Domestic and General (D&G) Automates Data Science with DataRobot and Earnix

The Challenge

Domestic and General, the UK’s largest provider of extended warranties for white goods, has an over 100-year history of protecting people and their products. Today, D&G looks after almost 24 million products in countries around the globe – from Germany to Spain to Australia. With D&G’s tremendous success and large market share, complacency could easily become a byproduct.

Paul Davies, the Head of Data Science at D&G, isn’t complacent. He’s very interested in continually improving the accuracy of his organization’s personalization efforts – being able to pinpoint what products, prices, and preferences drive customers to convert. He views data science as the enabler to improve accuracy in personalization. For Paul, he views his challenge as:

How do we continue to improve personalization success as customer usage patterns evolve?

Historically, warranties for white goods were sold based on the product and its attributes – make, model, and age. D&G, in the past 5 years or so, has made the shift to delivering product warranty plans based on customer attributes in addition to product attributes — the number of products a customer has in-home, their usage patterns, and other customer behavior data points. To make this shift from being a product-centric to a customer-centric organization, D&G has relied heavily on DataRobot and Earnix.
The Solution

As D&G began their solution search with a few base technologies and some homegrown systems in place, they knew that they had to work with their end goal in mind – to analytically personalize the variables of their extended warranty offerings at purchase and renewal for improved customer and business metrics. With a blank slate, it became evident D&G would need to account for several key components:

- **ENTERPRISE-GRADE**
  D&G wanted a solution that could grow with the data science team as they evolved from simple pricing analytics to advanced multi-plan personalization. The solution also had to support the needs of the larger business, with 1500 agents delivering 13,000 quotes per day across multiple channels. D&G required a solution that could handle the volumes, speed, and automation levels at which they needed to operate.

- **EASE OF USE**
  The data science team at D&G, while innovative and experienced users of analytics technologies like R and Python for pricing, did not have years of personalization experience under their belt. The solution they chose had to be easy to use – with simple but robust capabilities around data management, analytical modeling, scenario analysis, visualization, and rapid deployment.

- **EXECUTIVE BUY-IN**
  The pricing and personalization initiatives that the D&G data science team wanted to implement were new concepts to some executives inside the organization. Executive-level education on the topics of pricing and personalization was needed for everyone to understand the power of the joint solution they desired.

With these things in mind, D&G saw that Earnix and DataRobot together met the needs of their business. As Paul states,

“Earnix gave us the ability for our data scientists to quickly test and integrate models in a robust way and an out-of-the-box manner. With DataRobot, we could develop faster, more accurate models and get them live more quickly. We can do everything an entire floor of pricing analysts can do with 6 or 7 data scientists.”

— Paul Davies
Results

With massive success, Paul and his team have moved data science to the heart of the business at D&G. And while they feel that their usage of the joint solution is just beginning, they are already seeing numerous positive results and tons of potential for the future of the joint offering. A few of the results include:

• **TIME TO VALUE**
  Perhaps the biggest benefit D&G is receiving from the joint offering is centered around speed and automation, which results in improved time to value. Not only does the joint offering allow D&G to realize improved speed in model creation and deployment, but it allows a relatively small pricing team to “do more with less” when it comes to setting up complex analytical projects and processes. This increase in time to value equates to people, process, and technology cost savings across the business.

• **GOVERNANCE AND COMPLIANCE**
  An unexpected benefit that has resulted in huge business process improvements is the ability to log, document, track, and audit what data is being used in what models or projects and in what capacity. D&G sees value in the fact that both solutions provide the audit and documentation information needed to cover audits or inquiries from regulatory agencies.

• **BEST OF BREED**
  Modernizing on best of breed technologies has not only made pricing and modeling improvements, but it has also reemphasized the culture within D&G to “find and improve the next bottleneck”. New best of breed technologies include standardizing on AWS, using DataRobot for multiple model (risk, cancellation, demand) synchronization, and leveraging Earnix for rapid price and personalization modifications. With the automation that comes from these new technologies now in place, D&G can react to market changes in a rapid manner while satisfying customer expectations.

Next Steps

With the foundational components now in place, Paul and his team have become used to “breaking the mold”. Their ideas for the future include moving more into marketing with their solution – creating a complete personalized marketing platform based on data science for their 6 million-plus customers. As Paul states,

“We want to deliver the best product, at the best price, with the best messaging, into the best marketing channel in an extremely rapid fashion – and we are sure that Earnix and DataRobot will be critical in doing that”.

— Paul Davies
Commercial value and putting our customers first are the two things we think about all the time. “If your goal is to drive value for your business and put your customers at the center, and you want to do it in a quick, robust, and stable manner – this joint solution does that better than any other solution in the market”, states Paul.

“These solutions make us a better team”.

As D&G looks forward to the Internet of Things and the predictive maintenance use cases that IOT supports, they know that the speed, accuracy, and automation they have today will serve as a great foundation. “Earnix and DataRobot are innovative partners for us who both have strong roadmaps and are very open to working together to help us achieve our future vision.”