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Case Study:

Capturing new business value with data

How reskilling analysts into modern practices improved forecasting, automated processes, and boosted the bottom line



INTRO

As part of their digital transformation initiative, an established Global 2000 building materials company was looking to derive more value from their data and modernize their processes.

CHALLENGE

The Company collected large amounts of data from different global locations but didn't have the skills or tools to leverage data in a way that was impactful, sustainable or competitive. They also had a general lack of state-of-the-art tool adoption and needed data-driven approaches to help enable the sales process between countries. The Company determined the best solution was to upskill and reskill employees who could capture new business value from big data for each team.

SOLUTION

Working with Galvanize, the Company assessed their existing talent and confirmed the current staff and processes were not equipped to provide proper correlations to the data.

Galvanize worked with the company to build a customized curriculum.

Galvanize delivered Data Translators and Data Science Core programs, a project-based approach to promote measurable understanding and practical application of the topics. Each lesson was reinforced with a Case Study exercise using real data and problem-solving skills.

The courses finished with a capstone project, a culmination of all the lessons learned.

OUTCOME/RESULTS

Data scientists, analysts, and developers were upskilled in modern practices, tackling immediate business needs as well as transforming their roles to incorporate new tools - during and after training.

Across two cohorts, there were a total of **20 projects** with an estimated business impact of **\$7.8 million**.

The capstone projects developed solutions to several business problems, including:

- Building a pricing calculator for different business lines based on customer demographics as well as sales mix, and predicting the likelihood of a sale
- Automated consumption of text from customer feedback survey results
- Customer profiling for cross-selling
- Building a recommendation engine based on customer workflow
- Predicting machinery overload from sensor data -- saved \$300,000 in machinery repairs
- Building models to improve sales forecasting accuracy, reduce customer churn, and improve supply chain and logistics operations



Topics covered include:

- Python programming, and mathematical and statistics essentials
- Data ingestion, Extract Transform Load (ETL)
- Data visualization
- Statistics, hypothesis testing, exploratory data analysis
- Supervised learning (regression, classification)
- Unsupervised learning
- Natural language processing (NLP), time series analysis, anomaly detection
- Capstone projects