Gothaer Versicherungen bases its insurance quotation software on the b+m Generative Development Process and the b+m ArchitectureWare® product line

Field of Business

Insurance solutions for the banking sector.

Application

Insurance quotation software for Gothaer Versicherungen life insurance to be deployed on financial services workplaces at Bankgesellschaft Berlin (BGB).

Corporate Profile

The Gothaer Group is one of the largest German insurance companies, with the individual companies covering all branches of personal and property insurance.

The Gothaer Group includes the Gothaer Versicherungsbank VVaG, Gothaer Allgemeine Versicherung, Gothaer Lebensversicherung AG, Gothaer Krankenversicherung AG and Asstel AG.

Business Solution (Business Benefits)

Comprehensive sales and insurance quotation concept from A-Z; direct access at consultant's monitors; clear user guidance of the consulting process using computer-based forms; consulting process presented in small, clear steps; transparent recording of customer data; accelerated handling right from the start; standard products from five product areas at a glance; simple modification and creation of products based on so-called "product masters" using a product editor; product design via self-explanatory forms without any programming knowledge necessary – enter information and go; 80% of turnover takes place directly in the system; reduction of consulting tasks; the completed insurance application can be printed, signed and sent via the bank to the insurance company; one of the most modern consulting systems on the German market.

Software/Systems

b+m Generator FrameWork®, b+m Flow Controller®, Rational Rose™, Websphere Application Server™, DB2™, Microdoc Persistence Framework MPF/J™, JDK™

Systematized Consulting – Policies via the Net

Consulting for Gothaer Versicherungen insurance products is now done systematically in the branches of the BGB. In place since mid-2002, the "Nepal" project, which was developed by IDG Informationsverarbeitung und Dienstleistungen GmbH and b+m Informatik AG, provides Gothaer Versicherungen with direct and universal access to consultants' workplaces at the bank's branches.

As a consulting system, "Nepal" is part of a sales and insurance quotation concept that optimally uses the bank's existing sales routes; traditionally, such systems are located in banks for both technical and business reasons.

For the consultant, this largely self-explanatory system is able to take over most of the consulting work for Gothaer Versicherungen insurance products, since it provides clear user guidance via computer-based forms and small, easy-to-understand steps. Particularly with today's focus on mass business and the trend to less qualified staff, this feature of the system results in higher quality consulting and considerable cost reductions.

Moreover, the handling of the comprehensive process is decidedly faster from beginning to end. In combination with the recording of customer data, it offers not only a reduction of the consulting work but also a complete insurance quotation for the customer and a printout of the customer's application showing all premium-related information. If customers then decide to accept, they can immediately sign and send the application via the bank to the insurance company.

Standard products can be modified and new products can be integrated using the product editor and the self-explanatory forms based on the "product master" – without the need for any programming knowledge. 80% of turnover is thus achieved using standard products fully integrated in the consulting system.

Business Aspects/Organization

The classic insurance company sales process is carried out through consultation with an insurance agent in the customer's home or in the local branch office of the insurance company. But it is also profitable to provide consulting to customers where they handle their finances and obtain financial planning advice – namely, at a bank. This new sales method is the first aim of the "Nepal" project; simultaneously, "Nepal" is the basis for extending this system to other sales areas.

Gothaer Versicherungen is the lead participant in this project. The partner from the banking sector is Bankgesellschaft Berlin (BGB) with a network of over 300 branches. The analysis, planning and implementation of the project were carried out and led by IDG Informationsverarbeitung und Dienstleistungen GmbH as IT service provider of Gothaer Versicherungen and by b+m Informatik AG.

- In addition to the new sales method being used, the new system, with its so-called "product masters", can also be used to create new products in the system.

These product masters serve as a model in the administrative part of the program called the "product editor", which the consultant can use to generate a new product version as part of a product line. Since the individual product versions each have a temporary validity, the insurance date identifies the current product.

The system also enables the user to create and maintain so-called advice structures (trees), which can be used in connection with specific products and customer data during consulting sessions at the bank.

For calculating premiums, runtimes, etc., Gothaer Versicherungen's processing module "ZML" is used. This program is also used for consulting by insurance agents.

