and exchange rate differences (ERD) that result from paid liabilities as well, says Katarzyna Olczykowska. Most materials that are used to manufacture fixed assets are purchased abroad, with the use of foreign currencies. The system has to calculate ERD because they may increase or decrease the value of fixed assets and from company perspective they represent the large amount of money. The main complication is due to the fact that the way the ERD is calculated depends whether fixed asset was built before or after ERD occurred. Creating a mechanism for such operations was one of the largest system modifications. *The module responsible for calculating ERD is still undergoing the extensive verification*, Katarzyna Olczykowska admits.

It was also necessary to add fixed assets insurance handling functionality to Axapta. The system enables registering insurance policies, as well as installment payments. It can also generate information, e.g., to notify users that a certain policy is about to expire.

>> Double conversion

The solutions that were first designed on the paper together by Bonair and the Pilicka Telephony Company were incorporated in a test data base, which was created based on the data imported and converted from various existing data bases. The Pilicka Tele-

The circulation of materials in the Pilicka Telephony Company



In the system, a particular material is registered as an investment purchase that is to be stored in either the main warehouse or in the office materials warehouse. The purchased material that is booked in the main warehouse can be released for investment, in other words, it can be either incorporated in a device or installed at client location as a fixed asset.

The device or parts of it can be returned to the investment products warehouse. From there, it can be transferred to the main warehouse and wait to be reused. It is also possible to transfer the device to the fixed assets warehouse or to the repairmen warehouse. Out of order or damaged devices can be used to either repair other devices, incorporated in a fixed asset or sent back to the investment warehouse. Materials sent to the operators warehouses are utilized in the process of repairing damaged devices for which client complaints have been received. The warehouse of rejected devices contains damaged products that are either transferred from the investment warehouse or handed over

by the repairmen. The damaged products are being send for the repairs to the outside service company and they are booked to the investment warehouses on the return for future utilization.

All materials circulate in a closed circuit with multiple changes of their values. The devices are stored with "zero" accounting value in the fixed assets warehouse. The information regarding the current values which is needed for the purpose of various analyses is stored in the additional structures. The goods that are located in all the remaining warehouses have assigned their actual accounting value to each of them. A particular material from the fixed assets warehouse can certainly return to the investment warehouse. First, however, its present value is calculated with the depreciation factor also being considered. Each material circulates inside the company until it is fully used-up and finally written off. The materials from the rejects warehouse that can not be repaired or this is economically not justified are scrapped or sold and finally written off.

> Revolution in logistics

phony Company employees then checked if particular system modifications or its new elements worked according to the agreed specification. A set of documents from a specified period of time was also entered into the system to enable verification process and to compare the results with those obtained from the old system.

After the tests had been completed, the most difficult operation was carried out. The existing data bases (e.g., data regarding suppliers, customers, materials and products) was to be transferred to Axapta. Even though there were large volumes of data (after conversion Axapta had 6GB of data), the old coding and product indexing schemes have been changed (for example, what used to be a group of products in the old system was registered as just one product in the new system). In consequence, all materials have been assigned the new indexes.

The data transfer was carried out in two phases. The company responsible for the previously-used systems prepared data using the format that had been earlier agreed on. Bonair, on the other hand, created mechanisms that converted the data to structures from which they could be imported to Axapta. The data was then verified and entered into Axapta as the opening balance. The entire operation was so complicated and time-consuming that the opening balance was ready in March 2005 and not, as it had been scheduled, in January 2005.

Starting in June 2005, the new system became fully available to users. However, the Pilicka Telephony Company decided to utilize both the new system and the old ones simultaneously until the end of 2005. The very few systems have the chance to be verified this thoroughly.

