



TURNING BIG DATA INTO DONATIONS

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PURSUANT[®]



No subject on the Harvard Business Review blog has gotten more airtime recently than the subject of “big data.” It was a fairly foreign term just a few years ago, but now commercial firms everywhere (and even some nonprofits) are wondering how they can translate customer data into sales. For donation-driven nonprofits, the question is the same: How can we turn donor data into donor intelligence and, ultimately, donor donations?

After reading many articles about this topic, it seems to me that these authors assume that the trip to bountiful is paved and obvious. But that isn't reality. I continue to observe some foundational needs for working through the process of turning donor data into fundraising strategies, and ultimately, into donor support. So that is the purpose of this article. As a company committed to data-driven strategies, Pursuant is constantly converting data into decisions on behalf of our clients.

Here is how we do it.

Data Cleanliness

The process of driving strategies from data must begin with an understanding of the data at hand. What does it represent? Is it specific to a certain channel (online only, events only)? Does it cover only some donors (major donors, cash gifts)? Because many donor management systems do a lousy job of capturing all donor data, it's highly likely that you deal with multiple "data stores" or databases of donor information. And that's fine. But it also means your conclusions will be specific to the data you've analyzed.

Another question concerns the time period of the data. Does it cover entire prior years and only part of the current year? Is it up to date? Make sure your analysis compares like periods. Analyzing a partial current year is fine, as long as it's being compared to the same period of time in the prior year.

Yet another question concerns "outliers" or unusual circumstances. If the data includes a single gift of \$1 million and your organization doesn't normally take receipt of gifts that large, then it may be important for you to filter highly unusual gifts out of your analysis. While including such a gift may be appropriate for evaluating the effectiveness of your major donor reps, it's inappropriate for calculating the average gift size across all donations.

Finally, it's critical that you consider the source. How clean is your data? What are the "business rules" governing the use and meaning of codes? How about the data entry process? Have fields been used to store data that are not indicative of the labels attached to those fields? Enterprising nonprofits will store data just about anywhere to make sure there is a record of it—even if it means using fields for data that were never meant to be used that way!

Our database staff at Pursuant will tell you that the process of receiving, cleaning, and understanding client data is some of the most challenging work we do. And they may be right. It's important to verify that the data you think you're evaluating is indeed the data that you're evaluating.

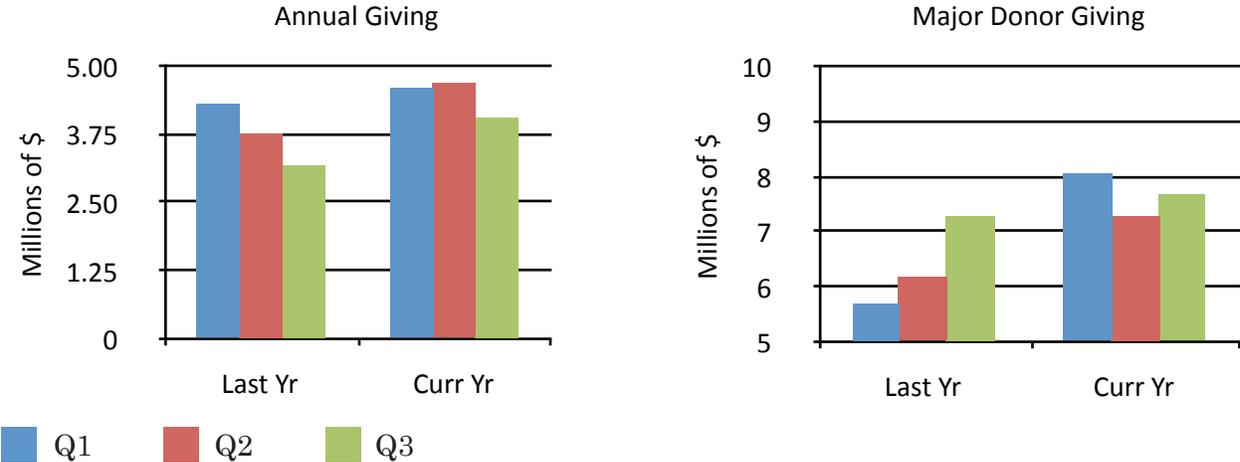
Data Preparation

Just as pictures are worth a thousand words, graphs can represent—and misrepresent—a

thousand numbers. So why do we use them? Very simply—we do it to show relationships. The number “\$10,000,000” is meaningless unless I tell you that it represents someone’s compensation for a year, or it was the gross domestic product (GDP) of an entire country. Context and relationships are everything in analytics.

