Case study

Certas Energy
Enabling a data-driven pricing approach to achieve greater yield and maximization on Azure

CLIENT

CERTAS ENERGY UK LIMITED started trading in 2001 and pride themselves on excellent customer service and providing a range of energy products and services. They have an extensive and reliable delivery network compromising of more than 130 depots, over 900 tankers and 2,300 employees.

Certas Energy's parent company, DCC, is an ambitious and entrepreneurial business, operating in 20 countries, and supplying products and services used by millions of people every day throughout Europe. It is headquartered in Dublin and is listed on the London Stock Exchange. DCC reported £14.8 billion in revenues and an impressive operating profit of £494.3 million in FY 2019-20.

MARKET SITUATION

The aim is to grow in a fiercely competitive market and a new approach to pricing is one of the key stands of the strategy.

Objective
- Maximisation of margin with ongoing client sustainability.
- To create a whole operating model that improves.
  - Increased Quote to Order conversion rates.
  - Long-term improved wallet share.
  - Increase in material margin.
  - Reduce client churn.

Success
Success would be to maximise yield and increase market share across this competitive market landscape.

CHALLENGES

Certas engaged with LTIMindtree to lead the collaboration with stakeholders and subject matter experts within Certas and Microsoft to provide consulting services on their Customer Segmentation Model catering to Price Optimisation, and subsequently to client demand.

Challenges

- Needed to be convinced of success factors, methodologies, analysis and illustrations of datasets. Overall, the output needed to be articulated within the stakeholder community, agreed and formalised within the final Scope of Work.
  - Analytical approach from the stated business problem had to be defined.
  - The right techniques to use for the given analytical problem had to be identified.
  - ML algorithms to solve the business problem needed to be employed.
  - Azure tools had to be used effectively to prepare data for analysis.
  - Coordination with the internal and external project stakeholders.
  - Knowledge of one or more scripting language (Python) and big data analytics had to be be demonstrated.
- Needed the ability to weave a business problem from understanding it to solving it to EDA output walkthrough, model walkthrough and interpretation. Finally, decisions had to be suggested.
- Improved in-house knowledge required in the task of transitioning to Azure.
- Knowledge transfer provided within 1-2-1 training and structured shadow-based learning interaction to allow Certas to become self-sufficient.

APPROACH

The whole process was periodically reviewed, defined, and directed by the Certas SME, in conjunction with the LTIMindtree Consultants to achieve the desired business outcome which included:

- To own the data science solution definition in a segmentation exercise, which caters to price optimisation in a manner that creates value for Certas through innovative model conceptualisation. This included:
- Segmentation of customers and comparison with existing clusters.
- Customer profiling within the segments based on their behaviour.
- Refreshed clusters on the latest data available using the exact same variables used to re-create the legacy model.
- Implementation of the clustering model in the provided environment.
- Providing a summarized roadmap in the price optimisation journey.
- Providing notebooks and additional documents to support knowledge transfer and training.

- Focus on helping the Certas team acquire knowledge all the way through the process to leave them in a position to be able to continue building themselves.
- To position as a Hands-on-Data Science Advisor to Certas, and advising on various aspects of the solution by bringing in domain knowledge, familiarity of various techniques and expertise in a data-driven knowledge discovery exercise that creates the most appropriate and differentiated value.
- The outcome had to be efficient and effective at various levels of abstraction in communication. It needed to have the ability to relate to Certas' business problems, playing it back to them to for verification, and ensuring that there is uniform understanding across stakeholders and teams. Additionally, the ability to present the findings of the assignment in a manner which is understandable to all, thereby laying the foundation for customer trust and knowledge transfer was needed.
- To provide data science solution leadership in the area of specialisation.

SOLUTION

LTIMindtree worked with Certas' team to scope out a significant deliverable that could be accomplished in five weeks. The objective was to update the customer segmentation using the quotes data. Segmentation is the bedrock towards building a yield optimization tool. The existing segmentation was a black box implementation, with hard coded segments being used to label customers.

- Identified the right variables to carry out the segmentation exercise to arrive at the dataset used to create the legacy model.
- Rebuilt the segmentation model as pilot.
- Identified the data gaps between existing model and rebuilt model.
- Performed EDA on the data common across the legacy and rebuilt model, and compared segments.
- Built the segmentation model using the latest data and ran EDA to monitor the stability of the legacy segments.
- Transferred the knowledge to the Certas technical team.

BENEFITS

The existing segmentation was a black box implementation with the customers being hard coded to legacy segments. The latest cluster assignment could not track the change in the customer behavior. This meant that potential customers were offered wrong quotes.

LTIMindtree's team ensured the entire process was transparent and could be replicated by Certas' technical team. The Certas team is now empowered to dynamically refresh the model as and when required.

- Early pilot indicators suggest an improved sales margin of 2%.
- Early pilot indicators suggest an improved Quote to Close conversion rate of 10%.

TESTIMONIALS

'We have recently worked with LTIMindtree on a customer clustering project of which they brought structure and expertise. The team was superbly led, with honesty & integrity throughout. We were more than happy with the outcome and the knowledge share that was passed on to our own BI Team that now allows us to become self-sufficient. I would have no hesitation in using LTIMindtree again as we embark on our ML & AI journey.'

Graham McCracken
Head Of Business Intelligence & Strategic Insight, Certas Energy

'The LTIMindtree Minds were very knowledgeable in the area of data science we needed help with. They were able to provide a very satisfactory solution and their continual guidance throughout the project helped us understand the steps involved. This has allowed us to gain in-house technical skills which will be beneficial in the future.'

Stephen Smith
Senior Business Intelligence Developer, Certas Energy