nten

2020 Data Empowerment

An NTEN Report
by Robert Hulshof-Schmidt

NTEN envisions a just and engaged world where all nonprofits use technology skillfully and confidently to meet community needs and fulfill their missions. We support organizations by convening the nonprofit community, offering professional credentials and training, and facilitating community skill and resource sharing.

NTEN reports support the growth and development of the sector through benchmarking the technology goals and challenges of nonprofits and identifying areas of need.

For more, visit **nten.org/reports**.

DATA IS ESSENTIAL FOR EVERY NONPROFIT.

Nonprofit staff in the NTEN community regularly pose questions about data collection, security, and management. NTEN surveyed diverse organizations to identify the sector's most significant challenges and opportunities thanks to support from the Fidelity Trustees' Charitable Initiative. The Trustees' Initiative is a direct grantmaking program, separate from the Fidelity Charitable donor-advised fund, whose mission is to expand giving and advance the nonprofit and philanthropic sectors.

Forty percent of respondents indicated they experience most of the data collection challenges listed in the survey. For many people, this means there's no easy fix — organizational leaders and teams need to look holistically at where data is coming from and how their staffs use it to make improvements.

Unsurprisingly, funding was seen as the most valuable resource for data management, selected as valuable or very valuable by 74% of respondents. We anticipated this to be the leading resource need, and conducting this survey during the COVID-19 pandemic has only confirmed the increased necessity of financial support for organizations of all kinds.

One significant myth in the nonprofit sector is that organizations with more money and staff are always doing "better" with technology than others. By and large, NTEN's research consistently finds this is just not the case. It doesn't matter what your staff's size or budget is, or even how long you've been around, as much as it matters how you use that budget, how you train your staff, and how you make decisions.

We found only a few instances where these factors made some level of a difference:

- Organization size and age influence the likelihood of customized data policies for the organization's specific use.
- Larger organizations have more staffing (Full Time Equivalent) for data collection.
- Organization size and budget correlate to the adoption of machine learning and artificial intelligence.

You're encouraged to use the report to start conversations within your team and organization. While there's no "right" answer for many of the questions -- because the results show that challenges exist for all organizations -- there are likely challenges for your staff. Identifying those is the first step for investment, training, and improvement!
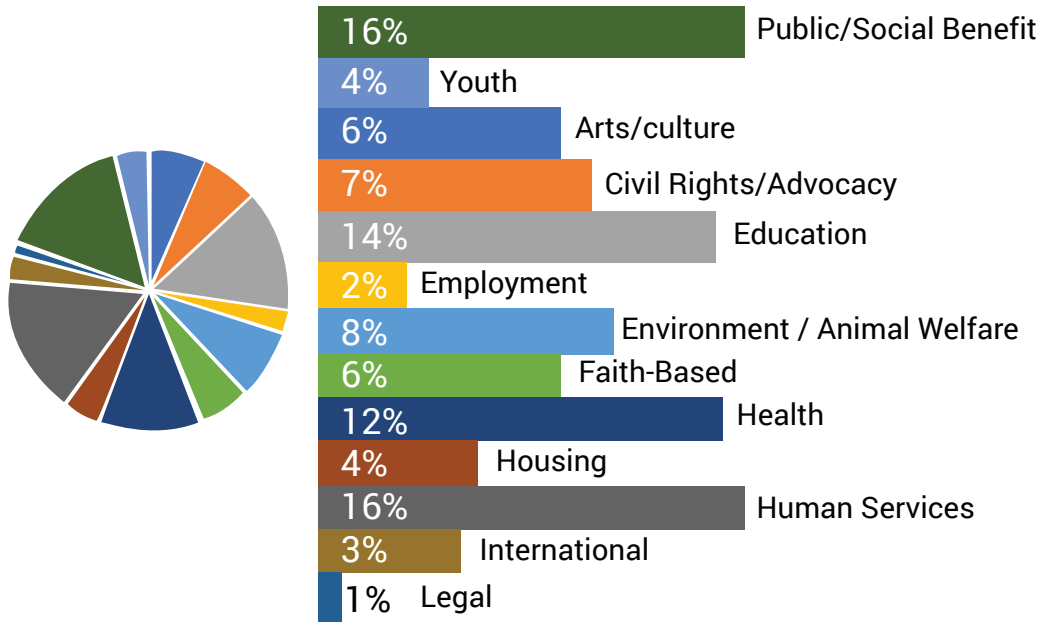
NTEN has community forums, courses, and other resources to help you and your whole organization move forward.
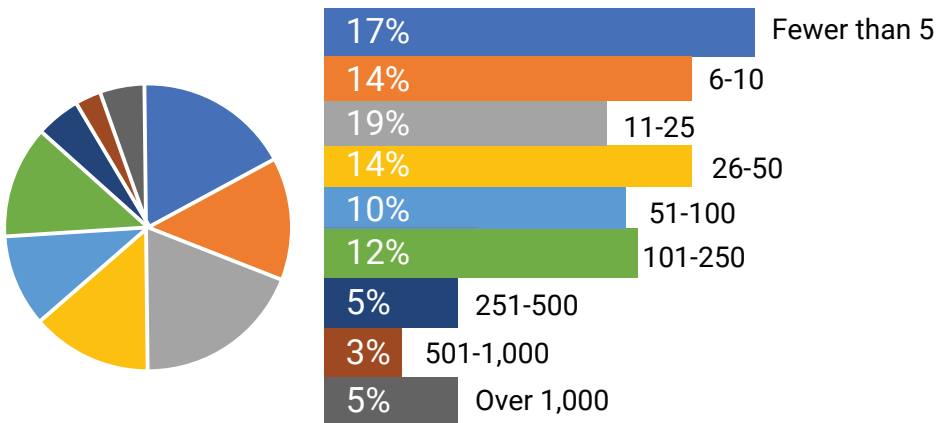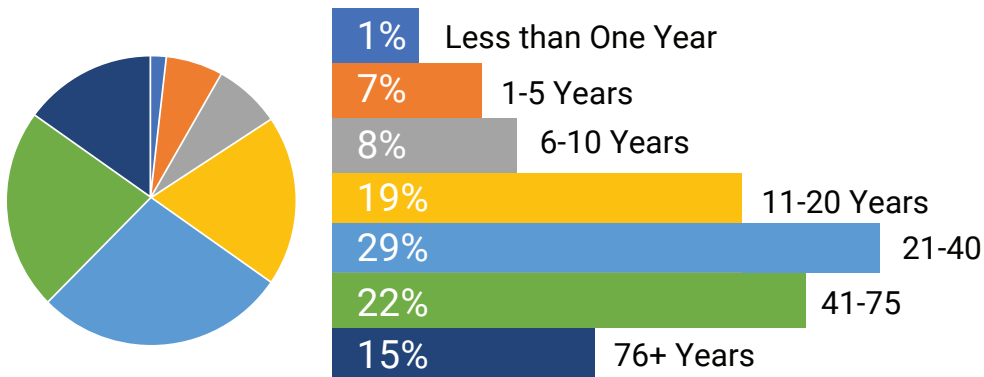
Amy Sample Ward
CEO, NTEN