Following successful consulting, the insurance application with the completed information is printed out using a print master. The customer can then sign the application, which is then sent by the bank to the insurance company.

Method

To avoid the necessity of distributing client software to the bank's branches, a browser-based solution was requested. This was to be augmented by an application server to enable scalability and shared access to a business object model.

The technical basis of the system consists of the following products:

- Processing module "ZML" for calculating insurance data

- Websphere Application Server

- DB2 as relational database management system

- Microdoc Persistence Framework MPF/J for persistency of object network

The following components were used for product development:

- b+m Flow Controller® for dialog and flow control (runtime component)

- b+m Generator FrameWork® for generating the technical application infrastructure from business UML models. The following implementation framework was generated iteratively:

   o EJB classes, methods, deployment and persistency descriptors for entities – including programming model for associations, inheritance, business components and their decoupling

   o EJB classes and methods for the process layer – including link to the b+m Flow Controller

   o Business process descriptors for flow control

   o JSP-based MVC pattern for the presentation layer – including plausibility, error handling and link to flow control

   o Ant-based build scripts

The basic technology is provided by the "Java™ 2 Enterprise Edition" (J2EE™) platform. The business logic is thus programmed in Java using JSPs and servlets.

The basis of the development process is provided by the "b+m Generative Development Process", which uses generator technology to automatically generate all template application parts.

Following the definition of the development process, the following work steps were conducted iteratively:

1. Analysis

    - Definition of business requirements in use cases

    - Setting up an analysis class model

    - Modeling of functionalities in the class model

    - Result: analysis model

2. Design

    - Setting up the class model on the basis of the architecture model

    - Modeling of dynamics in sequence and activity diagrams (process definition for the b+m Flow Controller)

    - Result: design model

3. Generation

    - Generation of implementation framework (see above) from the design model

4. Business implementation

    - Implementation of the business logic in protected regions of the generated code

5. Tests

In contrast to the classical waterfall model, the development process is iterative and incremental – i.e., the entire process is run through several times, which ensures continual improvement in each section of the development process.

The b+m Generator FrameWork® is an OMG MDA™-compliant product. One aim of this architecture-centered approach is the creation of groups of architecturally similar applications, so-called application families. For the "Nepal" project, an application family that can be used in other projects was developed.

The application family consists of the following components:

- UML profile (design language)

- Reference design

- Reference implementation

- Templates and metamodel

The design language is used for modeling platform-independent models. It covers the language scope of UML with extensions for stereotypes, tagged values and constraints. The reference design is a business model expressed by the means of the design language. The reference implementation demonstrates the application and implementation of the design language for the reference design. The generator templates are developed on this basis. Within the templates, the protected regions in which the application developers can implement the business logic are also defined.

Summary and New Projects

The application was developed on time and within budget. The application is in productive deployment with the above-named partners.

During the period from January 1, 2001, to August 30, 2002, 17 persons spent around 5000 person-days on the development.

Although this product was developed at two different locations, the extremely good collaboration between the developer teams of IDG Informationsverarbeitung und Dienstleistungen GmbH and b+m Informatik AG must be emphasized. The structured approach enabled a consistent and plannable developer workload and resulted in the on-time rollout of high-quality software at the customer's site.

The application family is used in another IDG Informationsverarbeitung und Dienstleistungen GmbH project, which means that considerable savings are achieved.

Scope of Application

Number of GUIs	79
Number of classes/beans of BOM	139
Number of classes/beans of process layer	100

Generated Source Code of Application

Code lines	Generated
Java without beans, presentations, controller and persistency layer	85%
Persistency layer	99%
EntityBeans	61%
SessionBeans	37%
Presentations	88%
Controller	31%
XML configuration	100%

Contact

For further information, please contact:

b+m Informatik AG
Jochen Meyer
Rotenhofer Weg 20, D-24109 Melsdorf
email: j.meyer@bmiag.de
Tel:: + 49 4340 404 5182

Trademarks

The products and names marked with ™ and ® are trademarks of the respective manufacturers and protected by national or international law.