>> Necessary training

Eleven employees of the Pilicka Telephony Company participated in the implementation process. They were introduced to the system while it was still undergoing modeling, and then they participated in testing. The testing was to show how the system would function once the changes have been implemented. The eleven employees did not require standard training, all they needed was a summary of the knowledge acquired. However, they are not the only ones to use Axapta at the Pilicka Telephony Company, where simultaneously 20-24 employees work with the system. *In order to make the system fully usable, it was necessary to provide training to all the operators that use Axapta*

Implementation benefits

- > Faster document flow inside the company
- > On-line access to information regarding invoices and their payment due dates enables preparing detailed payment schedules
- > Possibility to estimate future costs based on the just arrived documents
- > Electronic information regarding suppliers and orders enables preparing better strategies for price negotiations and delivery conditions
- > When small system modification is needed the assistance of the system supplier is not necessary, since the Pilicka Telephony Company system administrator can handle this himself.



Katarzyna Olczykowska
the Head Accountant
at the Pilicka
Telephony Company

” *The implemented system has significantly expedited document circulation in the company. Fast access to electronic information regarding our suppliers and orders allows us to create better strategies for negotiating product prices and delivery conditions.* ”

on a daily basis, claims Katarzyna Olczykowska.

It is worth mentioning here that the Axapta implementation has not caused downsizing despite the fact that fewer employees are now required for certain jobs. *The operators of the old systems are involved in different tasks that are based on additional information and functionality build into Axapta,* Katarzyna Olczykowska says.

>> A cohesive chain of events

The Axapta implementation has entirely changed the way logistics are handled at the Pilicka Telephony Company. Unlike in the previously used systems, each operation that is registered in Axapta is a cohesive element of a long chain of events; starting with order placing, through products receiving, internal transfers, warehouses transfers or material assignments to the investments. Company started to register purchase orders and based on this information product deliveries are accepted. In the past, the product delivered by a supplier was registered in the system without verification if there is a demand for it. Now the supplier needs to use a PO number and a warehouse employee will accept only the products listed in the PO and in quantity ordered.

The document flow has also changed. In the past, the warehouse employees entered various data into the system, and consequently orders were generated there. Nowadays, these processes are handled by the commercial department, which has a better orientation when it comes to prices and delivery conditions. The warehouse employees register only the material/product delivery data, while the financial department keeps track of the product costs. Similarly, entering invoice data into the system is possible only after a purchase order is registered, and the information confirming that a particular product has been received by a warehouse is also entered.

The system also handles various office activities. The system registers incoming documents, such as invoices, and then it monitors what happens with them (e.g., they are sent to particular departments in order to verify, for example, a list of ordered products or the order value). Thanks to this, it is possible to locate each document and to check on the document acceptance process. Only after the document is internally accepted it is sent to the accounting department.

A complete scoring solution for Kredyt Bank

> Quick credit decisions

Thanks to implementing the Bonair's solution the client's credit credibility decision is independent on who, when and where (which branch) receives a credit application and this decision can be generated in just a nick of time.

Every year, Kredyt Bank receives more than one million credit applications. On one hand, the clients demand that their applications be quickly processed. On the other, the Bank strives to automate its operations in order to be more time efficient, but it also wants to minimize the credit risk that is potentially related to every transaction. The implementation of Bonair's Application Processing System (APS) along with ScoreEngine (decision engine) help to meet the both sides expectations.

The APS is used to make credits decisions. The system assesses client's creditability as well as the potential credit risk. All operations taking place in the system reflect the bank's credit policies. The solutions used by Kredyt Bank consist of numerous components, including the registration module, the application processing module, the scoring engine, the document printing subsystem, the monitoring module, the administrative module, and the automated interfaces for data exchange with internal and external data sources.