SURVEY PARTICIPANTS
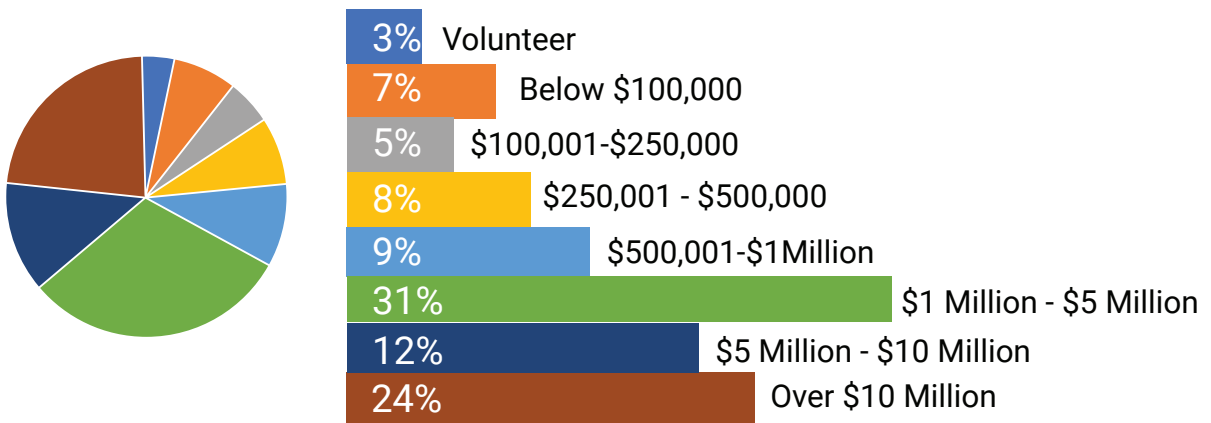
What best describes your organization's primary issue area?

16%	Public/Social Benefit
4%	Youth
6%	Arts/culture
7%	Civil Rights/Advocacy
14%	Education
2%	Employment
8%	Environment / Animal Welfare
6%	Faith-Based
12%	Health
4%	Housing
16%	Human Services
3%	International
1%	Legal

What is the size of your overall organization staff?

17%	Fewer than 5
14%	6-10
19%	11-25
14%	26-50
10%	51-100
12%	101-250
5%	251-500
3%	501-1,000
5%	Over 1,000

About how long has your organization existed?

1%	Less than One Year
7%	1-5 Years
8%	6-10 Years
19%	11-20 Years
29%	21-40
22%	41-75
15%	76+ Years

What is the approximate annual budget of your organization?

|	
3%	Volunteer
7%	Below $100,000
5%	$100,001-$250,000
8%	$250,001 - $500,000
9%	$500,001-$1Million
31%	$1 Million - $5 Million
12%	$5 Million - $10 Million
24%	Over $10 Million

Over 700 people responded to the survey, representing a wide variety of nonprofits. Nearly half work at organizations that provide direct social and public services (Public / Social Benefit, Human Services, and Education, each around 15% of respondents). The rest are well distributed across the service areas.

Most respondents work at relatively small organizations, with 50% having a staff of 25 or fewer. Most represent nonprofits that have been in existence for some time. Nearly 2/3 have been around for 20 years or more, while only 8% were started five or fewer years ago.

