

Product Failure Analysis for a High-Technology Manufacturer

The client collaborated with Capgemini to analyze the product failure system of a major provider of precision timing and network synchronization products and services

The Situation

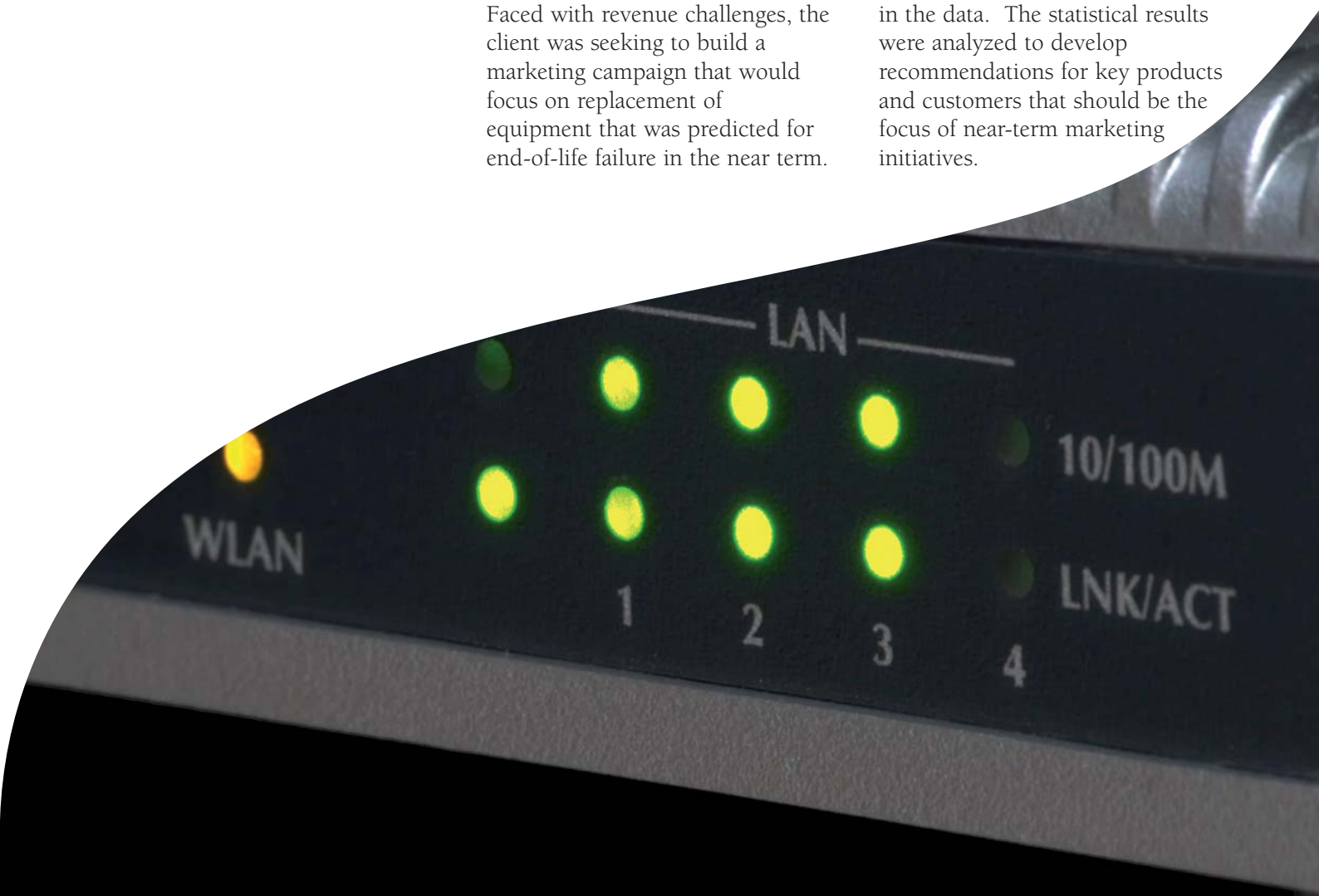
The client was seeking to understand the rate and timing of end-of-life product failures for several of its key products. The historical analysis had never been performed in a manner that could be used to predict the rate and timing of future failures.

Faced with revenue challenges, the client was seeking to build a marketing campaign that would focus on replacement of equipment that was predicted for end-of-life failure in the near term.

The Solution

Capgemini assessed the client's data systems to identify the necessary customer purchase and equipment failure data required to perform detailed analysis.

A predictive model was built based on historical data and statistical techniques that examined patterns in the data. The statistical results were analyzed to develop recommendations for key products and customers that should be the focus of near-term marketing initiatives.



The Result

The Capgemini team was able to identify primary sales opportunities based on marketing equipment that needed to be replaced at key customers. The team also provided a data infrastructure and statistical methodology which could be leveraged to perform periodic analysis in support of future marketing campaigns.

Finally, the team identified products with high failure rate during the first few years following product launch, and developed recommendations for the New Product Introduction process to address this issue.

How the Client and Capgemini Worked Together

The client chose Capgemini based on an established relationship built on prior successful engagements. When the client came to Capgemini and explained that its marketing team was looking to identify how they could predict a need for replacement products, the Capgemini team worked with the company to further define the problem and identify a potential solution.

Once this was done, Capgemini presented resources with expertise in delivering similar solutions. One of the key enablers used for this project incorporated a deep understanding and knowledge of existing data systems to identify key data elements that were required for the analysis. This enabler was conducted through a complex statistical analysis tool, which was utilized to determine patterns in historical product failures.

The Capgemini solution provided the client with the predictive value of future failures by key product as well as key client. This provided insight into the exact market locations where its marketing/sales team should focus for opportunities.

More importantly, the recommended solution provided the client with a method of communicating the predicted failure of its products, which allowed the client to better utilize its historical databases to better predict product failure.



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Backed by over three decades of industry and service experience, the Collaborative Business Experience is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and

collaboration-focused methods and tools. Through commitment to mutual success and the achievement of tangible value, we help businesses implement growth strategies, leverage technology, and thrive through the power of collaboration.

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