Graphs are also valuable for digesting vast amounts of data very quickly. Give me a table with 100 rows, and it may take me several minutes to find the largest and smallest numbers, to see the general trend across all of the numbers, and to evaluate the sizes of the numbers relative to each other. But if we turn that table into a bar chart, then the data relationships come to life.

Conversely, when poor graphing techniques or the wrong graphing form are used, the pictures quickly become misleading. Consider the following charts:



See the problem? At first glance it appears that annual giving has been exceeding major donor giving. But the charts are misleading. The y-axis labels begin at two different places (0 versus 5). Problems like this aren’t apparent until people begin comparing graphs in ways they weren’t meant to be consumed. Everything was fine until someone put these two charts side by side. Suddenly comparisons are being made across graphs, creating a misleading picture of the data.

So data preparation decisions are critical to the process of developing data-driven strategies. What are we trying to analyze, and what is the best way to depict the data so it can be quickly and accurately understood?

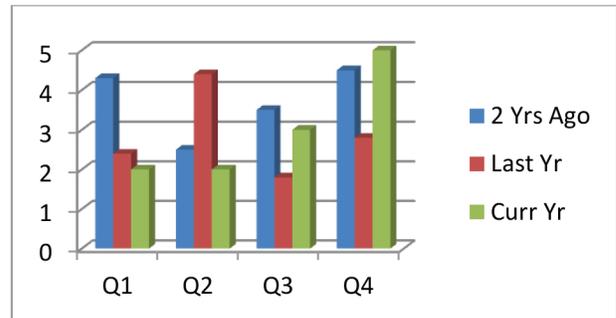
Our analytics team at Pursuant would argue with our data team and tell you that creating graphs that accurately communicate a story is the most challenging part of the process! Perhaps it is. So how do we do that part of the job well?

Let’s start by examining some of the basic graph types and what each one does best. As we

do, keep in mind that while 100-meter sprinters are lousy 1600-meter runners, that doesn't mean they're lousy athletes. They just have different strengths. The same thing can be said about graphs:

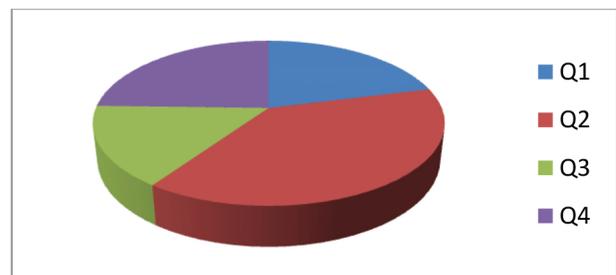
Bar Charts

Bar charts are best for comparing sets of data. The chart at the right does a great job of showing how the figures in each quarter compare to each other over the last three years. Less clear are trends in performance over several years, or even how Q1 performed year over year.



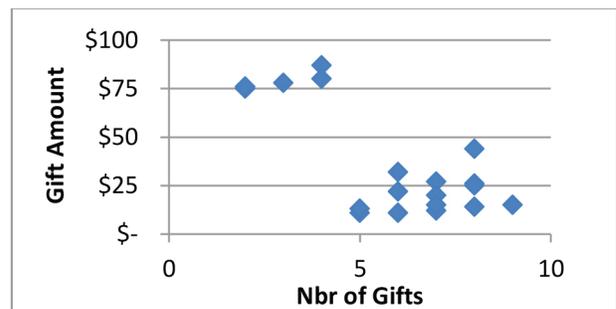
Pie Charts

Pie charts are best for showing proportions or ratios. The pie chart to the right immediately shows that about two-thirds of the year's performance occurs in the first two quarters. By the way, this pie chart is graphing the "Last Yr" figures in the bar chart above. See the difference in perspective?



