

## Behavioral Economics Modeling and Unsupervised Artificial Intelligence The Next Frontier in Individual Fundraising

By Michael Gorriarán, President, Arjuna Solutions and Loree Lipstein, Founder/Principal, Thread Strategies

Throughout the last decade, nonprofit organizations have addressed the challenges of individual fundraising by leading their organizations through a digital transformation. Donor Relationship Management Systems (DRM), Marketing Automation Platforms (MAP), Social Media Marketing, and Online Giving have all served to improve the operational and cost efficiencies of individual fundraising through automation. They have not, however, materially improved the participation rates or giving levels of individual donors.

Why has fundraising performance remained stagnant despite increased efficiency? The chief culprit is outdated marketing tactics. Responsible for nearly 70% of all giving, individual donors continue to remain important to overall fundraising success. However, most nonprofit organizations have not benefitted from the full impact of their giving due to the lack of insights about each individual donor and their giving potential at scale.

Individual donors are still subjected to direct mail or email solicitations that feature relatively indiscriminate marketing messages along with simple, standardized gift array values like \$25, \$50, \$100, \$250, \$500 etc. All this, while in the rest of their lives, they are accustomed to receiving highly personalized solicitations with individually curated offers that demonstrate a brand's understanding of each consumer at scale. In short, individual fundraising has not yet experienced the benefits of personalization at scale.

Yet the path to creating this new norm is here and ready for fundraisers. Behavioral Economics modeled through new A.I. solutions featuring Unsupervised Artificial Intelligence (UAI) and Reinforcement Machine Learning (RML) are now delivering the financial impact promised of digital transformation.

UAI/RML solutions are self-learning, behavioral modeling algorithms that complement existing individual fundraising campaign practices and systems. Simply put, based on existing donor data, a (UAI/RML) artificial intelligence service can leverage behavioral economics models to determine the precise amount to ask of an individual donor, provide an accurate prediction of overall lifetime giving, and also make a recommendation about when to make the ask to optimize individual fundraising performance. These capabilities are specifically designed to increase individual donor lifetime giving, while lowering the cost of individual fundraising campaigns and minimizing the brand damage associated with excessive solicitations.

This specific form of artificial intelligence has already been in use for enough time and volume to have secured a deep level of distinct domain expertise in the field of individual fundraising. During the past three years, live in-market tests of UAI/RML solutions for individually optimized gift arrays have delivered an average uplift in annual giving of 17.8% in the first year of use, and more over time with consistent application. Additionally, the return on investment from using these artificial intelligence services is compelling, regularly producing fundraising results that rank it as one of the single most effective uses of fundraising budgets.

If your organization is ready to investigate A.I. solutions and behavioral modeling for fundraising, we recommend the following considerations:

- 1. Evaluate solution provider expertise. Identify A.I. solution providers that have at least three areas of domain expertise including nonprofit industry expertise, individual fundraising experience, and applied experience conducting individual donor campaigns with UAI/RML solutions. Seek to understand the number of engagements and length of time the provider has been engaged with individual clients solving the specific problem that you are targeting with these technologies. If the provider has not completed numerous, sustained client engagements with UAI/RML artificial intelligence solutions focused on the specific problem you are addressing, and they have not materially reduced their error margin (well below 10%) in this domain, then they have not yet emerged as an A.I. solution provider with "material" expertise.
- 2. Assess the impact on existing fundraising practices, workflows and systems. Does the provider require you to rearchitect your existing systems in order to leverage their capabilities? Is it necessary to hire new specialists within your organization to know how to deploy, use and manage the technology, as well as keep it up to date and secure? Would you need to change any existing workflows, practices or relationships with marketing or data partners in order to take advantage of a solution? If any of these answers are "yes", then you are considering a relationship with an A.I. solution provider that is excessively complicated. Identify an A.I. solution provider that can easily complement your existing methods, systems and relationships of individual fundraising.
- 3. Understand the data requirements. The provider should be clear on data dependencies, costs and ownership, as well as providing an ethical approach to using A.I. It is also important to understand whether the economic benefits depicted in the provider's case studies include the fully burdened cost of garnering and managing the data associated with the solution. Responses to the following questions will help determine the full financial ROI of using A.I. for fundraising: Which data sources are required? Who retains ownership of the data after it is used? What is the cost of data? How is donor data privacy and security managed? How are legal compliance requirements for data management and privacy managed within specific nonprofit segments and geographies (HIPAA, PII, CA etc.). How is data stored? Is it reused for any other purpose? Is it co-mingled with data from any other sources? How does the provider ensure that bias is

All Rights Reserved © Arjuna Solutions Incorporated

removed from the algorithm's data assessments in determining the precise values for each individually optimized set of gift arrays?

- 4. Operational Insights. It is important to understand the existing best practices used in leveraging the A.I. capabilities under consideration. For example, A.I. technology learns with each repeat use. As a result, there are increasing returns from consistently using a UAI/RML technologies over time. To fully evaluate its impact, it will be important to select a series of appeals that are spread out across several months. We suggest committing to at least a seven to nine-month long evaluation period in order to secure the best insights available about the impact of A.I. on overall individual fundraising results.
- 5. Stakeholder engagement and management. As with any other pilot testing of new technologies or capabilities, you will want to ensure that key stakeholders and senior leaders across the organization and within your partner ecosystem are fully informed and engaged in the testing of an artificial intelligence technology. They must be appraised of its capabilities and informed of any key dependencies you may have on them to support the test. It is also useful to appoint a single accountable team lead who understands the integration of the technology into the organization's workflows, donor management systems and marketing technologies (CRM, e-marketing, etc.).
- **6. Request references.** Nonprofit industry references from UAI/RML engagements are extremely useful, especially if they are from organizations of similar size and sector.

Behavioral Modeling in nonprofit fundraising through UAI/RML artificial intelligence is rapidly emerging as the natural next step complement to existing donor relationship management and fundraising systems. Given the remarkable performance of this artificial intelligence in the increasingly challenging individual fundraising environment, every Chief Development Officer should be evaluating and testing these capabilities today.

Video Insights from nonprofit organizations using UAI/RML for individual fundraising optimization.

- Martin Smith, VP Marketing Communications
  - o MAP International, Brunswick, Georgia
- Shannon McCracken, CEO, The Nonprofit Alliance, former CDO and current Board Member
  - o Charity Navigator, Glen Rock, NJ