>> The Bank is growing, and so is the system

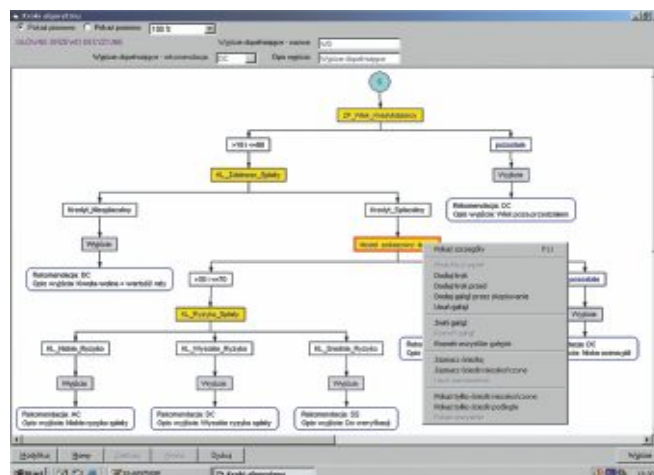
The APS implementation process began in 2002. The process was sequential: each credit product and each group of products were treated separately. First, the system was implemented in the three Warsaw branches that have the largest number of clients, and then the implementation encompassed all the remaining branches around Poland (there are a few hundred of them). *The system that we currently use is different from the one that was implemented four years ago. It has been modified*



and improved to serve our needs better, says Grazyna Szefflinska, the Head of the Department of Credit Risk for Individual Clients in Kredyt Bank.

One of the most serious improvements was the replacement of the previously used scoring engine with the one developed by Bonair. The scoring engine, based on the adopted strategy, automatically assess client's credit risk and generates recommendations regarding credit approval or refusal.

The recommendation generation algorithm resembles a tree. It consists of nodes in which conditions are examined (expressions and formulas are calculated based on the application's characteristics, application class assignment), point values are calculated and then a suitable strategy for proceeding is selected. The processed application flow may follow various paths depending on the score received in the previous node. In the end node a final recommendation is generated by the decision engine.



Implementation facts

> **What:**

A complete solution for credit application processing at Kredyt Bank: the system that registers and processes credit applications (APS), the decision engine (ScoreEngine), scoring strategy modeling tools and automated data exchange interfaces.



> **Where:**

Kredyt Bank - the headquarters are located in Warsaw. The system is accessible from all the branches of the Bank.

> **When:**

The main phases:
 Pilot implementation – 2002, Integrating the system with [several] external and internal data bases that contain client data – 2003, Linking the system to the e-banking KB24 module and to the Zagiel company system – 2004, Bonair's decision engine implemented – 2005.

The system is maintained and is being modified/developed to meet the current needs of Kredyt Bank.

> Quick credit decisions

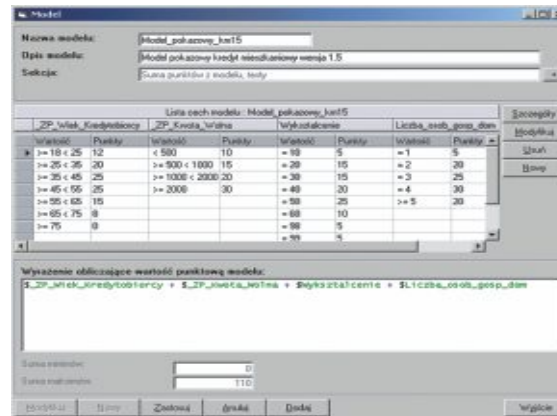
Next, this information, along with the explanation of why a certain approval / refusal decision was made, is transferred to a bank employee. We have chosen Bonair's decision engine because of its flexibility and adaptability to the Bank's individual needs. With the earlier solution, our possibility to intervene and modify the system was very limited, says Grazyna Szeffinska.

The implementation process at Kredyt Bank reflects the changing requirements and expectations of the Bank. Grazyna Szeffinska identifies three project milestones: integrating with the client data bases (both internal and external), linking to the e-banking KB24 module, and expanding the integration with the Bank main transactional system.