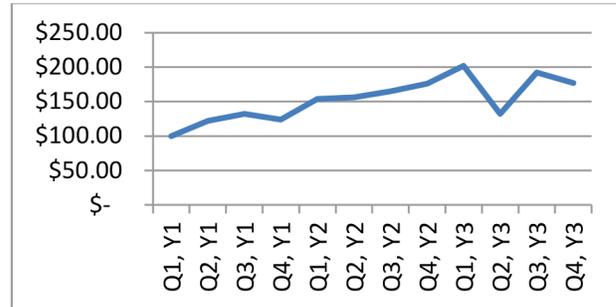
Scatter Plots

Scatter plots are best for viewing groupings of individual data points. The plot to the right shows the number of gifts received at different giving levels. There is a clear indication that more small gifts are being received than large gifts. Plots can be great tools for comparing dissimilar pieces of data.



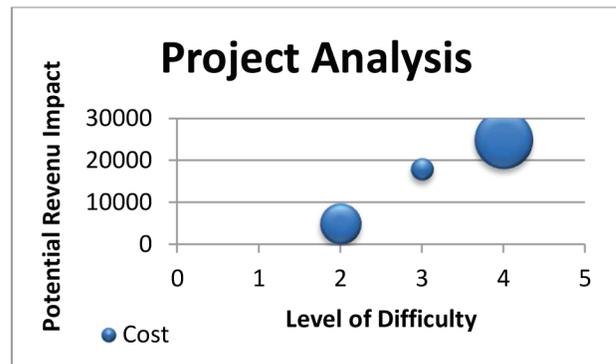
Line Graphs

Line graphs are best for depicting trends over time. Nothing compares to a line graph to show total giving amounts year after year. It may not compare specific periods side by side, but the *trend* in average gift size (as seen to the right) is very clear. Notice how the last three quarters of Year 3 show a downward trend over prior quarters.



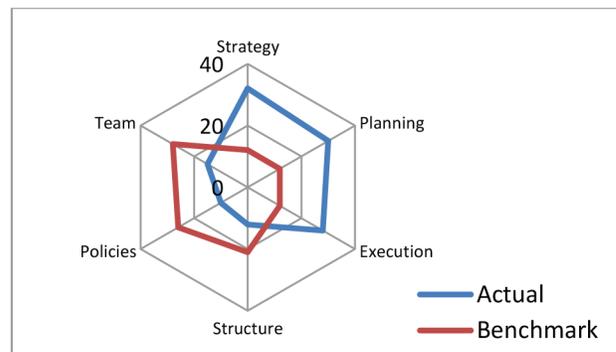
Bubble Plots

Bubble plots are best for comparing three different sets of data. These charts can be complex; but when needed, they put a lot of data into a clear picture. The example here shows a project analysis where Potential Revenue Impact and Level of Difficulty represent the x- and y-axes. The size of the bubbles reflects the cost of each project. Which one would you implement first?



Radar Plots

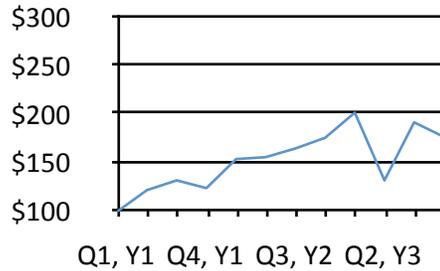
Also known as "spider plots," radar plots are often used to show areas of strength and weakness. In this example at the right, Actual results show a higher performance in areas such as Planning and Execution, while the Benchmark shows better results in the Team and Policies elements. Pursuant uses spider plots extensively in its fundraising and organization assessment instruments.



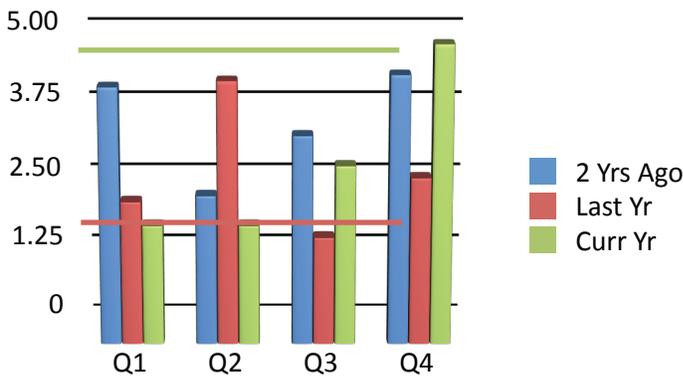
These charts illustrate the many ways that data can be portrayed, turning tables of forgettable information into interesting, memorable diagrams. But it's critical that analysts first consider what they are trying to depict. Are you comparing sets of data? Trying to show a trend? Are you presenting 100 data points or just a few? Are the data points connected in an obvious way, or are they somewhat dissimilar? How many data points need to be graphed?

