



## 14 ways emerging technology will change fundraising

Big breakthroughs in technology have emerged about every 10 years: the IBM PC in the 1980s, the Internet in the 1990s and social media in the 2000s. Today we're entering the age of big data, cloud storage, cloud-based software and data analytics. But big data is just the beginning of a technological shake-up that, in the next 10 years or so, will change the way fundraisers and donors will use and interact with technology. The future—driven by pioneers and entrepreneurs of the fundraising technology world—will be based on the emerging field of cognitive computing, which merges big data with machine learning and natural language processing to yield an augmented intelligence customized for fundraising that will be a partner rather than a tool.

Commonly lumped under the umbrella of artificial intelligence (AI), augmented intelligence is not a sentient human-like technology, but an expert system that processes massive amounts of data to help fundraisers better target priorities. While this augmented intelligence can listen into meetings as part of its information gathering, or perhaps even make suggestions from a nonbiased viewpoint, it won't be a robot roaming around the office.

Imagine a future where fundraising technology is frictionless, seamless and incorporates right-brain cognition. Imagine a world where data is self cleaning and self structuring. Imagine a world where technology is a partner in messaging and decision-making and not merely a tool for tracking transactions and simple analysis. Imagine a future where computers provide qualitative feedback in balance with quantitative analysis.

### Struggling with friction

What do we focus on today? Quite a bit. Donor research, donor acquisition, planned giving, events, annual fund marketing and copious time figuring out how to use the technology we've purchased. And even more time preening the data because current technology doesn't tolerate errors or gray areas. We do data entry, data cleaning, data import and export, and records matching. Is the John Smith who just gave online the same John Smith who attended a recent event? We do a lot of handwork to figure these things out. According to Hilary Noon, senior vice president of insight, analytics and experience for Pursuant, a comprehensive fundraising agency,

a lot of nonprofits don't benefit from the data because they spend so much time struggling with it. She says, "Finding true insights from today's data is usually last on the list, so the real meaning behind the data gets lost or is not used."

When fundraisers work with technology today, we experience a lot of friction, even to the point of epic frustration. Today's data is very fussy. It prefers a precision and structure that's unnatural for us. Different systems store similar data. Integration is difficult at best. Due to friction, "We're conditioned to believe that technology has severe limitations. But we're moving into a world where the limitations will go away," says David Lawson, co-founder and CEO of NewSci, which brings cognitive computing to the fundraising community. Lawson's book, "Big Good: Philanthropy in the Age of Big Data and Cognitive Computing" was released October 2017.

### **The no-friction future of automation**

Today, fundraisers use technology to identify opportunities, then develop strategies to take advantage of those opportunities. Richard Becker, president of Blackbaud Target Analytics, says that in the future, "We'll use technology not only to inform but to do."

For example, he says, in direct marketing-driven fundraising, we use technology to formulate a list of highly responsive prospects who are likely to give at a certain level. We work with partner agencies to develop tactics to make multiple touches with the prospect. "I envision a day where a lot of the friction or the steps in the process, which are many, will become seamless," he says. "New technology will automate everything. The nonprofit will have to do very little. The technology will identify the opportunity and then automate the execution in real time. The nonprofit will focus on receiving the benefit from the outcome."

Less handwork means more time available to raise money. Lawson says, "This is exciting for our field because we are so understaffed and overworked. To have this augmentation of our workforce—of our intelligence—will be terrific."

Here are 14 ways that new technology will impact the fundraising office.

#### **1. Technology: from tool to partner**

Much like the HAL 9000 computer in the movie, "2001: A Space Odyssey," where the augmented intelligence, HAL, monitored the operations of the spacecraft while providing advice and suggestions to the human crew, future fundraising technology will act more like a partner than a tool. Our future technology partner will be an augmented intelligence that's programmed for your fundraising niche and further customized for your organization.

Current technology tells us how many donors we have and how much we've raised this year. "Now we're going to get into the qualitative age. That's when we'll understand why the quantitative data went up and down," says Lawson. Emerging technology will capture the nuances of the donor's passion and experience to know why the donor gives or doesn't give, or why your campaign is or isn't going well. It will also assist us with planning our business by telling us exactly how much to spend on fundraising.

## **2. Automated prospect research**

Prospect research requires a lot of handwork. We do our own research and may hire an agency to do a wealth screen. However, most of what we learn comes from transactional data, which doesn't tell us much about what motivates the donor. We evaluate transactions because that's what our technology is designed to do. We miss the human elements that are so necessary for our work. We get that by hand, talking to the donor and their associates.