Budgets vary widely, but nearly 2/3 of respondents have annual budgets larger than $1 million. Half of those are in the $1 to $5 million category.
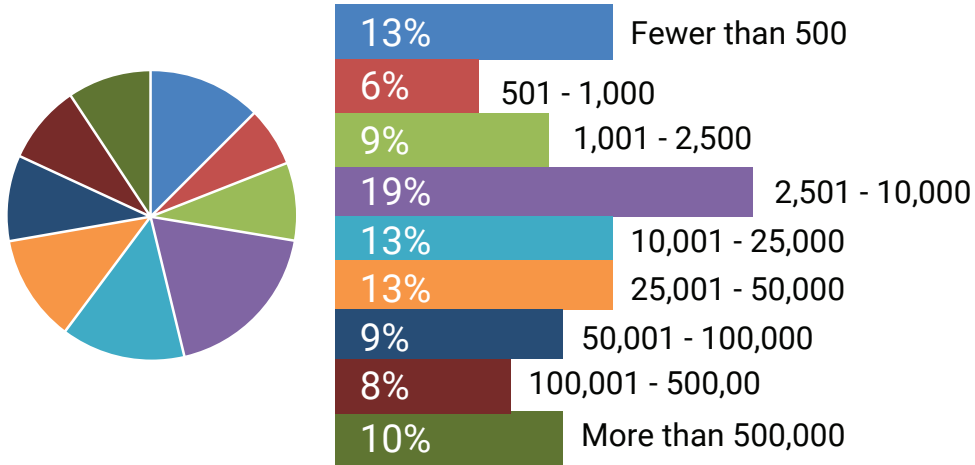
What is your relationship to your organization's data? Please select all that apply.
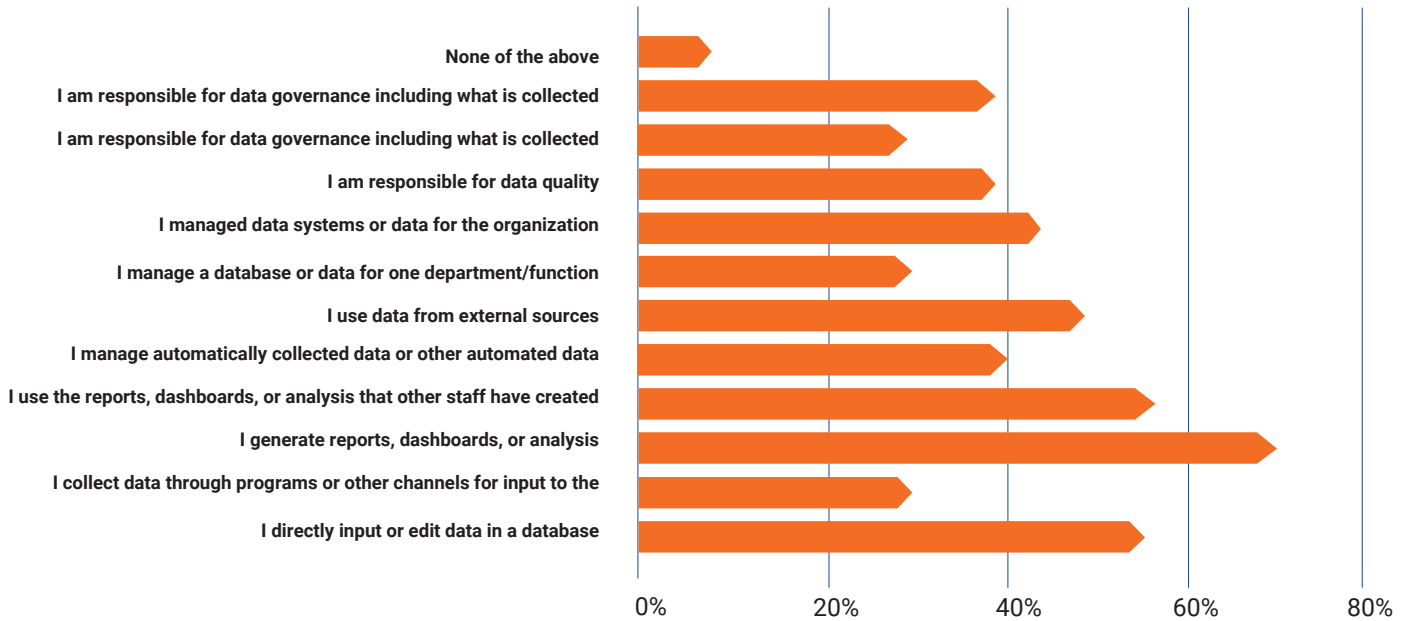
The respondents themselves work with data in a wide variety of ways. Most (over 70%) provide reports and analysis. Half are responsible for direct data entry. Many (nearly 50%) also work second-hand with data provided and analyzed by other staff. This range of data experiences provides them with a strong background to share insights throughout this survey.

RECORDS

Roughly how many constituent records does your organization manage?

13%	Fewer than 500
6%	501 - 1,000
9%	1,001 - 2,500
19%	2,501 - 10,000
13%	10,001 - 25,000
13%	25,001 - 50,000
9%	50,001 - 100,000
8%	100,001 - 500,00
10%	More than 500,000

Respondents reported a wide range of record volume. Almost every category was selected by at least 8% of respondents. The largest group is 2,501 to 10,000, accounting for nearly 20% of respondents.

In general, the size of the record set corresponds to the age of the organization, with a somewhat weaker connection to organization size. Smaller organizations may still have many constituents.

Records come from a variety of places, with most respondents indicating at least two data streams. A significant number relies on some sort of manual process.

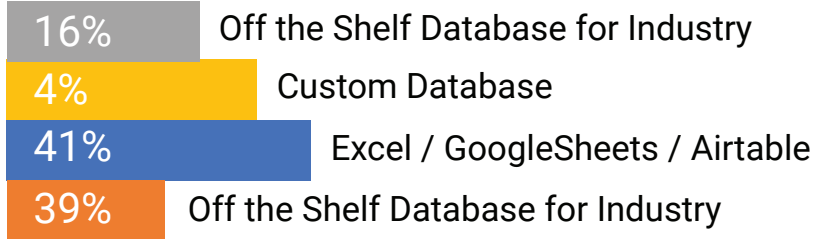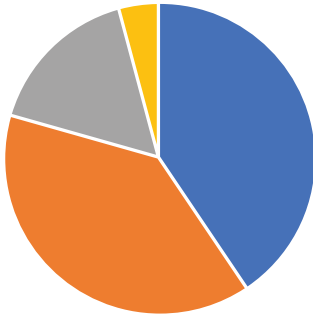Respondents who indicated "other" had two primary categories:

- From constituents via some process not identified in the survey questions and
- By synchronized processes from some other system, often a donation or subscription system.