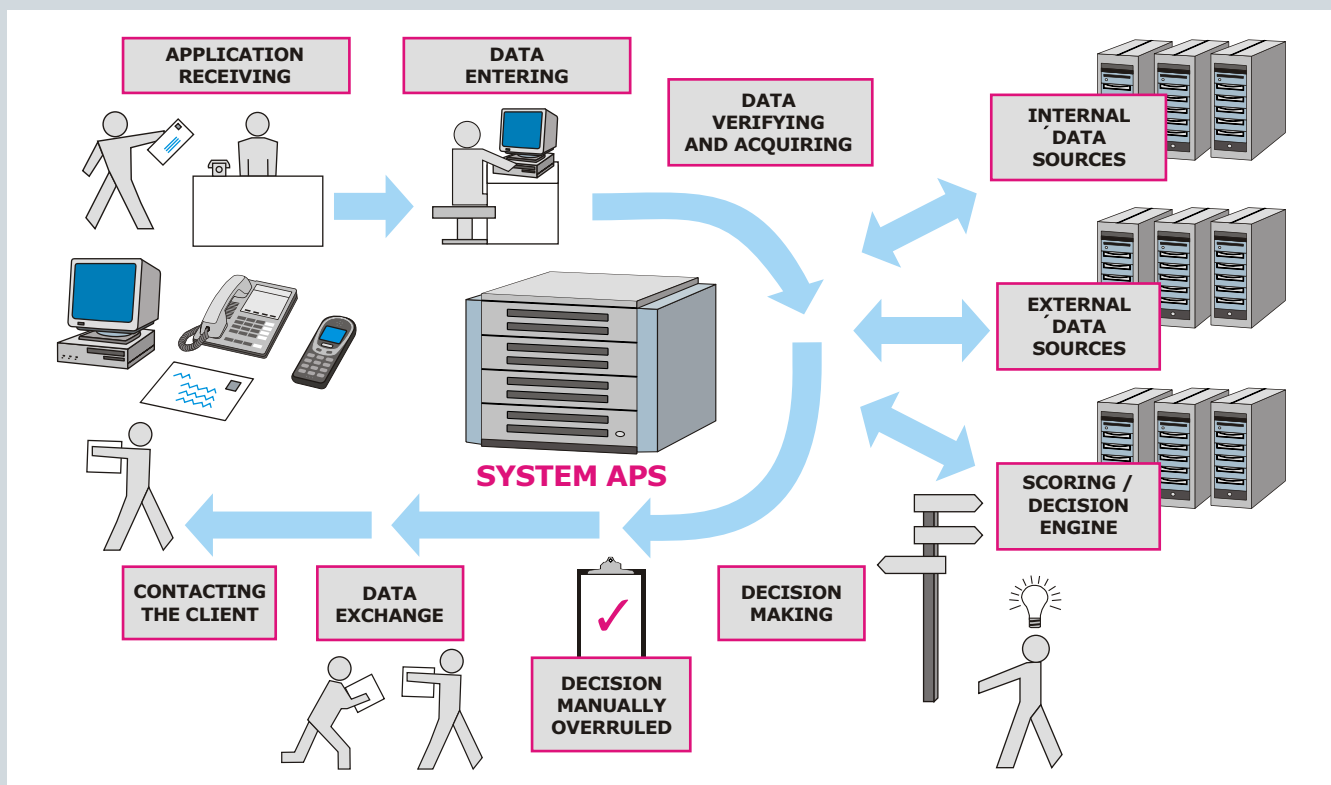
>> In a testing loop

The cooperation procedures between Kredyt Bank and Bonair that were used during the first implementation phase are still in place now when Bonair delivers system modifications or adds new functionalities. Following Kredyt Bank's formal request, Bonair designs new functionality. After internal testing, Bonair

Bank's scoring cards and formulas defined in assessment algorithms enable assigning point values to data presented in the application. The model of score value calculation is one of the elements of the decision making strategy that enables automated credit recommendations generation by the decision engine.



A credit application flow in the APS system



The circulation of a credit application in the APS (Application Processing System) reflects the real application processing phases in the Bank. An employee who receives an application from a client enters the client data, information regarding client's monthly income, etc, into the system. The system then adds data that has been obtained from the Bank information resources and it verifies the completed application against the data generated by the data bases. Next, the system obtains additional information from the Bank's external data sources (e.g., the Credit Information Bureau). Next, the ScorEngine decision engine evaluates the application against credit strategy using an appropriate scoring card. The engine assigns point values to the application and then it generates an automated recommendation in regards to credit's

approval or refusal. The system generated decision can be overruled by an authorized employee (if the Bank procedure permits such action).

