





BACKGROUND

As the world's largest PC vendor and the third largest smartphone manufacturer in the world, Lenovo is a global technology leader in providing innovative consumer, commercial, and enterprise technologies. Its portfolio of products and services includes PCs, workstations, servers, storage, smart TVs, and a suite of mobile products (smartphones, tablets and apps). To stay on top, Lenovo's CEO has recently vowed to transform online sales and bring in \$12 billion in annual revenue within the next three years.



To this end, Lenovo executives have approached its Global Business Intelligence team to identify ways to increase online sales. It was decided that one of the ways this could be done was to identify today's web visitors who are most likely to purchase and deliver content to them in a way that would lead to a purchase in the quickest amount of time. They then posed the following business question: Can we identify today's visitors who will account for 80% of future purchasers?

CHALLENGES

The team had been using rules-based logic for display retargeting. The segments were heuristic, fairly subjective, and operating on humanly defined assumptions. For example, a rule identifying those individuals who visited a laptop page assumes that all individuals carrying out this interaction are the same. However, each customer has a different intent when browsing online and using rules ignores most of the other data Lenovo has on each customer. Additionally, the team would also have two rules running on top of each other and still not be certain how they would play out. At the same time, building rules was also a very manual and laborious process, and it was difficult to control audience sizes. After some time, it became apparent that building rules was "a pretty messy affair," according to Ashish Braganza, who runs the global business intelligence team at Lenovo.



LENOVO CASE STUDY





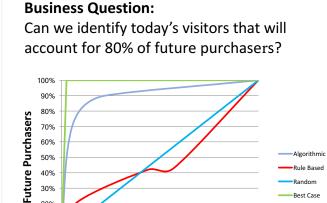
SOLUTION

To control audience sizes and retarget web visitors more effectively, Lenovo chose to test and compare their rules-based retargeting model with that of Syntasa's algorithmic retargeting model for a period of three months, using data for US visitors on lenovo.com. They took all of their data (purchasers and nonpurchasers) and put it into a logistic regression. They scored out 100 variables and coefficients, created confidence intervals, and they ran an A/B test to see what each of the rules-based and algorithmic segments could deliver. What they found was that algorithmic segments perform extremely well.



"Syntasa has been instrumental for attribution modeling, by taking complex datasets from various sources and making them actionable through customized machine learning algorithms."

Tushar Mukherjee Head of Global e-Commerce Analytics, Lenovo



RESULTS

Best Case

As a result of testing Syntasa's algorithmic retargeting, Lenovo's Global Business Intelligence team can now predict the likelihood scores for purchases from web visitors. They also find it much easier to adjust audience sizes by creating high-value segments and low-value segments and going after one group. With the algorithmic retargeting project, they are saving \$5 million in display advertising annually. This represents enormous savings and reduction in waste, by simply targeting the high-value purchasers. Lenovo is scaling the propensity algorithm to leverage it across all marketing programs globally (email, SEM, affiliates, and others), and the projected savings of \$20 million will be reinvested back into marketing programs.

30%

20%

10%

0%

0%

20%

40%

60%

Today's Visitors

80%

100%