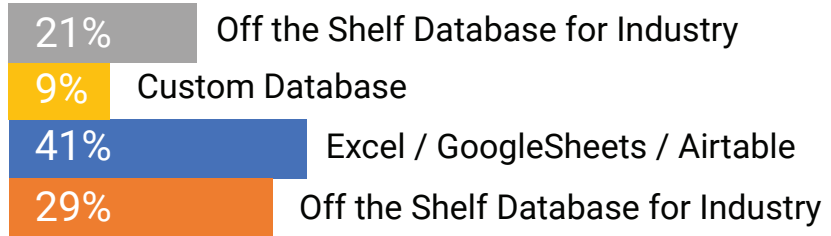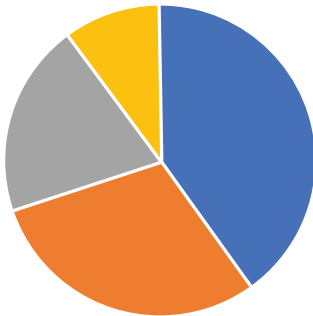How does your organization collect data? Please select all that apply.

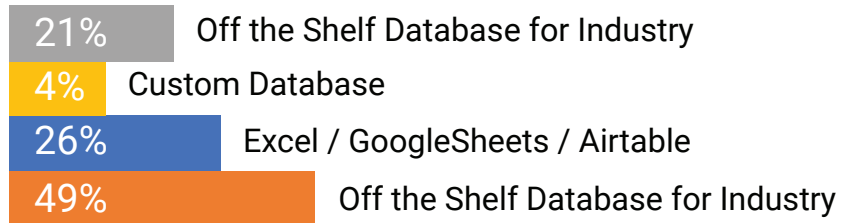|	
Automatically via sensors, system processes, or tracking actions taken in our...	
Indirectly from 3rd parties like email lists from partners or purchased list	
By staff who enter it directly into your data systems	
Directly from constituents via your website	
Directly from constituents via paper	
Other (please specify)	

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

STORAGE

Human Resources

16%	Off the Shelf Database for Industry
4%	Custom Database
41%	Excel / GoogleSheets / Airtable
39%	Off the Shelf Database for Industry

IT

21%	Off the Shelf Database for Industry
9%	Custom Database
41%	Excel / GoogleSheets / Airtable
29%	Off the Shelf Database for Industry

Finance

21%	Off the Shelf Database for Industry
4%	Custom Database
26%	Excel / GoogleSheets / Airtable
49%	Off the Shelf Database for Industry

Communications / Marketing

20%	Off the Shelf Database for Industry
4%	Custom Database
39%	Excel / GoogleSheets / Airtable
36%	Off the Shelf Database for Industry
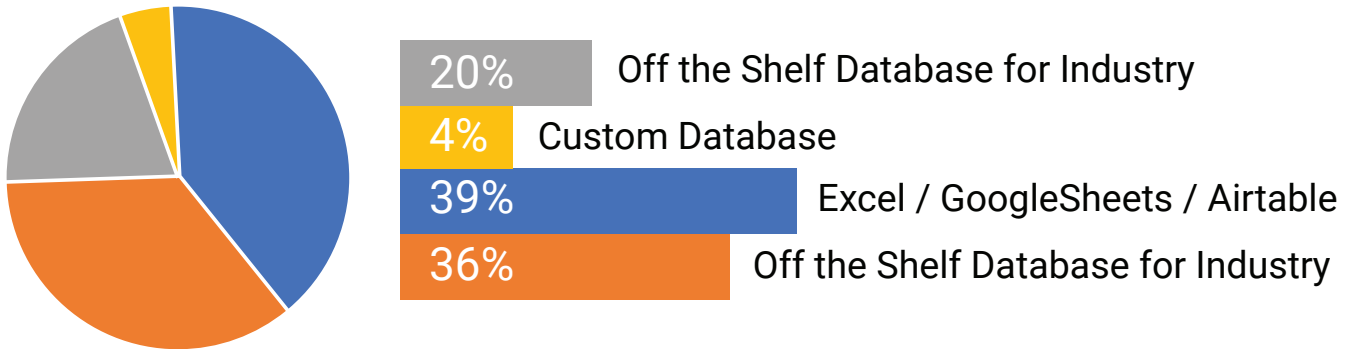
Fundraising / Development

23%	Off the Shelf Database for Industry
4%	Custom Database
31%	Excel / GoogleSheets / Airtable
42%	Off the Shelf Database for Industry

