A.I. Is Ready for Fundraising.

Are Fundraisers Ready for A.I.?

By NICOLE WALLACE

FUNDRAISING

Michael London's goal at the Cleveland Clinic Foundation is to automate every repetitive — some might say tedious — fundraising task he can. One of his most important tools is artificial intelligence. His goal is to free up employees for work that requires human smarts, like crafting strategy or building ties with donors. He's off to an impressive start that is bolstering fundraising without big increases in costs.

When people make gifts to the path-breaking hospital, algorithms run information about the donors against more than 3 million records to determine if they're already in the fundraising database. If they're not, coding automatically creates new records for them.

Staff members used to do all of this work manually; now they touch less than 5 percent of records. For any one gift, the amount of staff time saved is small. But taken together, the efficiency gains are eye-popping. Today the clinic processes 80,000 gifts annually with the same number of employees who processed 30,000 donations annually just a few years ago.

Artificial intelligence is also changing what some fundraisers do at the Cleveland Clinic. The organization used to have two full-time employees to assign potential donors to big-gift fundraisers who could cultivate them. That task is now largely automated, with algorithms giving fundraisers their choice of a select group of new prospects, which is updated nightly. Staff members double check the roughly 5 percent of prospects the system decides not to open up to fundraisers — but the rest happens without human intervention.

And what happened to the two people who used to do all the donor assignments? One accepted another job within the Cleveland Clinic. That prospect-manager position was then reconfigured to work with schools that want to raise money for the hospital and on the Trike & Bike program, which encourages children ages 3 to 12 to raise money for pediatric cancer research at the Cleveland Clinic. The other staff member now uses a system that assesses supporters' capacity to give and interest in the clinic's mission to

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MICHAEL F. MCELROY FOR THE CHRONICLE

TIME SAVER
Michael London uses A.I. to automate back-office fundraising tasks at the Cleveland Clinic. Algorithms, for example, determine whether a donor has given before and creates records in the database for new supporters. The goal: free up staff members for activities that require a human touch.

GRACE BEAHM ALFORD FOR THE CHRONICLE

MORE ACTION
Marijana Boone hopes the College of Charleston's new A.I.-powered fundraising system will make it easier for fundraisers to act on data — without having to sift through it themselves.

Artificial intelligence can conduct complex tests, learning and adapting on its own in real time.

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identify people who seem poised to make very large gifts.

"He's on pace to generate over $5 million worth of new donations," London says.

Uncovering Donors' Passions

The Cleveland Clinic Foundation's use of artificial intelligence isn't sexy or particularly space-age. It isn't the robot maid on the *Jetsons*. But it just might be the future of how charities win gifts big and small.

In addition to automating administrative tasks, artificial intelligence has the potential to help nonprofits better tailor their fundraising, letting them use data to suss out donors' passions and target appeals in increasingly personalized ways. That's important because as companies use the technology to build ties to customers, based on their interests and buying habits, those people are starting to expect the same level of customization from the nonprofits they support.

While there's excitement among leaders, some experts wonder how readily rank-and-file fundraisers will accept the new technology and whether organizations will use artificial intelligence as a reason not to hire additional fundraisers.

Right now, only a handful of large nonprofits are experimenting on their own with artificial intelligence. But a growing number of fundraising systems are baking it into their offerings, and the features they offer could start to change the way nonprofits raise money.

Take Blackbaud Guided Fundraising, a system designed to help universities coordinate student calling and texting with direct-mail and email appeals. The system determines which donors students should text or call, and after they've made contact, it automatically sends email or direct-mail appeals that come from the student. At the beginning, the system analyzes up to 25 years of giving history to develop an initial hypothesis on how best to select donors. Over time, it refines its strategy based on how they respond.

"With artificial intelligence, you can test very complex things that have lots and lots of factors, and you can see it adapting in real time," says Andy Reeher, vice president for data intelligence at Blackbaud. With traditional A/B testing, fundraisers can test only one facet of an appeal at a time, he says. At that rate, it could take years to figure out the best way to cultivate a particular donor. "If we can try all the channels at the same time, we're going to better our shot."

Being able to weigh lots of components with algorithms that learn and change is powerful, says Josh Birkholz, principal at the fundraising consultancy Bentz Whaley Flessner and author of *Fundraising Analytics: Using Data to Guide Strategy*. But that same complexity could make it hard for fundraisers to accept artificial-intelligence systems, especially if they're afraid of being displaced by technology.

"Sometimes with A.I., we don't see what the ingredients are," he says. "That makes some people distrust it, even if it's better."