Today, 10 organizations can do a wealth screen on the same person and get basically the same score. In the future, fundraising systems will look for prospects and initiate a qualitative and quantitative analysis. Scores will be specific to the organization, drawing on real-time data about the prospect's passion and interests that are relevant to the nonprofit. The technology will produce a text report putting the wealth factor in context with the donor's worldview and behaviors. Donors will no longer be summarized as a wealth score but accurately profiled using rich sources of data. In this way, technology has the potential of humanizing our prospect research and help us make better decisions about who to approach and when. With a more complete profile of a prospect, the gift officer has a leg up in starting a conversation.

## **3. Automated messaging**

It's hard to imagine using a machine to write your messaging but that's where we're headed. This capability is available today in a product called "First Draft," which draws on data to compose a first draft of letters, emails and other documents. Lawson says, "The technology is rudimentary now, but moving forward, this technological partner will be amazing, composing first drafts of emails, proposals, case statements and other documents."

When this technology matures, it will build messaging that resonates with specific groups based on similarities drawn from rich sources of data. Messaging can be further personalized to the individual's motivations and passions. Instead of a few versions of a letter, you can have 1,000 with messaging more likely to lead to transformative gifts.

Emails from major gift officers will be automated. The technology will write in the gift officer's voice and style and draw on rich data to create content relevant to what makes the donor tick. Gift officers will monitor and curate the conversation and will know when to personally take over the conversation, leading to a personal visit.

Other messaging, such as social media, will also be automated. Professional communicators won't go away. They will curate how the machine learns to ensure the messaging engine works for the organization.

#### **4. Automated direct mail**

Direct mail hasn't died yet. If it survives for the next 10 years, it will be automated, beginning with segmentation. "As organizations grow and become more diverse, the need to be much smarter about segmentation is critical," says Lawson. We'll easily go beyond recency, frequency and gift amount—transactional data—and allow the machines to suggest segmentation on patterns and criteria gleaned from the data. Messaging will be composed by the automated messaging system. Letter production will be automated. Letters will be mailed when the donor is most receptive. We won't schedule mailings around the calendar. These will be ongoing campaigns that self-optimize based on response.

#### **5. Storytelling through virtual immersive experiences**

According to Curt Swindoll, executive counsel at Pursuant, technology will change the nature of storytelling and engagement. According to research by Rogare, a donor who has an immersive and memorable experience, particularly early in the relationship, is more likely to be a long-term supporter. Today, nonprofits take the donor to the experience. In the future, you'll bring the experience to the donor as if they were there. Nonprofits already use virtual reality, engaging eyes and ears. In the future, all five senses will create a completely immersive experience where the donor explores—and engages—on their own and will find it difficult to distinguish the virtual experience from actually being onsite.

#### **6. Automated gift matching**

Becker says that \$6 billion of corporate matching gift funds are left on the table annually. "Employees either don't know about their employer's matching gift program, or they're not motivated to follow through," he says. "A myriad of things need to happen. The donor needs to be aware, fundraisers need to prod them to match the gift. Maybe they follow through. Maybe not. There's too much manual process and too many touches." There's too much friction to get that \$6 billion.

Blackbaud is working on an automated, friction-free matching gift system. For every gift, the system will identify who the donor works for and determine if the employer has a matching gift program. The system will pre-populate the company's matching gift form and send an automated message to the donor saying, "Click here and we'll process your matching gift." In the backend, the system will correlate that gift to the corporation.

### **7. Organizational knowledge will be preserved**

A generation ago, people kept the same job for a long time, perhaps their whole career, keeping organizational knowledge intact. Today, turnover in the fundraising office means that a lot of organizational knowledge walks out the door when an employee leaves. The ability for cognitive computing to capture organizational knowledge over time will be valuable.

### **8. Information silos will disappear**

Operationally, each part of the fundraising office has its own specialty, so it's natural for certain things to stay in their silos. What drives fundraising leaders crazy is the intentional or unintentional hoarding of information in silos. In the future, all of your data will be in one big database. Everyone will have access to the same data in ways that are meaningful to their job function.

### **9. Open systems will eliminate one-vendor solutions**

A big technology hang up in the fundraising office is using a set of solutions that don't work well together, or buying an all-in-one solution in the hopes of encountering less friction. Lawson says, "The 'best vendor' never works because even if they're the best at something, they'll never be best at everything. The rate of innovation will always put it at a disadvantage."

Future technologies will interface seamlessly using standard protocols. Like a stereo system, you integrate components on an as-needed basis. So you can buy "the best" of something from one vendor and expect it to work with "the best" from another vendor. You will always have access to the best technology that's appropriate to your task and scale. Even if there's a problem with the interface, the technology will be programmed to fix it.