Programs

25%	Off the Shelf Database for Industry
10%	Custom Database
37%	Excel / GoogleSheets / Airtable
28%	Off the Shelf Database for Industry
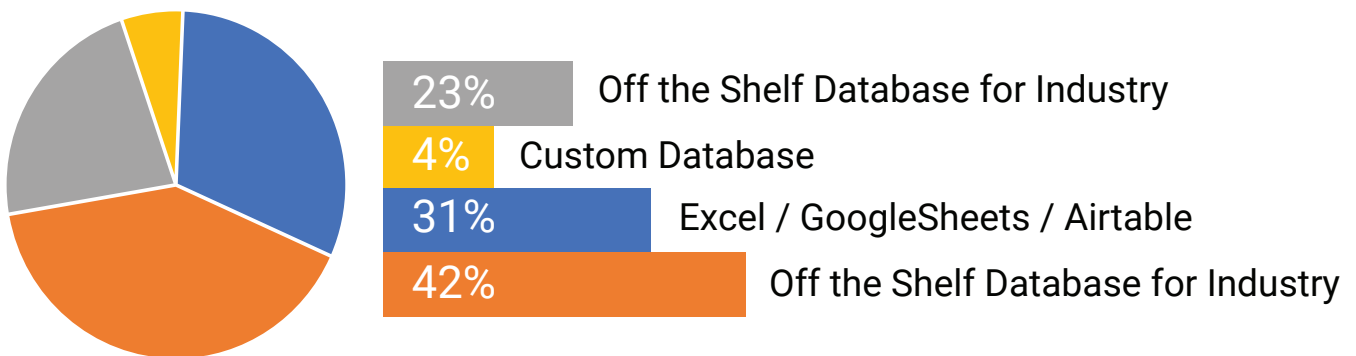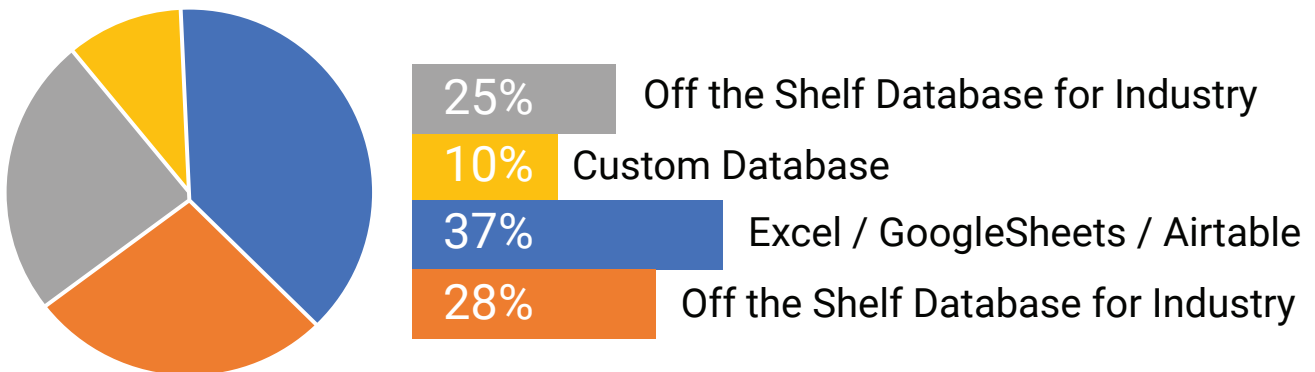
How is your data accessed? Please select all that apply.

Data is on individual computers for access only by that individual	
Data is in a locally-hosted CRM / data that staff access when in the office	
Data is in a cloud-based CRM / database that staff access online	
Other (please specify)	

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%
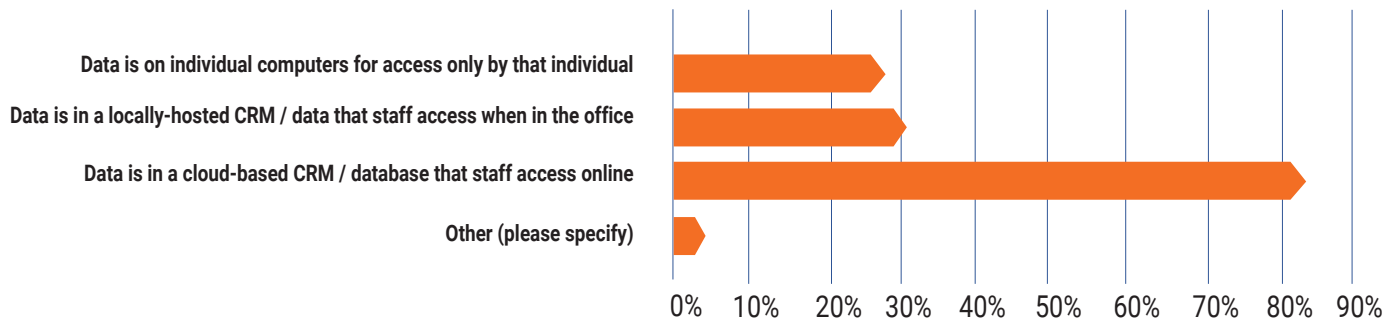
What is the primary type of data storage system used for each of these departments? While there is a wide variance in the popularity of data storage systems based on the type of records contained, four of the six categories rank the systems in the same order.

