

How Predictive Analytics Is Transforming NPO Fundraising

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The art of nonprofit fundraising is quickly becoming a science. Fundraising is a vital process for the mission of many nonprofit organizations (NPOs), and the better organizations are at this process, the more effective they become in their missions.

Historically, this process consisted of following standard fundraising processes and tracking the results to periodically adjust the processes based on results. This feedback loop could take months or years; however, NPOs have begun improving this process by utilizing analytics, rather than simply responding to past results.

Perhaps the most important technological breakthrough for NPO fundraising in recent memory is predictive analytics. This technology is enabling NPOs to run more effective fundraising campaigns and quickly boost their fundraising results. Rather than relying on evaluating the effectiveness of past fundraising efforts and basing decisions on opinions and experience, predictive analytics provide guidance on what will likely be the most effective campaigns, whom to target and how to allocate resources to maximize fundraising results. This article discusses how predictive analytics works and several ways it can be employed to enhance your fundraising efforts.

What Is Predictive Analytics and How Does it Fit Within NPOs?

Predictive analytics is a set of techniques and technologies that extract information from data to identify patterns and predict future outcomes. Based on a variety of statistical techniques and software technology, predictive analytics helps to understand the relationships between data points, and identify patterns within the data, as well as factors contributing to the prediction. This whole analysis can be configured to show prediction based on various factors and can be refined further over time as more information is included in the analysis.

Predictive analytics is being employed across numerous industries, including nonprofits. The most common examples of predictive analytics are found in data-centric industries—such as tech firms, finance, and insurance—where data is readily available and the ability to predict outcomes directly relates to the financial success of those organizations. The same is true of NPOs. While NPOs may or may not collect millions of records across hundreds of data points, they do collect a sufficient amount of donor information, marketing touch-point records, and other information that can be utilized for predictive analytics, and that predictive ability can make a significant difference in fundraising efforts.

NPOs are uniquely positioned to benefit from predictive analytics. Most NPOs house the kind of data that can fuel detailed analysis, which results in actionable insights. They have donor information that often includes a wide array of demographic information, historical behavior information and information about how donors responded to past fundraising campaigns. This type and breadth of information can quickly be converted into predictions and more effective fundraising campaigns. Even if the NPO only has hundreds or thousands of donor records—as opposed to hundreds of thousands or more — that is sufficient for creating effective predictive analyses.

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When Should NPOs Consider Predictive Analytics?

- Seeking to improve fundraising results
- Facing competition for donors
- Fundraising efforts not meeting goals and objectives
- Exploring opportunities for new or enhanced fundraising campaigns
- Shrinking donor base or difficulty reaching your donors

How Predictive Analytics Works

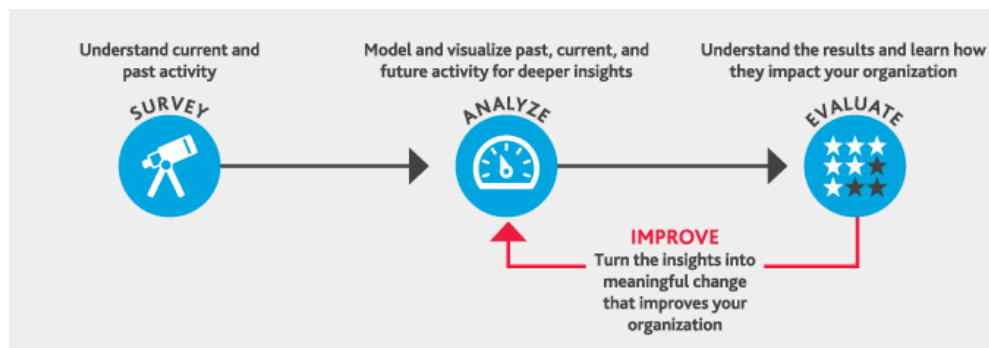
In the traditional fundraising process, several steps are typically employed across different layers of an NPO's data. First, key donors are identified and targeted. This may be done based on selecting key individual donors, by a prior donation level threshold, and/or demographic information. Next, past campaigns are assessed, and new campaigns may be discussed and evaluated. Finally, a plan is developed and executed to drive fundraising. For this entire process, the rigor of data analysis and the evaluation of past campaign effectiveness may vary by organization but, at a high level, the processes are similar: organizations make use of data and personal judgment to drive future fundraising efforts.