The decision engine consists of the following two components: the defining module that models the application evaluation algorithm (which measures client's credit ability and assesses potential credit risk) and defining decision making strategy and the executing module that generates an automated recommendation based on the predefined algorithms.

The APS directly supports bank employees in registering credit applications, performing operations, monitoring the progress of application processing and in automated and final credit granting decisions.

hands them over to the Bank where they are subject to more testing. For this purpose, a special test installation is used, which processes simulated data. *When we see that a certain operation could have been handled differently and we want to improve it, we just communicate this with Bonair. The company prepares another version of the application which includes our comments and we test it again,* Grazyna Szefflinska says.

Once the tests are successfully completed, a new application is added to the system, according to the schedule that has been accepted by both parties.

>> Training – content specific mainly

In 2002, when the system was being implemented, the training was necessary. First Bonair trained these employees for whom it was crucial to understand the system in depth. Later on these initially trained employee become internal trainers who provided the necessary training to the remaining employees. *Training people in the Bank branches that were the first ones to start using the system was not easy, even though they had been exposed to testing before. Electronic training was also available to our employees. It was possible to access the system, input test data, process an application and to verify one's system knowledge,* says Grazyna Szefflinska.

Because the system is being used by Kredyt Bank for several years now, the employees had enough time to get to know it well. Therefore, adding new functionalities or modifications does not require complicated training. Besides, all the system operations have been described in a manual that is available internally at Kredyt Bank. *The employees can access it at any time. Once in a while we also organize additional content specific training. We concentrate on explaining various functions of the system, and we show how to use them properly,* says Grazyna Szefflinska.

Another useful tool that is available to the Bank employees is the help utility, which displays hints on how the form should be handled. For example, the system helps users to enter data and ensures completion of all mandatory fields.

>> A client at a bank counter

The system is available to all customer service employees in the bank. Consequently, a client can complete all the required paperwork in any desired location, at any bank counter. Operations involving issuing cash credits or changing the credit limits can be completed in any branch without the involvement of the Bank headquarters. The client has only to provide all the data that is necessary to complete an application. If the client has all the necessary documents the contract can be signed immedia-

Implementation benefits

- > Improving credit application processing
- > Minimizing manual work
- > Time reduction in decision making process
- > Creating uniform client assessment rules
- > Capability to process large volumes of data (credit agents)



Grazyna Szefflinska
the Head of the Credit
Risk Department
Individual Clients
in Kredyt Bank



” *Thanks to the credit application processing system, we are more time efficient and our clients are more satisfied. Now we plan to link the Bonair solution to our transactional system in order to further automate the application processing process and to make it possible to issue final decisions faster.* ”

tely. *In order to diminish client's efforts, we reduced our formal requirements as much as possible. For example, in order to determine the account overdraft limit we only need client's ID and a confirmed declaration of monthly income,* says Grazyna Szefflinska.

When a client comes to a Bank branch, he/she can apply for a credit by either answering questions that are asked by Bank employee (which are immediately entered into the system) or by filling out the application by himself/herself. Then, the application data is entered into the system.

The filled-out application that has been signed by a client is then sequentially processed. For example, it is verified whether the client can afford monthly installments in which he/she has to pay the credit off. Next, a potential transaction risk is assessed based on the rules and decision making strategies – the bank strategy is expressed in the algorithms that had been defined by the Bank employees. Once the application completes all the processing phases successfully the credit is approved and the client is immediately informed about it. The system then automatically prints the contract.

>> Automated, standardized and fast

Automated application processing has made it possible to make fast credit decisions, which is of great importance when it comes to the banking sector. Speed really determines success. At the same time, the system implementation has also forced us to conform to certain requirements, e.g., we had to standardize our credit products. But this is a very positive consequence, claims Grazyna Szefflinska.

Procedures and operations that take place during application processing are formalized and standardized for a particular type of credit. Since the process of application verification is completed automatically, it is extremely fast. *A fast decision, supported with client information from different data bases, as well as risk assessment and credit policies effectively enhances the sales process, is customer friendly and this is what we care about at the Bank,* says Grazyna Szefflinska.