All of these questions drive the use of different chart forms. It's also important to evaluate how the charts will be used. Are they being presented or printed? With or without commentary? Over what period of time? Is the audience familiar with the data or new to it? How is the intended audience used to seeing the data visualized? How can the visualizations be improved?

Sometimes it helps to add information to a plot such as trendlines, which show the trajectory of change and eliminate periodic highs and lows. For example, using the line graph example from above, I added a linear trendline (at right) to show how the average gift has generally been growing over the last three years. The trendline implies how that data point should continue to grow if fundraising efforts prove to be as effective in the future. Today's charting tools make it simple to add different forms of trendlines.



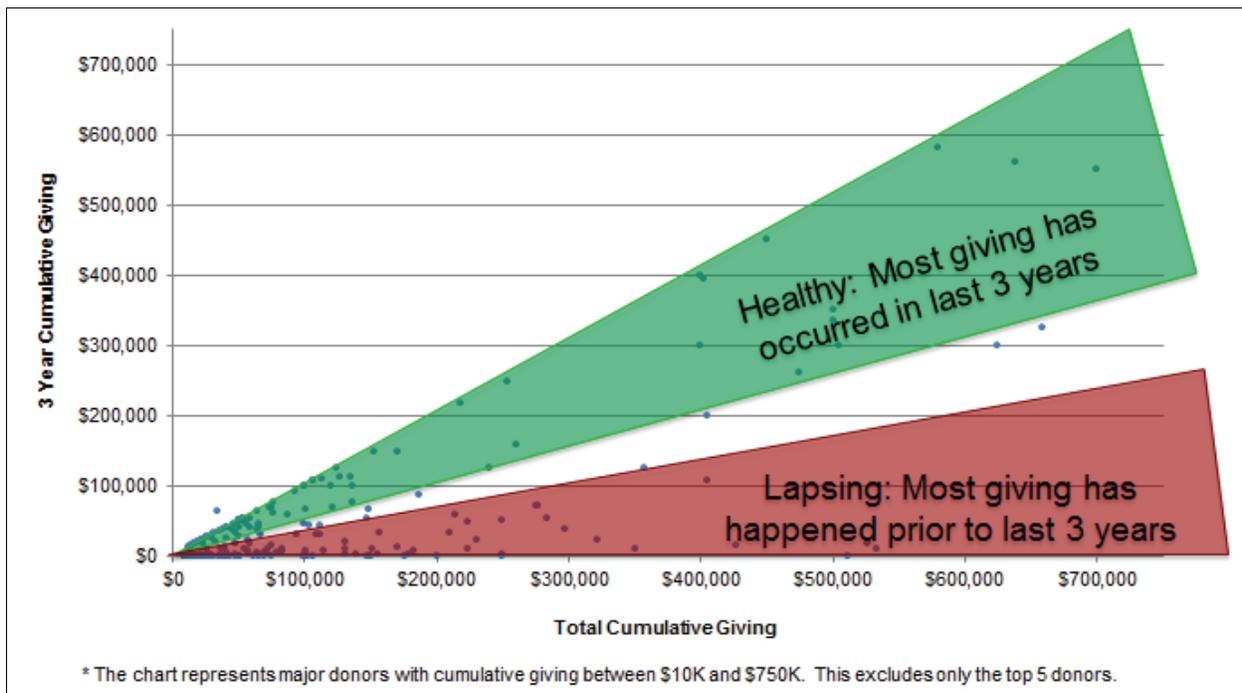
Other additions to charts could include rules that depict information not found on the graph. For example, using the bar chart example from above, I added two rules depicting the lowest and highest performing quarters in the last five years (see chart at left). How do these rules provide additional context for understanding the data depicted on this bar chart? Rules like this have a far greater impact than a text note.



One of the most powerful elements in charting—and undoubtedly one of the most challenging—is to consider how combining data points that aren't normally associated with each other can tell an interesting story when they're included on one chart.