Personal Assistants

Using data to improve fundraising isn't a new idea. Large nonprofits have been using analytics to identify promising potential donors for more than a decade. But even savvy organizations have sometimes been frustrated by how few fundraisers use the analysis. Often they get a spreadsheet of promising leads and their wealth scores, nod with a befuddled expression on their face, and go right back to raising money the way they always have.

Artificial intelligence, proponents argue, can change that by analyzing the data and prescribing critical steps to take.

"The job of a development officer is not to prioritize their portfolio and think about who to email; it's to build relationships for the benefit of the college," says Marijana Boone, executive director for advancement services at the College of Charleston. "They shouldn't be the ones filtering and sifting through data."

The College of Charleston has started using Gravyty, a new A.I.-driven system it hopes will help fundraisers act on smart analysis and make it easier for them to get appointments with potential donors. It uses artificial intelligence to analyze the people in a fundraiser's portfolio to determine the next person it thinks the fundraiser should contact. The system then sends an email to the fundraiser with a brief synopsis about why the donor was chosen and a pre-written draft message to the donor, which the fundraiser can tweak before sending. The system learns the fundraisers' writing style — when they write "Hi, Alice" versus "Dear Ms. Smith" — by studying the changes they make to the drafts. The newest version of the software might even suggest a restaurant for lunch with the donor, drawing on Yelp ratings, or note the unseasonably warm or cold weather in the donor's part of the country.

Gravyty was designed to act as a personal assistant to make it easier for fundraisers to schedule meetings so they have more time to meet with potential donors, says Adam Martel, the company's co-founder and a former major-gift officer at Babson College.

"It's a question of numbers," he says. "If you can get a frontline fundraiser in front of two or three times the number of donors that they're in front

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of now and they can ask maybe one or two times the number of folks that are asking now, that will always yield more gifts."

Westmont College recently started using Gravyty. The small liberal-arts college has set up a test to compare the amount of money derived from leads determined by the system versus the donors uncovered by its one full-time prospect researcher and the work-study students who help him.

Reed Sheard, vice president for college advancement at Westmont, says his prospect researcher is rooting for Gravyty to be successful because it would allow him to move into an analyst position instead of spending so much of his time on "rudimentary research."

Sheard hopes it will help the college raise more money — without adding fundraisers. "I want to have my cake and eat it, too."

The idea that artificial intelligence allows an organization "to add staff without adding staff" comes up a lot in discussions about the technology's use in fundraising, says Karin George, principal at Washburn & McGoldrick, a fundraising consultancy. That gives her pause.

"I see that in the first year or so," she says. "But I don't see that long-term."

George worries that some administrators will use the technology as an excuse not to hire additional fundraisers. But after the initial efficiency gains, the software will identify too many promising prospects for the existing fundraisers to cultivate.

"The A.I. can't actually go and see the person," she says.

Knowing When to Ask for More

When Patrick Pearce prepares renewal mailings for the fundraising arm of the Arkansas Educational Television Network, he uploads the donors' data to the ExactAsk platform, which uses artificial intelligence to generate three amounts to request from each donor. Sometimes, the highest number in the series is roughly the same amount the person gave before. But other times, what the software recommends is a real surprise, Pearce says, such as asking someone to contribute $240 who in the past has given $30.

Some worry that A.I. will be used as an excuse not to hire more fundraisers.

Pearce says he didn't hesitate to send out the appeal asking for $240. "We're trusting that these folks know what they're doing," he says.

So far, the Arkansas PBS affiliate's bet is paying off. Across multiple appeals, the average gift from donors whose letters included the series of personalized gift amounts is $5 to $10 higher than donations from the control group who were asked to contribute amounts based on their previous gifts.

ExactAsk uses the data a nonprofit has about its donors, sometimes combined with data from the U.S. Census, to predict how much the donor values the nonprofit, says Adam Treiser, chief executive of Arjuna Solutions, the company that created the system. Over time, ExactAsk refines its calculations based on how the donor interacts with the group.

"The artificial intelligence is actually using each interaction with each donor to learn about that donor," he says.

In January, the company released a new product that predicts which donors are most likely to give to an appeal at a particular time. It's also working on products to help nonprofits figure out the rhythm of appeals each donor is most likely to respond to and to personalize elements of an ap-

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What the Future Might Hold for A.I. and Fundraising

Ashutosh Nandeshwar can see a not-too-distant future when sophisticated chatbots answer potential supporters' questions online and connect them with the fundraisers most knowledgeable about the causes they care about. Donation pages on university websites could serve up the five or six funds a donor is most likely to support, based on that person's interests, instead of the hundreds that donors currently confront.

It's not that far-fetched a vision.