1. Spreadsheets
2. Off-the-shelf databases
3. Partially customized off-the-shelf databases
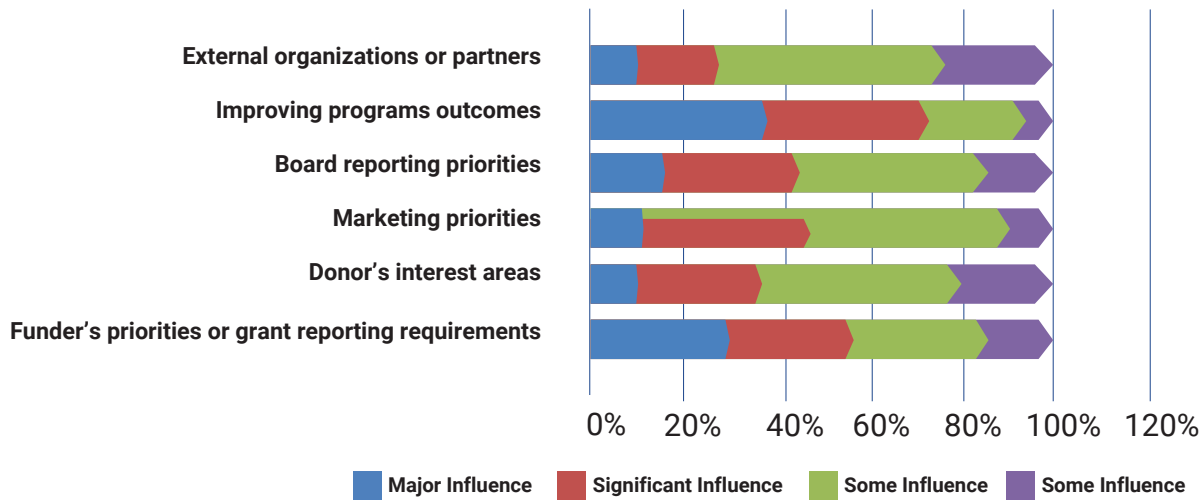4. Custom databases

These categories line up in order from the simplest and least expensive to the most complex and resource intensive, so the order is not surprising. Financial and fundraising data have slightly larger adoption of off-the-shelf tools. Both of these areas have a long history of strong tools and a need for in-built security, so these variations are not a surprise.

The majority of respondents make their data available to staff through a database with online access. This is true across the data storage types, even when data is stored in spreadsheet form.
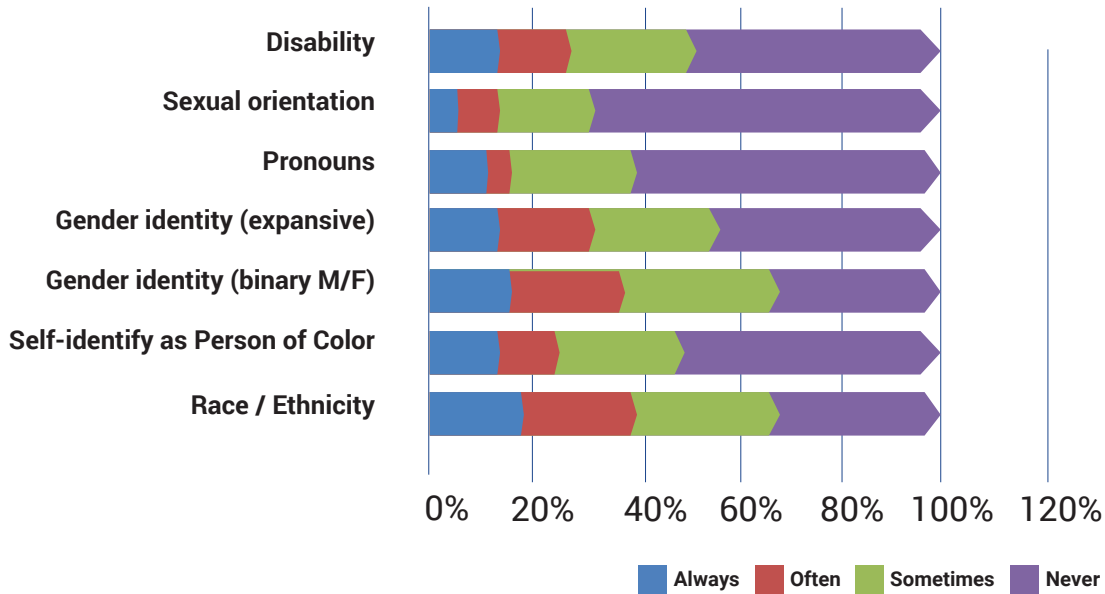
Most of the respondents who indicated access by an individual were referring to Human Resources or IT data.

COLLECTION

How have the following factors influenced the data you collect?

Legend: Major Influence | Significant Influence | Some Influence | Some Influence

Categories (top to bottom):
External organizations or partners
Improving programs outcomes
Board reporting priorities
Marketing priorities
Donor's interest areas
Funder's priorities or grant reporting requirements

Do you collect any of the following types of data?

Legend: Always | Often | Sometimes | Never

Categories (top to bottom):
Disability
Sexual orientation
Pronouns
Gender identity (expansive)
Gender identity (binary M/F)
Self-identify as Person of Color
Race / Ethnicity

Respondents indicated a wide range of factors that influenced their data gathering decisions. The most significant were requirements from funders or granting bodies and program outcome improvements. Given their relationship to customer service and satisfaction and funding streams, this is not surprising. The least influential areas were donor interest and input from external organizations and partners. While the data don't specify it, it seems likely that there are less clear and consistent information streams from these influencers.

A significant number of respondents do not collect any fundamental demographic data about their constituents. The most notable exception was race and ethnicity data; this is frequently requested by funders and granting bodies.

