
About the Company

- Digital real estate investment company
- Manages a portfolio of over 4 million domain names
- Specializes in domain monetization and development
- Features a domain name marketplace with presence in more than 100 countries

Goals

- Automate domain valuation process for acquisition purposes
- Decrease expenditure in manual pricing of domain names
- Identify low-value domains to drop them and reduce renewal costs

Approach

- Develop a statistical model relating domain characteristics with selling price
- The statistical model would also classify the domains into various categories to streamline the company's workflow
- Deploy the model to use it as a real-time decision tool

Digital Real Estate Portfolio Manager Utilizes Statistical Model to Streamline their Domain Name Trading Procedures.

The company specializes in Digital Real Estate Management. Their main business line consists of purchasing domain names, attempting to increase their value (by monetizing them, driving traffic to them, etc.) and then sell them at a higher price.

The most important challenge facing this company lies in the domain valuation procedure. For most domain names, the price was assessed by conducting a "manual" review, which consists of a review done by the company's staff and a pricing recommendation based on it.

Given the large amount of domain names that become available for purchasing every day, this procedure is extremely costly, time-consuming, and error-prone. Precision Consulting was approached to:

- Review and analyze a database of billions of domain names and their characteristics, such as existing traffic, keyword value, Alexa ranking, number of inbound links, etc.
- Based on this dataset, develop a model that would help:
 - produce an estimate of the value of the domain
 - categorize the domain into "valueless", "automatic pricing" or "premium"

Solution

Precision Consulting worked with the company to understand its goals and analysis objectives. Precision's expertise in Statistical Modeling allowed creating a model that would produce a forecast of the domain name price based solely on the available information about the domain, without any human intervention required.

The modeling was conducted in two steps. First, a binary logistic regression model was used to estimate the probability that the company would be able to sell a given domain in the future. Following that, General Linear Model analysis was used to estimate the dollar value of a domain assuming that the sale occurred.

Results

- Savings of thousands of man-hours by avoiding manual pricing when not needed
- Increase in portfolio value
- Optimized purchase/sale decision rules for domain name trading

The final step of the analysis involved generating an expected value of the domain given its probability of sale and price estimate.

For both models, several characteristics of the domain names were used. These included Alexa ranking, page count according to various search engines, number of visits, Top Level Domain (.com, .net, .org), registration date, etc.

Based on the pricing ranges generated by this methodology, it was possible to classify the domains into the categories required by the company.

Benefits

Results from these models allowed for the creation of predictive formulas that could be readily implemented in real-time through a custom software application. In this way, the company was able to run the thousands of domains that become available for purchase every day to create pricing estimates for them in a matter of minutes.

The categorization derived from the model developed by Precision Consulting also allowed the company to streamline their pricing procedures. For instance, “Valueless” domains were ignored, domains on “Automatic Pricing” were purchased depending on their selling price as compared to the model-estimated price, and “Premium” domains were reviewed manually as they could potentially be worth several thousand dollars.

The company thus obtained several benefits from the statistical model:

- The number of domain names to be reviewed manually was decreased drastically, resulting in large savings for the company
- The reduction of manual pricing also allowed the company to reduce costly errors in domain name valuation
- Finally, the company was able to identify a large number of “valueless” domains in their existing portfolio. The company allowed those domains to expire, generating savings in terms of domain renewal costs