

Marketing Campaign Management Solution

Client Background

The Client is an online marketing consultancy that leverages the advances in search technology to create highly optimized marketing programs across channels and devices. In the past year alone, the Client's digital strategies have driven more than \$825M in retail sales and generated more than 42M actions for brand and lead gen marketers.

Our Client directly cooperates with one of the largest research and development centers that focuses on digital technology, as well as has established partnerships with Google, Yahoo!, Microsoft, Facebook and other industry leaders.

Business Challenge

The Client was planning to automate routine data aggregation and processing as well as to allow specialists to analyze the available data from a number of perspectives. In order to meet their business goals, the Client contacted iTechArt with the intention of deploying a centralized, web-based business intelligence tool for managing complex online advertising campaigns.

The challenge was to develop an application that provides a factual foundation for defining and evaluating marketing strategies and facilitates the following marketing tasks:

- managing campaigns and keywords
- setting and monitoring internal and client-specific goals
- generating customized performance reports
- tracking changes in key performance metrics and identifying trends

Project Description

The application, distilled from years of industry specific experience, evolved from a Cognos based solution. However, over time limited functional capabilities, as well as escalating maintenance costs made the case for a custom business intelligence solution, which was delegated to iTechArt.

The initial project phase involved analyzing the legacy software built on the BI Reporting and BI Analysis modules of IBM's Cognos business intelligence product and designing the application architecture. iTechArt's Cognos experts were involved throughout the design process.

The application is based on the Flex/Java EE technology stack and in its all-around design relies on a combination of the Spring and Hibernate frameworks, which is beneficial in a number of ways.

Architecturally, the implemented solution is a modular n-tier application with a Flex based user interface. The application backend comprises the Web Service layer powered by the Metro Web Services stack, the Data Access layer based on Hibernate, and a Business layer. The database is implemented on top of Microsoft SQL Server. The application was designed around the Spring Framework, which provides the groundwork for its core functionality.

Overview

Client

Headquartered in Chicago, with offices in Atlanta, Los Angeles, New York and internationally;
Founded in 1998

Industry:

Entertainment/e-commerce

Country:

USA

Business Value:

Increased accuracy and relevance of strategic marketing decisions

Technical Value:

A reliable centralized, web-based business intelligence tool

Development Model:

Agile

Services:

Development, Design

Tools and Technologies:

- Front-End: Flex
- Server Side: Java EE, Spring, Talend, Metro Web Services
- Database storage: Hibernate, MS SQL Server
- Business Intelligence: IBM Cognos BI
- Languages: Java, ActionScript 3, SQL

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The business logic is implemented as a set of stateless services, responsible for core application behavior such as exception handling, security management or transaction management. The underpinning for the database layer is provided by the JPA specification and specifically the Hibernate Framework. JPA allows abstracting from a particular database implementation as well as provides for seamless migration between databases.

This design approach promotes a robust, scalable and decoupled application structure, as well as provides for testability and ease of localization. A focus on comprehensive quality assurance and continuous integration eliminated serious integration issues and accelerated the development process.

Value Delivered

iTechArt has provided an enterprise-class solution optimized for handling extremely large volumes of statistical and analytical data. It has a clean, structured system of user roles and permissions, which is easy to manage and configure. The system offers comprehensive support for the Client's day-to-day operations.

Structurally, the application comprises the following modules:

- The **Keyword Management Module** allows accessing and managing keyword information, which can be sampled by advertising campaign, advertiser, location, and timeframe, as well as viewing performance-related statistics.
- The **Goal Report Module** is used for generating client- and goal-specific reports and setting targets for various performance metrics.
- The **Alert Management Module** provides functionality for tracking trends in performance metrics over a specified timeframe.
- The **Messaging Module** notifies the user of all the recent events of importance which have occurred within the system.

The application gives the Client more control over business-critical data while keeping maintenance costs down to a minimum. The solution allows dramatically increasing the accuracy and relevance of the strategic marketing decisions. The application not only allows integrating business processes, but also has an appealing, easy to use interface.

iTechArt provides in-depth, high-quality and cost effective software development and consulting solutions to corporations across Europe and North America using both onsite and offsite service delivery models. iTechArt was founded in 2003 and has developed substantial strengths Application Development, Project Management and Outsourcing areas. iTechArt possesses deep domain knowledge through its proven research and implementation strategies across many industries including, Financial Services, Marketing & Digital Media, Security, Healthcare & Life Sciences, Retail and many more. We deliver the most effective and competitive solutions to our clients to achieve mutual business growth and success.

Quick Facts

Founded: 2003
Headquarters:
Iselin, New Jersey, USA
Development Centers:
Minsk, Belarus; Kiev, Ukraine
Team: 400+ employees

Industries

Financial Services
Marketing & Digital Media
Security
Healthcare & Life Sciences
Retail
and others

Services

Application Modernization
Enterprise Mobile Development
Custom Software Development
IT Staff Augmentation
Software Testing & QA
Software Maintenance

Technologies

Enterprise Platforms
RIA
Mobile
Web & Intranet Portals
Middleware
Business Intelligence