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Several things are worth noting about this chart:

1. Notes were added to clarify the critical points.
2. Data on the top five donors were excluded in order to avoid plotting outliers that would have made the chart much more difficult to reach.
3. Highlighted sections were added to show areas of strength and weakness.

The bottom line: this plot was helpful for visualizing the number of donors whose giving had occurred prior to the last three years. While some major donors had done most of their giving in recent years, many others were in the process of lapsing. This created a sense of urgency within the organization to strategize how they might avoid watching a large percentage of their major donors lapse.

Examples like this show the incredible power of visualizing data to help tell a story. Can you imagine the plot above depicted in the form of a spreadsheet?

While visualizations are important, they lose their value if poor decisions are made concerning titles, labels, legends, notes, axis lines, fonts, and font sizes and colors. Popular business charting tools provide an endless array of options for customizing a plot. A person can spend a lot of time adjusting the detailed elements in a series of plots. And some of that time is well spent.

For example, are their brand standards that should be observed in your organization for things like use of font styles and color call-outs? How consistent are the colors and fonts used across the graphs and charts in your report or presentation? Does red depict negative information while green is positive? Are labels hard to read because they're depicted in a dark text color against a dark background? Or in a light text color against a light background?

A lack of attention to detail and consistency makes a presentation look sloppy, calling into question both you and the data you're presenting: "If Sam couldn't get the font sizes consistent, then what are the chances that his data is accurate?"

It's impossible to overemphasize the importance of accurate labels, titles, legends, and notes. Every word counts because text on a chart should be kept to an absolute minimum. In the past I've rewritten chart notes at least 20 times while trying to find an economy of words. I've also been in review meetings where several analysts spent more time than you'd imagine trying to find the right term to use for an x- or y-axis label, or a legend entry, or a title. Words matter—especially when there are very few of them. Use them wisely and also double-check them to make sure they aren't misleading.

It's also vital to consider how the presentation is going to be made. Will it be delivered through a projector? Is it going to be printed? With what level of quality and color? These outcomes should affect any decisions that are made about how the data will be presented.

One final note worth addressing: graphing tools these days offer some very cool options for three-dimensional graphics. It's as easy to select a three-dimensional graph as a two-dimensional one. But be very careful. Sometimes a three-dimensional graph provides visual interest and adds a professional touch to your analytic artwork. But other times it may greatly reduce the clarity of the data and make it virtually unreadable.

Decisions made during the data cleaning and initial presentation stages will set up the next step for success or failure: data immersion.

Data Immersion

The process of deeply understanding data begins once an initial presentation of the data is in place. Pursuant uses dozens and dozens of standard charts and graphs as the starting point for the immersion process. From there, a subject matter expert (SME) takes over the process, looking into the eyes of the data to see the face staring back. Are these donors happy or sad? Are they confused or amazingly responsive? Are they engaging or disengaging?

It's important to bring an objective, unbiased opinion to the process. One of the benefits of

analyzing our clients' data is that we have no idea what the process will uncover. If you're looking for something specific, you'll likely "find" it—even if it isn't entirely true. This is no place for jumping to conclusions.

I strongly recommend that you work with a team during this stage. Applying the experiences of different people will make the data immersion process run a lot faster and produce a more complete and accurate outcome in the end.

The first step is to become thoroughly familiar with the data. What is each chart telling you? What is the story behind each graph? If you look at a chart and have no idea if it represents a positive image or a negative one, then it's highly likely that you lack sufficient context to understand the data, much less draw conclusions from it.

During data immersion, themes and general impressions are far more important than any single number. Which data are trending up versus trending down? How does the number compare to the same period in prior years? How does the data change when it's evaluated over quarterly results, or over an entire fiscal year?

Next, what outliers—dramatic peaks or valleys—do you see? How long did the slump last? How recent was the record-setting month? Was the peak twice the norm? Was the dip slight or drastic? This is one of the most important steps in the process. It is critical that you research why the outlier occurred. Look for correlations. What changed during the period in question? Was a specific communication channel or campaign responsible for the unusual decrease or increase? Did an event occur at that same time? Was timing somehow responsible for the change? What else went up or down during that same period?

