



# Brighthouse FINANCIAL

CASE STUDY

Established by **MetLife**

## Improving Cost Efficiency of Marketing Analytics Models

Brighthouse Financial



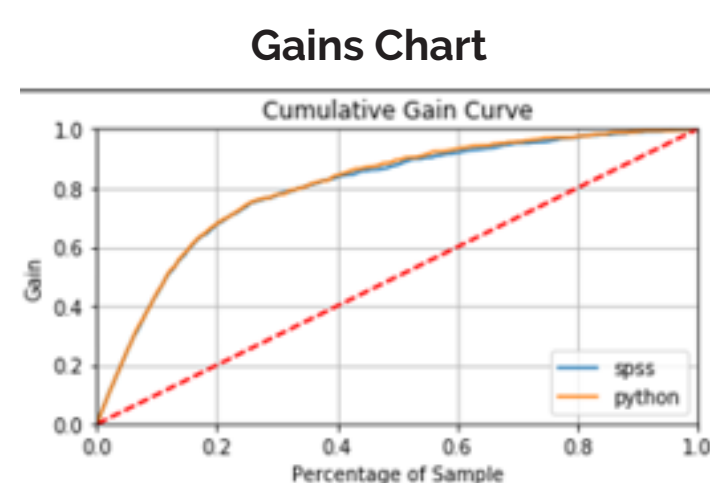
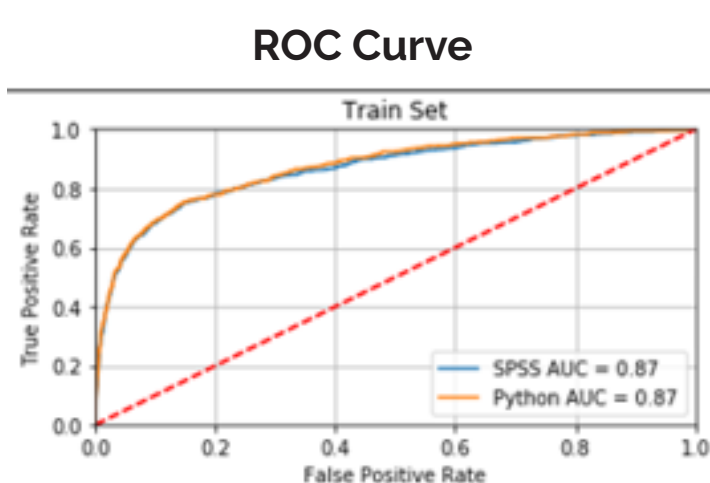
### Business Need

Transitioning Marketing Analytics models from SPSS to open source, in a cost savings effort by completely automating the modeling process to provide propensity scores both through scheduled and OnDemand processes. Improving the ability of the models to function on a greater cadence than currently, and hooking the outputs into a back-end CRM system. Lastly, training the client's Data Science Team to support the models.



### Customer Challenges

- New SAP Big Data environment to support the effort and little experience with it
- The client's Data Science Team lacked knowledge of open source technology
- The client's Data Science Team had limited programming experience
- The client's Data Science Team sponsor left the organization the week prior to partnership with Syntelli



"New Python Model Vs. Old SPSS Model"



### Solution Provided

- Syntelli helped the SAP team with configuration and QA of the tools required to perform mode transitions. With the environment in place, data sources were better understood, and the process of model replication was initiated.
- Created models one at a time, for total of 7. Developed a set of output model diagnostic charts to match those in SPSS. Almost all of the models had to go through a series of iteration to finally gain a matching or superior model.
- Need for data engineering support was identified upon discovering the process of data collection to feed the models wasn't efficient. Syntelli stepped in to provide governance to the process for ETL, automation and QA.



### Impact of Solution

- The client can now retire the SPSS software and shed the high annual cost of over 1M/annum.
- Several Models have been improved from a predictability perspective.
- Models are automated and can now run at any cadence period. Previously this was a three-month manual process.
- Model processes now run in minutes compared to hours previously.
- Team can now retire Netezza data environment and shed the cost.
- Model result scores are integrated into the CRM system.



### Technology Used

 python

 PySpark