

SAM LYON

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PROFESSIONAL BACKGROUND

Over the past 10 years, Sam has excelled in a variety of roles across several industries with a focus on analytics, client and project management, and education. Sam has led both onshore and offshore teams through big data model design, implementation, and visualization; he has managed client onboarding, change requests, and custom enhancements for over 50 distinct market research clients. A strong proponent of the lead-by-example mentality, Sam works hand in hand with the teams he manages, utilizing his knowledge of data science, analytics, project management, and change management to propose, develop, and put into practice cutting-edge data manipulation, machine learning, and visualization technologies that drive key insights for businesses.

SELECTION OF RELEVANT EXPERIENCE

Data Scientist for a Large Manufacturing Company

Sam worked with a leading finishing manufacturer on multiple projects related to improving EBITDA. During his first week with the company, he identified an enhancement in the way product component costs could be calculated, and he collaborated with data engineers to compile a historical dataset that included this enhancement. Using this dataset, Sam built a data pipeline in R that employed ARIMA and exponential smoothing models to forecast product component costs several months into the future. With these forecasts, Sam built a series of Power BI reports, which upper management utilizes to plan price increases for the company's products. Sam documented the process in writing and through video so that employees of the organization can replicate it in the future.

Sam also carried out a freight analysis designed to identify the circumstances surrounding incorrectly assigned freight carriers and modes of transportation. He found and examined these misassignments, identified patterns, and proposed solutions to remedy them.

Data Scientist and Project Leader for a Wine Analytics Startup

Sam led a team of three in a project designed to glean insights from BigQuery datasets collected from several wineries. In addition to scheduling and running the weekly meetings to ensure the project stayed on track, coordinating with the project's sponsors, and compiling and fine tuning the deliverables, Sam built a deidentified and aggregated dataset from the disparate wineries' data, utilizing fuzzy matching and regular expression techniques in Python to impute data where necessary.

He also performed a price elasticity analysis in SQL and Python which included testing multiple models on nearly 500 separate cuts of the data, saving the price elasticity coefficient and mean squared error of each model, and using this information to build visualizations in Qlik Sense which could then be analyzed. The team presented the results from each portion of the project in written, recorded, and live video formats. The sponsors informed the team that the results may be used in a future publication.

Industry Experience

- Market Research
- Beer, Wine, Spirits
- Manufacturing
- Insurance
- Education
- Recreation

Functional Expertise

- Data Analytics
- Machine Learning
- Big Data Technologies
- Data Visualization
- Data Quality Control
- Project Management
- Change Management

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SELECTION OF RELEVANT EXPERIENCE

Data Scientist for a Top Ten Market Research Company

Sam worked on a receipt panel project designed to implement a new direct access data reporting solution based upon receipt data collected from panelists. He created a receipt matching app in R Shiny to build a more robust model training dataset, utilized HQL and Excel to investigate potentially fraudulent panelists, and utilized HQL and Bash scripting to automate pricing threshold criteria that were used to remove outliers from the models.

Sam also led the quality control work necessary to ensure that data from two major online retailers was being parsed correctly. This included developing checks in HQL and Alteryx that were specific to each dataset, documenting in detail the issues that were occurring, collaborating with cross-functional teams to resolve these issues, and coordinating with ETL to get the data loaded to the appropriate warehouse, as necessary.

Client Service Analyst for a Top Ten Market Research Company

Sam led the data management/reporting/visualization solutions for over 50 market research clients, helping them with onboarding, change management, custom enhancements, and issue resolution. In this role, he spearheaded a project designed to largely automate smaller clients' existing data deliverables using the company's proprietary database technology. Sam was responsible for designing and building the deliverables, training and helping clients get set up on the deliverables, and ensuring the transition was as seamless as possible. Sam also managed the offshore reporting team that took over the reports once they were in place, ensuring the team was on time and providing training and documentation where necessary. These largely automated deliverables saved days of work per monthly update cycle.

Additionally, Sam worked with a top 5 beer distributor to create a custom, direct access, data model specific to their needs. This required working closely with modeling and other teams within the organization to ensure all specifications were met. Sam helped design and build the distributor's unique reporting visualization system which encompassed nearly 40 business units across the country.

Operations Analyst for a Top Ten Market Research Company

Sam was responsible for the data quality control, data updates, issue resolution, and change management of over 20 market research clients who subscribed to various database management/reporting solutions. He worked with cross-functional teams to ensure updated, accurate, and on-time delivery of all data products, and he ran monthly calls with client service counterparts to manage the monthly integration of new items into the models.

Sam also acted as a mentor for new operations analysts within the company. He provided training, both in-person and virtual, and strived to facilitate a welcoming environment for everyone coming onboard.

Technologies

- Python, R, SQL, HQL
- Tableau, Power BI, Qlik
- Alteryx, DBeaver, MySQL, SQLite
- Some experience with AWS, GCP, Bash, HTML/CSS, JS, D3.js

Methodologies

- Time series forecasting
- Classification
- Regression and Decision Trees
- Factor Analysis
- Dashboarding
- R Shiny App Builds
- Agile/Scrum

Education

- M.S. – Analytics (12/22)
- B.S. – Mathematics; Minors in Economics and Music Studies
- Certified ScrumMaster