CONSENT

What systems does your organization use for gaining consent to collect and use data? Please select all that apply.
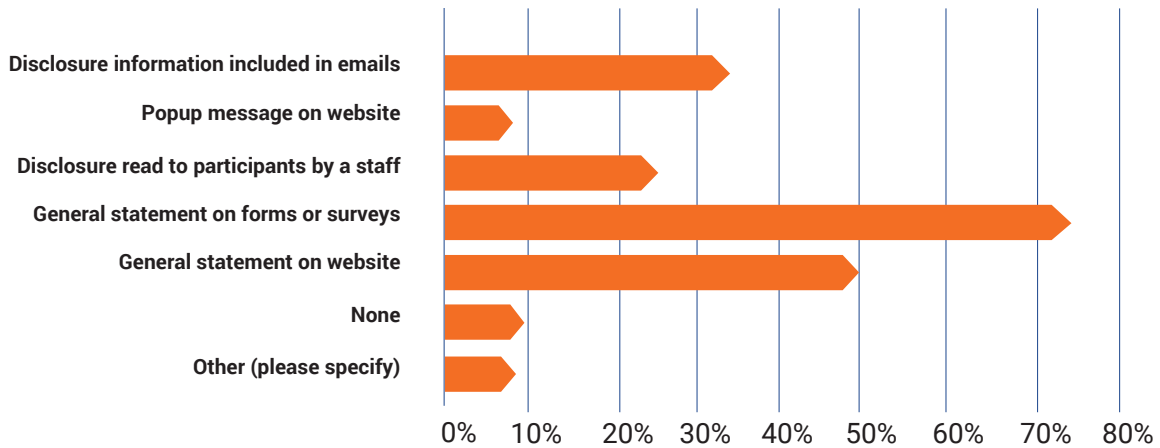
Does your organization allow constituents to opt out of having their data stored or used by your organization?

15% Never
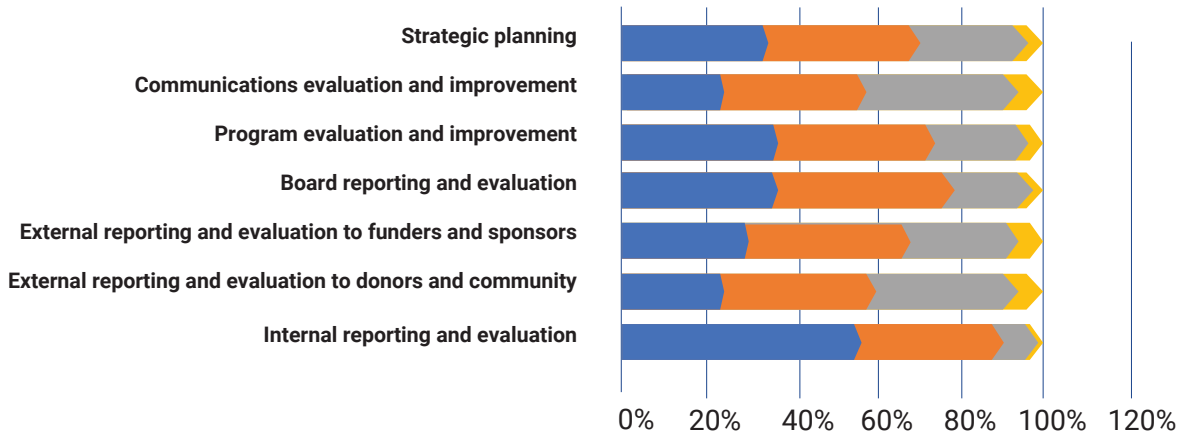17% I Don't Know
33% Always
35% In Some Circumstances
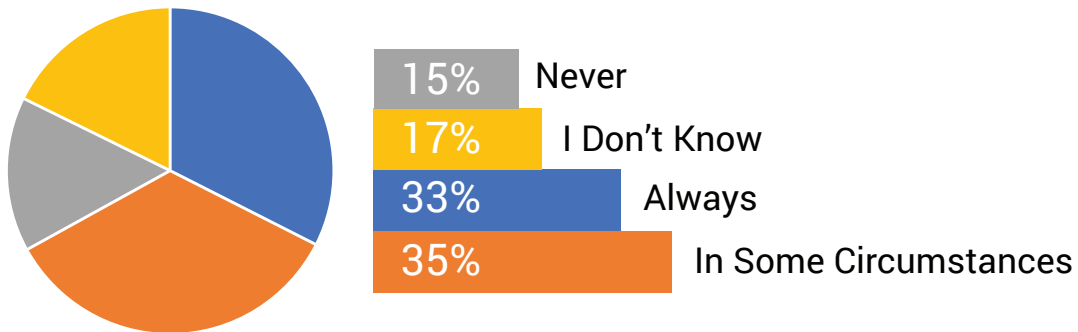
The majority of respondents rely on general statements to obtain consent from data providers, mostly on specific data gathering tools, but also with a standard website disclaimer. Those who indicated "OTHER" fit into two broad categories: application-specific disclosures and disclaimers in contracts.
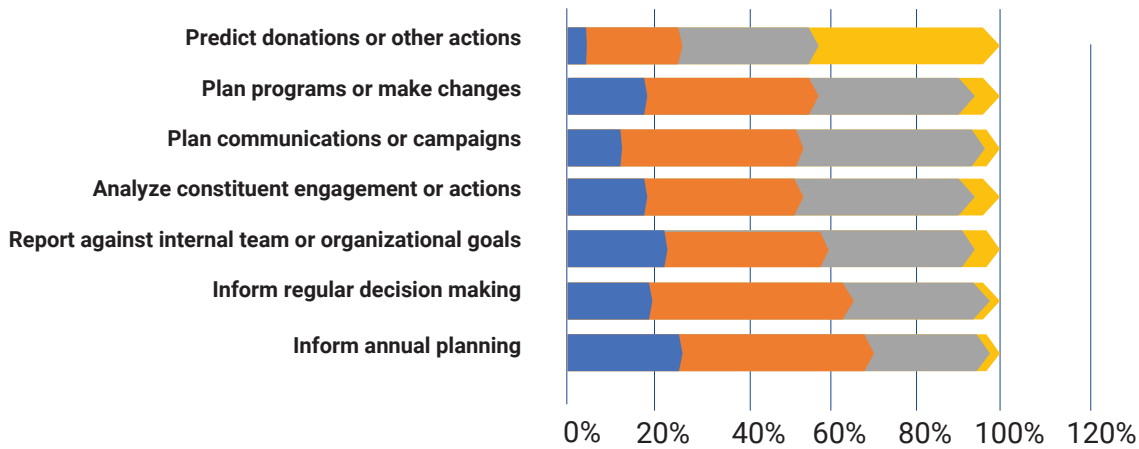
About 2/3 of respondents allow some measure of data collection opt-out from constituents. There seems to be some relation between the purpose of the data and the level of opt-out allowed. For example, respondents who indicated data collection for grant reporting seldom said "ALWAYS" for opt-out.
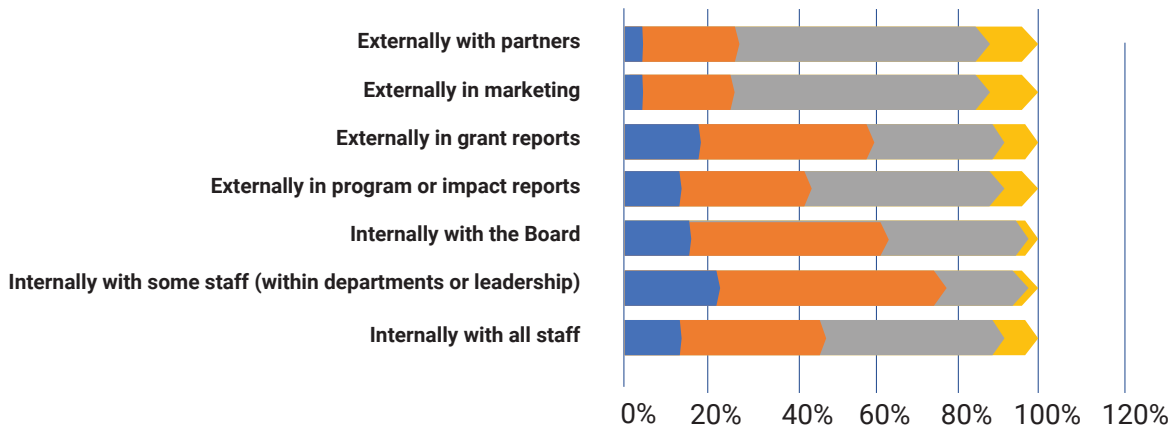
USE OF DATA