Contextually speaking, it's important to know what data you're reviewing. Online results? Major giving results? Is the data depicting engagement behaviors such as website visits, click-throughs, or online newsletter registrations? Or is it annual/general fund giving data? Or all data? Does it represent all gifts—including that extraordinary estate gift that came in last year? Do the graphs represent 90 percent of all giving or only 10 percent of it?

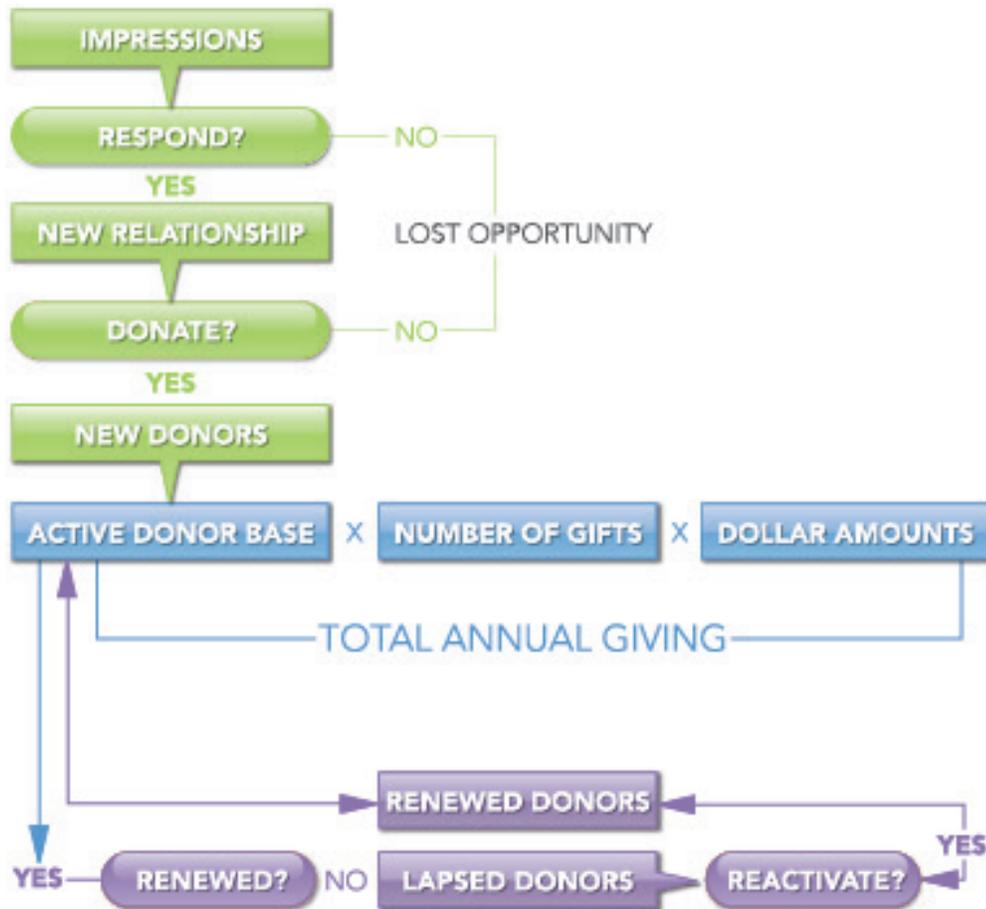
It's also important to have a general sense of industry standards during this process, as it will provide additional context for evaluating the success or failure of a campaign. What was the goal of the campaign? What was budgeted for revenue that month from that catalog mailing or email blast?

Subsector growth and decline represent valuable points of context. An increase in annual giving of 2 percent may seem anemic . . . until you realize that giving to your hospital/healthcare subsector decreased by 5 percent in the last calendar year. Nonprofit sector and subsector benchmarks are helpful to the immersion and observation process. But keep

in mind that every nonprofit has differences that may make overall sector averages less relevant. Don't give them too much weight. They are one data point, but they're not the only data point.

