

**Category:** *Online Lead Generation*

**Methods:** *Correlation/Cluster Analysis, Predictive Modeling, Cross-Validation, Simulation Modeling, Advanced Analytics*

## Summary

A large U.S. military service branch uses websites to attract young men and women as potential recruits. By providing a form to be completed by those interested in a military career, data is captured that helps the military branch with recruitment. Predictive analytics was applied to data obtained from forms filled out on the website, page views, and lead generation. The resulting predictive models were used to adjust relative spending on different clusters of Web pages, maximizing ROI in terms of lead generation.

## Strategic Issues

The number of Web pages our client has is enormous, with considerable variation in the cost of Web page development and management. Cost reduction was desirable, and was to be achieved without reducing lead generation. The client's Web pages fall naturally into categories based on logic and usage patterns. Categories might include (a) educational opportunities, (b) boot camp training, (c) military life—careers, (d) ships and equipment, (e) special forces, and (f) testimonials. While page views indicate interest, there is a need to go beyond simple statistics on page views and click-throughs, focusing on conversion rates into actual leads.

## Research Objectives

Web pages would be classified into categories based on Web usage data. Then, lead generation would be measured for each category. A simulation tool would predict numbers of leads with varying spending on Web page categories.



Disclaimer: Our case studies are drawn from our real-life work. However, the details—and in some cases, subject areas—have been thoroughly disguised to avoid any compromising of the actual work or its sponsors.

## Research Design and Methods

First, categories of Web pages were defined based on correlation and cluster analysis of page-view data. Then, we applied predictive analytics to assess how much each category of page views resulted in form completion. Lead generation, as measured by completion of the online form, was modeled as a function of page views by category. Predictive models were tuned using cross-validation techniques to maximize predictive accuracy.

## Results

Six major categories of Web pages were identified based on usage data. A hypothetical example of page-view data appears below. In one week, a very large number of visitors viewed the site and its pages, but only about 1.5% became leads for recruiters as represented by the conversion rate in the table.

	Page Views	Leads By Page Category
<b>Educational Opportunities</b>	10,563	178
<b>Boot Camp Training</b>	23,454	191
<b>Military Life—Careers</b>	15,872	304
<b>Ships &amp; Equipment</b>	45,921	137
<b>Special Forces</b>	18,266	5
<b>Testimonials</b>	9,458	86
<b>Unique Page Views</b>	61,569	<b>Leads</b> 901
<b>Unique Visitors</b>	21,145	

Based on simulation modeling, spending on management of Web pages could be reallocated to lift lead generation by 32%, while holding constant the cost of website spending. As a result, the conversion rate per dollar spent (leads per dollar) would increase from 1.2 to 1.6.

	Now	Leads Per Dollar	Previous	Leads Per Dollar	Improvement
<b>Total Leads</b>	1,188	1.6	901	1.2	32%

The possibility of reallocating spending levels offered a winning strategy for maximizing lead generation without increasing costs.