



Project Profile: Provider Modeling and Data-mart

Business Situation

The client, a prominent insurance claims processing wanted us to model the complex relationships in provider data. Typically, a provider can have multiple tax-ids (TIN) and addresses – and similarly one TIN can have multiple providers and addresses and so on. Identify and link different provider name, address and Tax Ids, so as to simplify processing and identify potential fraud and suspicious behavior. Handle data-input errors and develop an intelligent match utility to cleanse and validate the data.

The Role of Masfin Consulting

Our response to this challenge was.

- ❑ A team of two analyzed the characteristics of providers ranging from hospitals, to group and individual practices using MS-SQL Server.
- ❑ Created an object oriented provider data-model using PowerDesigner which tracked the relationships between different providers, their TINs and addresses.
- ❑ Develop an address normalization routine in which data input differences like Street, St. or Str all get mapped same word i.e. Street.
- ❑ Also, maintain a current zip-code table to eliminate the need of inputting City and State information.
- ❑ Check the correctness of the input Tax ID number by performing a validity check algorithm.

Benefits of the solution

The main benefits of the solution for the client were:

- ❑ Better modeling of the provider data resulted in accurate processing of claims
- ❑ Reduced redundant data by 35%.
- ❑ Cost saving by reducing the error rate and identifying duplicate provider data early on in the process.
- ❑ Cleaner and more reliable data-set useful to track provider compensation and flag suspicious providers.
- ❑ Easier and better testing of PPOs and HMOs network selection criteria.
- ❑ Productivity improvement and better throughput due to this application

Technology used

- ❑ VB, XML, ASP, ERWin data-modeler, MS-SQL Server