Several years ago I created the Donor Process Model (below) to help fundraising professionals diagnose fundraising problems. This model highlights eight core areas that will inevitably affect optimal annual giving results:

DONOR PROCESS MODEL



1. **Impressions:** Too few people are hearing about the work of your organization
2. **Response:** Ineffective tools and techniques for turning impressions into new relationships
3. **Donate:** Poor process for encouraging new people to make an initial gift
4. **Active Donors:** Ineffective communication that fails to encourage donors to make the all-important second gift to your organization
5. **Renewals:** Ineffective communication that fails to keep donors engaged and supportive over time

6. **Lapsed Donor Reactivation:** Ineffective or nonexistent efforts to encourage lapsed donors to renew their support and become active again
7. **Numbers of Gifts:** Lack of focus on frequent giving programs (or for major donors, a failure to gain support outside of a capital/vision campaign)
8. **Dollar Amount:** A proactive focus on upgrading donors who are ready and willing at higher levels

As you conduct your initial review, consider the different components of the Donor Process Model and how your organization is performing at each step of the process.

Make notes on every page that summarize your initial impressions of each chart and graph. They will become increasingly meaningful as the data immersion process continues. Singular negative trends don't tell the entire story. It's only in the context of the entire picture—sets of observations—that we can begin giving weight and meaning to particular observations.

Once finished, go back through the graphs and your notes. What themes exist across multiple observations? The process of immersion doesn't happen in a single pass. Our SMEs typically have to review the charts and graphs dozens of times while they're creating a mental image of the story that donors are communicating through their giving behaviors.

Undoubtedly you'll need to drill down into the data for more information. Good analytics tools make the process of drilling into data easier. But it's not uncommon to have to conduct additional research and ask for more detailed information on a specific trend.

For example, let's say overall giving was lower than expected in June. Which of the three campaigns that are running that month performed the poorest? What was the problem? The response rate? The average gift size? Was a particular segment unresponsive? Did giving in May "cannibalize" giving in June? Were the donor communications too close together? Was the ask unclear or too soft? Was the need not well represented? Was the story not compelling? Or did the communication arrive too late to drive support for that month?

Answering these questions will begin to give you clarity about what needs to change in order to improve future results. The donor development process is one that involves constantly asking questions and learning what worked and what didn't work.

I once worked with an organization that discovered that every day they were late on an appeal mailing, it translated into a five-figure impact on giving. That single statistic made an indelible impression on the organization's leaders and highlighted the true cost of taking an extra day to make a subtle wording change on their donor appeal letters!

The goal of immersion is to gain clarity on the most important issues impacting donor

engagement and financial support. Giving may be going down, but understanding the causes of decreased giving will have everything to do with discovering the necessary strategies for turning the trend in a positive direction.

Consider the following scenarios—all of which Pursuant has observed in various client engagements:

- Lack of a compelling story or a poor case for support
- Communications spaced too close together or too far apart
- Decreases in giving to the subsector
- Lack of investment in/attention to donor acquisition over the last X years
- Lack of engagement with new prospective donors
- Poor process for connecting with major donors in a meaningful, personal way
- Lack of expertise among the staff responsible for cultivating certain levels of support
- Unclear email copy or poor design
- Website landing pages that are too complex
- Costs that are unnecessarily high
- Ineffective re-engagement of lapsed donors
- Unclear or nonexistent call to action
- Donor fatigue from either too much “urgency” or a general lack of urgency

Remember: Prescribing changes in fundraising efforts without first conducting a proper diagnosis is tantamount to committing fundraising malpractice.

Now that you’re armed with a distinct set of clear, supportable observations and root causes, you are ready to move to the final stage of the process: developing data-driven strategies.

Data-Driven Strategies

If you’ve done the job properly in the earlier stages, then creating effective strategies to

respond to your observations will be the easiest part of the process. Note your primary (approximately three to five) observations. Which charts and graphs do the best job of visualizing the problems or opportunities for growth or improvement? Those visuals need to be placed front and center in the presentation of results. What do you want your staff to remember?

The rest of your graphs should become part of the appendix to your report. It isn't that they're unimportant; they just aren't necessary for focusing attention on the primary areas of need. Don't marginalize your hard work by trying to impress people with all of the data you reviewed while coming to your conclusions.

Strategies should quickly emerge. If the problem is acquisition, where can you find prospective donors? How do we educate them about the work of our organization? How can we do that in a way that's interesting and perhaps even entertaining? How might we engage the power of our existing donors in telling our story to their networks of friends? How can we make that process easy and enjoyable?