Last month, Ruffalo Noel Levitz, a higher-education software and consulting company, released A.I.-powered chatbots that universities can use for fundraising and enrollment.

"It really allows for an institution to continue to communicate with a donor, with an alum, with a friend, with a parent 24/7 regardless of whether someone at that the institution is there or not," says Josh Robertson, the company's senior vice president for product strategy.

Using artificial intelligence to predict which issues will spark a donor's passion could also help nonprofits make giving easier, says Nandeshwar, an assistant vice president at the University of Southern California and co-author of *Data Science for Fundraising*.

QuadWrangle, a company that serves higher education and private schools, offers an online system that uses machine learning to understand alumni, drawing on data from the institution's database, their behavior on social media, and more. It then uses those insights to select what news and stories to show donors when they visit the university's website or to include in the emails the institution sends. The choices donors make as they interact with that content then helps the system learn more about their interests and improve the personalization.

Each week, universities and other large nonprofits create pieces of content by the dozens, if not hundreds, says Nick Zeckets, co-founder and CEO of QuadWrangle.

"With all that volume, we only have to do a great job two or three times a week," he says. The goal isn't to replace someone's Google news feed. "We're just trying to create a great level of resonance between an institution and one of their constituents regularly enough that you always feel relevant as an institution."

The system serves up tailored giving options when donors visit the university's website, and it also embeds very specific donation appeals into stories that take people to a specific giving page.

A group will get more click-throughs — and ultimately more gifts — if the story itself doesn't include a donation plea, Zeckets says. "People don't like being sold to; they like discovery."

Pulling Data Together

QuadWrangle and other A.I.-driven systems designed for colleges and other large nonprofits, like Uprising Technology and NewSci, bring together and organize a group's data from different locations — which nonprofits have long struggled to do, making it difficult to get a full picture of donors' interaction with the group.

Imagine that a volunteer managed an event and checked people in using a spreadsheet, Zeckets says. "Did they use the unique user ID from the school's core database? Did they write that down, too? Of course, they didn't."

What normally happens in a case like this, he says, is that fundraisers use the spreadsheet to send out thank-you notes, but the information about who attended seldom makes it into the main database.

Donors know all the ways that they're involved with a nonprofit, and they get frustrated when the organization doesn't seem to know the full extent of what they do, says David Lawson, co-founder of NewSci.

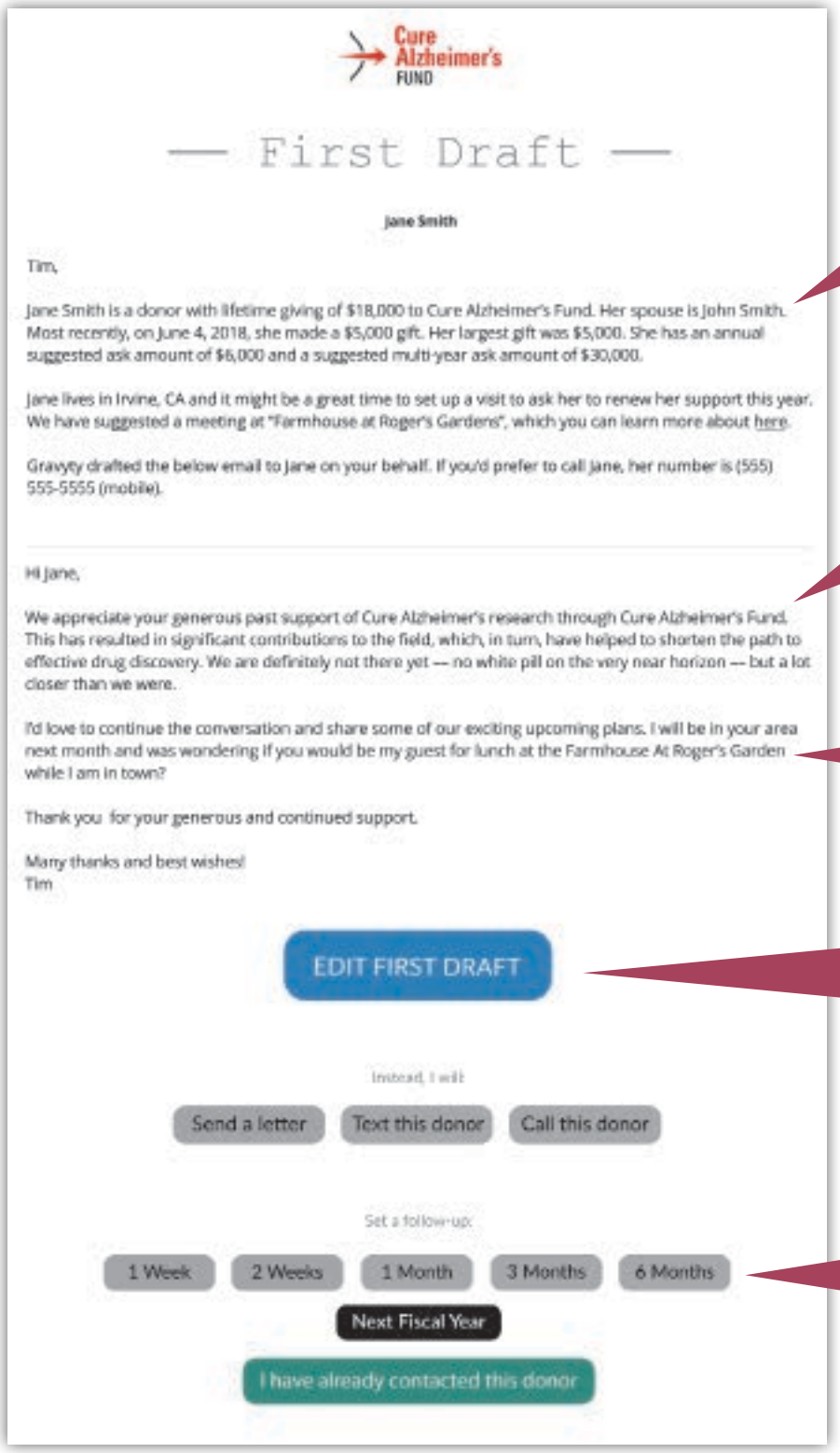
A big part of the problem, he says, is that nonprofits have struggled to work with both structured data — think concrete fields in a database, like gift amounts — and unstructured data — free-form information like the notes a fundraiser entered into the database after visiting a potential donor. Artificial intelligence is uniquely able to do that, he says.

