GSTEP
business intelligence

CASE
STUDY

GSTEP helps AdvanceCare monitor fraud scenarios

The objective of the project developed is to analyse fraud and abuse scenarios using automated processes able to detect a large number of suspicious cases, as well as make the latter more readily available to internal areas, for analysis, and to institutional clients, through a user-friendly, fast-access Business Intelligence (BI) interface.

"A long-time partner of AdvanceCare, GSTEP boasts a wide activity scope, which has added enormous value to our company. GSTEP's in-depth knowledge of the technological resources used in this project was determining to its success, as their contribution allowed us to better meet our deadlines and general quality standards. We are extremely pleased with GSTEP's work, as they possess vast knowledge of the product and have consistently and effectively met all our requests."

Advancecare

AdvanceCare Team

The Challenge

With more than 16 years of experience in the Healthcare Management area, AdvanceCare boasts extensive knowledge of Fraud and Abuse. Nevertheless, the company felt the need to automate and systemise the monitoring of these issues, in order to be able to analyse a greater number of fraud scenarios. Automated processes are capable of detecting a large number of suspicious cases, as well as making the latter more readily available to internal areas, for analysis, and to institutional clients, through a user-friendly, fast-access Business Intelligence (BI) interface.

AdvanceCare resorted formerly to ad hoc processes (some of which, based on BI tools, are still used) and behavioural statistical analysis to detect deviations. However, the need for manual operations and the long response times involved prevented the company from achieving the intended targets. Therefore, it became urgent to implement an integrated, structured solution, able to integrate acquired know-how and speed up processes, in order to minimise the impact of deviations.

The Solution

Project development was started by an AdvanceCare Group company with vast experience in the implementation of similar solutions in the American and Indian markets. This partner company identified fraud scenarios and defined a series of business rules for detecting potential cases of fraud and abuse.

The technological solution, implemented by GSTEP, comprises a series of ETL processes (approximately 40 processes), which use the aforementioned business

rules, a Data Warehouse, where data are stored for consultation (more than 40 core tables, including facts and dimensions tables, with an average 300 thousand records being entered/updated each day), BI models (an ESSBASE Cube and four OBIEE models) and dashboards/reports (about 30 reports).

Regarding the solution as a whole, ETL processes were created during an initial phase, in order to reflect the business rules used in fraud detection, both prospectively and retrospectively. The Talend tool is used to perform all ETL processes used to extract data from AdvanceCare's source systems, as well as apply the respective rules; results are subsequently stored in an Oracle Database.

The solution is currently used by approximately 10-15 employees, namely AdvanceCare's analytics team. The number of users is expected to double once the solution is made available to institutional clients.

The project was developed by a team of 8 individuals from the IT Department, the Technical Department and GSTEP. Responsibilities, time allocated to the project and levels of involvement varied between team members. The initial development phase, which had a duration of approximately 6 months, focused on infrastructure design (DB and ETL processes). Interfaces were designed during a subsequent phase, which had a duration of 3-4 months. The AdvanceCare team was involved in all phases.

According to the AdvanceCare team, "GSTEP's involvement, particularly its role as Advisor in the making of strategic decisions during the design phase, was determining to the success of this project. GSTEP also supplied the Software purchased by AdvanceCare and provided training concerning its use. Moreover, GSTEP was responsible for monitoring the Database specifically created for this project, as DBA, in addition to having developed some of the most important solution components, namely results dashboards."

Results

Once completed, the project will allow for a more agile, flexible and thorough extraction of business indicators concerning exposure to fraud and abuse, as well as a more efficient analysis of suspicious cases. The solution developed will also allow AdvanceCare to make this data available online, for access by its institutional clients.

AdvanceCare works closely with GSTEP, which is not only a major Software supplier, but also provides software installation, internal training and BI consulting services to the company. Given the success of this partnership, AdvanceCare will continue relying on the help of GSTEP to meet its future needs.

Key Figures

- About 300 thousand records entered/updated each day
- Approximately 40 processes analysed
- About 30 reports produced
- 8 individuals involved (IT Department, Technical Department and GSTEP)

About
Advance Care

Having achieved a solid position in the market over the years, AdvanceCare specialises in health insurance management. Widely recognised for its experience in this area, AdvanceCare owes its reputation to its commitment to ensuring proximity to its clients and partners and to its focus on experience and know-how, on which the company ultimately relies to create added value.

About
GSTEP

GSTEP specialises in Business Intelligence (BI), Enterprise Performance Management (EPM) and Business Analytics (BA), boasting in-depth knowledge and extensive experience in a wide range of technologies. Employing a highly qualified senior team comprising dozens of certified technicians in a vast variety of BI and EPM technologies, GSTEP is a leading company in Portugal, Europe, African and Middle Eastern markets.