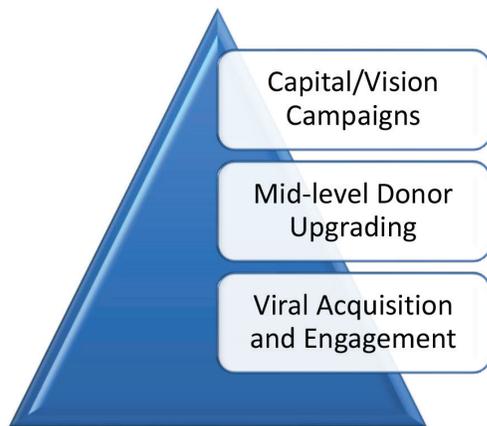
Pursuant has found the use of online "edutainment" campaigns (combining education and entertainment) to be an incredible means for creating a "viral" acquisition process where more people respond to an invitation than were initially invited to participate. Social media is great for this kind of approach.

What incentives might you provide to encourage donors to participate? Why should they share your story with others? What would make it worth their while? How can you create a process for engagement that reduces the friction commonly associated with engagement? These are questions that a strategist can help you answer, and they are the secret to creating strong, effective acquisition campaigns.

If your problem is keeping donors engaged, consider how your communication efforts should be changed to create excitement and appreciation for your work. Effective storytelling, perhaps through the use of compelling video messages, can have a dramatic impact on people. We live in a world of video communication. Video creates a vicarious experience for people to see firsthand the impact of your transformational work.

I encourage you to consider your organization's vision as well. If your most significant goals require double-digit growth, then developing strategies that create incremental improvement will be insufficient for getting you where you want and need to go. You have to get aggressive. Develop strategies that will engage thousands of donors. Re-engaging lapsed donors or increasing the average gift of donors by 2 to 5 percent may be worthy objectives. But they're insufficient for organizations that need to drive annual growth into the 20 percent range.

In our experience at Pursuant, viral acquisition and engagement programs, aggressive mid-level donor upgrading strategies, and large capital/vision campaigns offer that kind of growth potential. General donor cultivation efforts are extremely important to sustaining donor support over time. They form the foundation for any comprehensive fundraising program.



But high-growth trajectories require injecting a lot more gas into the engine, and potentially at multiple levels of the donor pyramid. Strongly consider how these three strategies might be leveraged to drive considerable growth across your entire donor file.

It's also important that you construct a return on investment (ROI) projection for each strategy. Most initiatives will require some kind of incremental investment. After all, it takes money to raise money. Develop some simple projections for both cost and the anticipated revenue that will be

generated by the initiative. For example, how would acquiring an additional 10,000 donors impact giving over the next three years? How would an increase in donor retention improve giving results over three years? Doing both will have an exponential impact on total giving.

Don't consider the cost alone. Look at revenue and cost. Is there a major donor who'd be willing to support an expanded fundraising effort? Most major donors love knowing that the impact of their gift will result in even greater levels of giving. In effect, their gift becomes a "challenge grant" that generates giving from other untapped areas of support.

Finally, consider the sequencing of your new strategies. Which initiatives should be implemented first? Just because an initiative will produce the greatest or most immediate financial impact that doesn't necessarily make it the highest priority. Your institution may be best served by driving mid-level support first, followed in two or three years by a capital campaign that can take advantage of a new, much larger pool of mid-level donors who will then be ready to respond. Determining the right sequence of strategies is as important as identifying the strategies themselves.

Conclusion

Too many chief development officers jump headlong into programs that may have worked in their former lives, but no longer represent the best investment for the organizations they currently serve. Taking a measured, data-driven approach will ensure that your investment in capturing "big data" produces returns that can make a material difference in your fundraising results.

Turning big data into donor support is a considerable but critical undertaking for any nonprofit organization seeking to maximize growth in top line revenue. Done well, the creation of a comprehensive, strategic fundraising plan will be one of the best investments you can make toward sustainable support . . . and the transformational impact that sits at the core of your nonprofit enterprise.

Let us know how we can help. We realize that your staff is extremely busy meeting the daily fundraising needs of your organization. Therefore, Pursuant has developed a cost-effective, turnkey approach to not only analyzing our clients' significant data stores and fundraising campaigns, but also turning our observations into comprehensive strategic fundraising plans that are appropriate to your organization's unique situation and revenue needs.

We would love to partner with you in identifying some visionary strategies that will transform your big data into donor intelligence that drives lasting support.