"This technology is built to pull that together and get these organizations on the same page as the donor."

— Nicole Wallace

One Company Puts A.I. to Work for Fundraisers

Gravyty's A.I.-powered system acts as a personal assistant, making it easier for fundraisers to contact the people in their portfolios.



Fundraisers get information from Gravyty in their email inbox. The first section of each email describes whom the system thinks the fundraiser should contact next and why. It includes important data, such as the date and amount of the donor's last gift so fundraisers don't have to look it up.

The second section of the message is a pre-written email to the donor. As fundraisers use Gravyty, the system learns their writing styles — such as whether they use "Hi" or "Dear" in donor emails and how they like to close their messages.

The system uses the online review service Yelp to suggest restaurants where the fundraiser and potential donor can meet.

Fundraisers can edit the pre-written email. Gravyty tracks the changes, which allows it to better learn each fundraiser's writing style.

Fundraisers can use other buttons to note if they've contacted the donor another way, such as by mail or phone. Fundraisers can also set up a follow-up reminder.

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peal — predicting, for example, which of several photographs would appeal to each of the donors on their list.

Organizations will never be able to build personal relationships with each person who gives $50 or even $500, Treiser says. But with artificial intelligence, they can offer those donors an experience that's better tailored to what they want.

"Today, too often we find that nonprofits are willing to annoy people and diminish the overall value of a relationship just on the chance that they might get one more transaction out of them," Treiser says.

Hiring Tech Workers

Perhaps not surprisingly, officials at A.I. software companies think many more nonprofits will use their services rather than building their own data-science teams.

Data scientists love a variety of data, says David Lawson, co-founder of NewSci, "As much as your problem might be super interesting at first, it is not going to be that interesting down the road."

Then, of course, there's the question of money. For-profit companies are struggling to hire all the data scientists they would like to have on their teams.

Regan Holt worked at Northwestern University for 13 years before she started Uprising Technology, a system that helps universities bring all their fundraising data together in one place. Hiring developers and other tech folks was tough when she worked at the university. Even if colleges and nonprofits had all the money in the world — which certainly isn't the case — they would still need to win over the data scientists and developers they want to hire.

"Part of the thinking for me when I was like, 'Hey, I'm going to start a company,' was, 'It will be way easier to attract the people that want to do this work if we're a cool, hip start-up."

But Michael London at the Cleveland Clinic Foundation stands by his DIY approach to artificial intelligence. All six employees in his department have coding skills. But he's not competing against the Googles and the Facebooks of the world to get them. Instead, he hires smart people committed to the mission and trains them in programming and other tech skills.

"The back ends of databases are extremely complex, and there's just a lot of information flowing in there," he says. "The people who are at those organizations are the ones that are going to know that information better than anyone else."