The predictive analytics process runs alongside this methodology to augment it, which acts as an advisor to existing activities and decision-making processes. Predictive analytics offers a way to look at the information in a new way by incorporating your existing methods and institutional knowledge. Predictive analytics can be run parallel to your process to offer new ideas, prove or disprove existing ideas and approaches, and provide a way to gauge how effective new approaches to fundraising will be.

A major misconception about predictive analytics is that it can replace a fundraising team or will serve as a stand-alone fundraising strategy function. A predictive analytic model is only as effective as the information and guidance that is provided to it, and performing predictive analytics effectively requires institutional knowledge and refinement. Predictive analytics is a statistical and technological way to utilize data based on institutional knowledge, so it is useful only if it is designed, implemented and evaluated by data and industry experts.

A typical scenario for NPOs to implement predictive analytics is when an NPO recognizes that its fundraising efforts could be improved. They currently may have sufficient data to understand what worked well in the past, but they often rely on comparisons between past approaches and new approaches, market research and small test campaigns for evaluating new ways to raise funds. They also recognize that these techniques test ideas and require an investment of time and resources, which may not deliver the level of results they want. This leads them to work with a data science team or a predictive analytics software package to improve their process. This begins the predictive analytics development, which may produce immediate results.

The predictive analytics process involves several steps. First, the organization's goals are outlined and historical data is surveyed to map the goals to key data points. In this step, the organization determines which questions it wants answered and whether the data it needs is available. Next, a predictive model is developed, and the data is analyzed and visualized to derive insights. This step is where forward-looking analyses and findings are derived from historical data, and it involves specialized analysis using specialized software and/or custom-developed logic in a programming language, such as Python or R. The results are next evaluated to determine whether the analysis was effective and, if so, how to apply the findings for meaningful actions. Finally, an iterative process of refining and re-running the analysis is performed based on the findings and changes. These steps are outlined below:



What Can NPOs Predict?

One way that NPOs can increase fundraising results is by using predictive analytics to identify the people who are most likely to donate as well as those who will not. Through this analysis, NPOs can identify potential donors based on utilizing past donor information to identify the characteristics that most accurately determine whether someone donates. Unlike traditional analysis methods that only examine past donation information, predictive analytics leverages information — such as age, income, lifestyle, past donation information and associations to NPOs with similar missions — to pinpoint donors. With this information, NPOs can more precisely target a pool of potential donors to maximize fundraising results.

For example, an NPO with a list of 3,000 past donors and 2,500 potential donors may only be able to directly contact 2,000 donors through in-person meetings, phone calls and/or direct/digital mailing due to budget constraints. Because of this constraint and the need to maximize fundraising, the NPO wants to know which of the 5,500 potential donors to contact. The NPO utilizes predictive analytics to assign a donation probability to each potential donor based on historical donation information and each potential donor's characteristics to then target only the donors with a high probability. This helps reduce the overhead of devoting resources to individuals or groups who are unlikely to donate and maximizes the donor conversion rate.

In addition to discovering the likelihood of donations, predictive analytics can be used to predict donation amounts. Analyzing donors for both their donation likelihood and predictive donation amount further helps NPOs identify key donor targets. An NPO may not get much value from identifying donors if they will donate in small amounts or if there is a high degree of donation amount variability. Instead, predictive analytics can be performed that assigns both a donation probability and an expected donation amount if they donate. This is an expected value for donors, and this information can be calculated to optimize the fundraising campaign. If an NPO identifies five high-value donors who only have a 40 percent donation probability, targeting those may still be more valuable than pursuing five low-value donors who have a greater than 90 percent probability of donating.

Predictive analytics can be applied to almost any area of NPO operations. While improving fundraising is often the first goal, predictive analytics can be used to improve other areas of the organization. Several examples of these are:

- Mission-specific goals
- Operational performance
- Cost forecasting
- Community and government outreach

Conclusion

Predictive analytics is an important method for improving your fundraising process. Just as major retailers, financial institutions and healthcare companies are utilizing predictive analytics to maximize revenue and reduce costs, NPOs have an opportunity to make use of this technology within their own organizations. Regardless of the volume of fundraising you are doing or the makeup of your donors, you can benefit from applying predictive analytics.

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