### **10. Today's' experts will be tomorrow's system designers**

"Today we rely on a number of experts and services to help with various aspects of our work," says Swindoll. In the future, he says, experts will be replaced by artificial intelligence engines. Services like social engagement analysis, advanced visualizations and persona modeling will be embedded in the tools anyone can use.

Becker says that we'll move from hiring agencies or buying software for specific tasks, such as campaign management software, customer relationship management software and predictive analytics, "to an automated direct marketer in a box or a development office in a box, taking out the need for the amount of human intervention that it takes today to touch a donor," he says.

What will happen to the agencies? Swindoll says that master fundraisers will be busy embedding their expertise into artificial intelligence engines. Instead of hiring expertise, their expertise will be baked into the software.

### **11. Self-service stewardship**

Technology will have a profound effect on the mission side of many organizations. Data will help us find cures, distribute food and inform other critical aspects of our missions. This data will flow back to fundraising so that donors can do their own self-service stewardship. Any information published about your mission, whether it be field reports or other information will be accessible to donors. Not just about the problem and the results of your mission work, but also how you solve problems. This will allow organizations to be more mission-centered rather than donor-centered. Lawson says, "That's what the donor is buying and that's what this technology will do."

### **12. Donor and volunteer empowerment**

The donor experience will also evolve. New technology will empower prospective donors and volunteers to find organizations that resonate with them. Jay Goulart, chief data scientist at NewSci says, "What won't go out of style is people wanting their lives to be of value." New technology will empower individuals to find and seek out their passion as a donor or volunteer.

Self-service stewardship will enable donors to find organizations that match their passions. And volunteers can find a good fit for their skills. Goulart says, "We've built platforms to make it easier for people to give money. It's a logical step to build platforms around matching talent sets of communities to the organizations in that community." He says that today it's easy to be a volunteer but less easy for the volunteer to find a good fit. He says, "If technology has the ability to match individuals with organizations, they'll more quickly come to a place where they feel of value." People seeking to volunteer will also be able to load their interests and skill sets into a database so nonprofits can find them.

### **13. More power for small nonprofits**

Donor and volunteer empowerment will, in turn, help empower smaller nonprofits. Goulart says that as emerging technology helps smaller organizations leverage their ability to connect with

people, "they become a much bigger place" by creating a national network of equal power of the larger nonprofits.

In fact, experts believe that larger nonprofits may suffer in the long run. Noon says, "Large nonprofits are not going to work anymore. Donors want something that's more deconstructed." New technology will allow small, local nonprofits to collaborate on big problems nationally, something that Noon says will be driven by donors. She says that today, "There is a desire for grassroots donors to have more influence and to peek behind the curtain to see how the organization is run. Younger audiences don't want to write a check and walk away. They want to understand and connect to the brand. They want to feel like the brand they're aligning with is integrated with who they are."

#### **14. New technology will be affordable**

Possibly the biggest barrier to nonprofit technology success today is cost. The best and most comprehensive technologies in today's world don't scale well for smaller organizations, so they tend to make do with solutions that are affordable but may not be effective. Or they buy the big software but don't have the resources to leverage the capabilities.

As new technology matures, the cost will go down and the most advanced tools will be affordable for everyone, reducing overhead. Noon says, "Nonprofits won't need to reinvent the wheel or invest heavily. Organizations won't have to spend as much on building big systems, but instead leverage technologies that will be embedded in the tools they purchase that will enable nonprofits to leverage the best of what has already been developed." We see this model emerging today where instead of purchasing an expensive software package, we "rent" cloud-based software tools and pay based on usage and scale. In this way, smaller nonprofits will have access to the same technology as larger organizations.

#### **The pace of innovation**

The road to adoption will be a long one but many eager commercial marketers are keen on implementing new technologies as they emerge, driving the pace of innovation forward.

In general, nonprofits have lagged in adopting new technology, particularly smaller organizations. Lawson says that because big vendors and nonprofits have a lot invested in the status quo, they may not be motivated to lead a big shake-up in technology. "You shouldn't follow the leaders in a time of change," he says. "You look for the people who need to innovate, and those are often smaller start-ups or midrange organizations that are not doing as well with the status quo. When

things are stable the old way is fine. But when things are changing, a lot of innovation will come from unexpected places."

### Sidebar

The fundraising office of the future will be based on cognitive computing, which combines three main technologies to create an augmented intelligence that will be more of a partner than a tool in the fundraising office of the future.

1. Big data refers to the ability to store massive information. While big data is innovative, it doesn't provide answers or insight. It's just big storage.
2. Machine learning is the ability for a computer to learn without being explicitly programmed. It programs itself. The computer is constantly updating its understanding by gathering data in real time from the big data cloud. In this environment, there is no "off" switch. The machine is constantly learning.
3. Natural language processing is the ability for a computer to understand and use speech and text, similar to people.



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