Case Study
Communications and Media Business

SQLMax

Running 365*7*24 to attract audiences and collect ~15% of donations

Service Type: SQL Consultation | Design and Development

Duration: ~7 Months

Summary

A satellite TV had decided to design an innovative application to collect donations on fund raisings. We were hired to take the responsibility of database to design and develop it from scratch.

Why SQLMax?

EXPERIENCE

-1,900+ SQL Jobs, Stored Procedures, Functions and SSIS Packages Tuned
-100+ DBAs and Developers Have Relied on Our SQLMax Library
-400+ Consultations Performed
-40+ Databases Designed and Developed

SOLUTIONS

-Complete Set of SQL Server-Focused Solutions
-Comprehensive Technical Coverage

SUPPORT

-Full-time Services: 365*7*24
-Dedicated Account Managers
-World-Class Customer Service

OUR TEAM

-Experienced & Knowledgeable Dedicated Team
-Clear Focus on MS SQL Server
-100% US-Based

Business Requirements

A satellite TV had decided to design an innovative application to collect donations on fund raising. With the application, a number for receiving premium text messages are announced through the TV so that audiences located all over the world can send their text message to the TV. The text messages are shown as a sub title on the TV and text senders are charged $5 or more. The wireless companies deposit the bigger portion of the money to TV bank account as donations from audiences.

We were hired to cooperate with their developers and take the full responsibility of database to design and develop it from scratch.

The database should have been designed to communicate with a sophisticated web application and local windows application from one side and interact with 8 external databases to gather the latest local and international text message prices and rules from the other side.

Situations

- Act in a real time; no delay more than 1 second to get a text and put it in the on-air queue
- Be accurate regarding interactions with different incoming and outgoing sources
- Be accurate regarding to work with money and on-air messages which all comes with strong responsibilities
- Integrate different text pricing and rules

Approaches

- Setup about 16 meetings with different levels of managers and developers to determine all business requirements and design
- MS SQL Server 2008 R2, ASP.NET-C#.NET and TFS under scrum methodology were selected as development and project management tools
- Gathered all existing documents and rules on donations and all other international and local wireless companies throughout the world
- Evolved a comprehensive data model through an iterative process and getting customer feedback
- Designed a database and all business rules in 152 tables, 63 stored procedures and 90 functions
- Designed a parent SSIS packages with 2 child

packages to import and update prices and text messages rules
- Defined a comprehensive disaster recovery plan
- Implemented the following maintenance jobs
  - Transactional backup every 15 minutes
  - Nightly differential backup
  - Weekly full-backup
  - Data archiving
  - Weekly full statistics update
  - Nightly partial statistics update
- Provided 3 base lines on Windows and database level
- Built 11 aggregated and details reports
- Wrote and delivered documents containing all design, definitions, data dictionaries and actions
- The whole system came through three simulated and a real sample test performed by an independent QA team

Results

- The database received and processed around 20,000 text messages throughout the globe within an hour during a main yearly fund raising
- On the time this document is being written after 2 years no weaknesses reported

Benefits

- The designed database running 365*7*24 and playing a main role in collecting 15% of donations
- Around 20 hours of a monthly manual work saved in a performed enhancement on a data collection part

Independent QA Manager

"We evaluated the database from various aspects. The naming standard was pretty clear. Execution durations are acceptable on high loading. All business requirements are met"