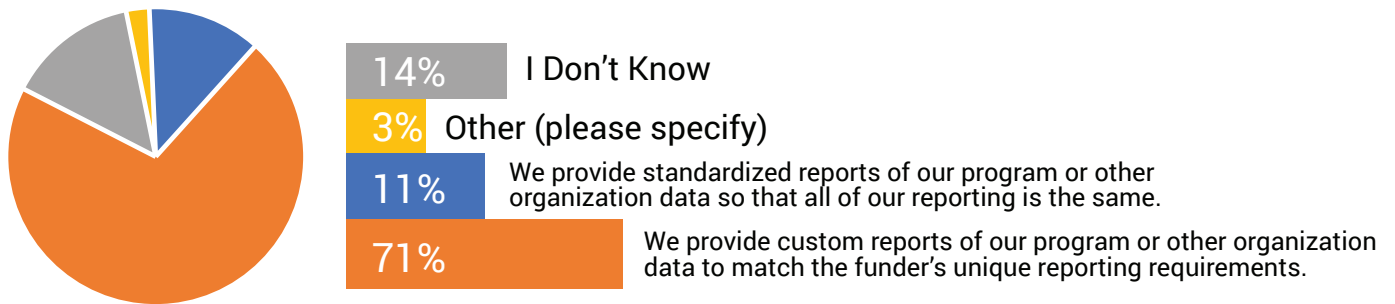In which of the following ways do you or your organization use data generally?

Strategic planning
Communications evaluation and improvement
Program evaluation and improvement
Board reporting and evaluation
External reporting and evaluation to funders and sponsors
External reporting and evaluation to donors and community
Internal reporting and evaluation

0%   20%   40%   60%   80%   100%   120%

In which of the following ways do you or your organization use data strategically?

Predict donations or other actions
Plan programs or make changes
Plan communications or campaigns
Analyze constituent engagement or actions
Report against internal team or organizational goals
Inform regular decision making
Inform annual planning

0%   20%   40%   60%   80%   100%   120%

In which of the following ways do you share data?

Externally with partners
Externally in marketing
Externally in grant reports
Externally in program or impact reports
Internally with the Board
Internally with some staff (within departments or leadership)
Internally with all staff

0%   20%   40%   60%   80%   100%   120%

Always   **Frequently**   **Sometimes**   **Never**

If you provide data for grant reports, which of the following options most closely aligns with your process?

14% I Don't Know

3% Other (please specify)

11% We provide standardized reports of our program or other organization data so that all of our reporting is the same.

71% We provide custom reports of our program or other organization data to match the funder's unique reporting requirements.

The closer the data use is to the staff, the more likely it is that respondents use data in that way. The only general use of data that is ranked ALWAYS more than 50% of the time is Internal Reporting and Evaluation. Program Evaluation, Board Communication, and Strategic Planning are the other significant areas. Many respondents indicated that they FREQUENTLY share data with funders and donors, implying that certain kinds of data are shared with those audiences. This may be driven by reporting requirements from funders.

Over 60% of respondents ALWAYS or FREQUENTLY use data for annual planning, goal-setting, and regular decision making. This makes sense and aligns both with the value of data for strategic planning and for program improvement. The data sharing responses align well with the general data use responses. Data are shared with relevant staff, the Board, and in specific reports with high frequency.
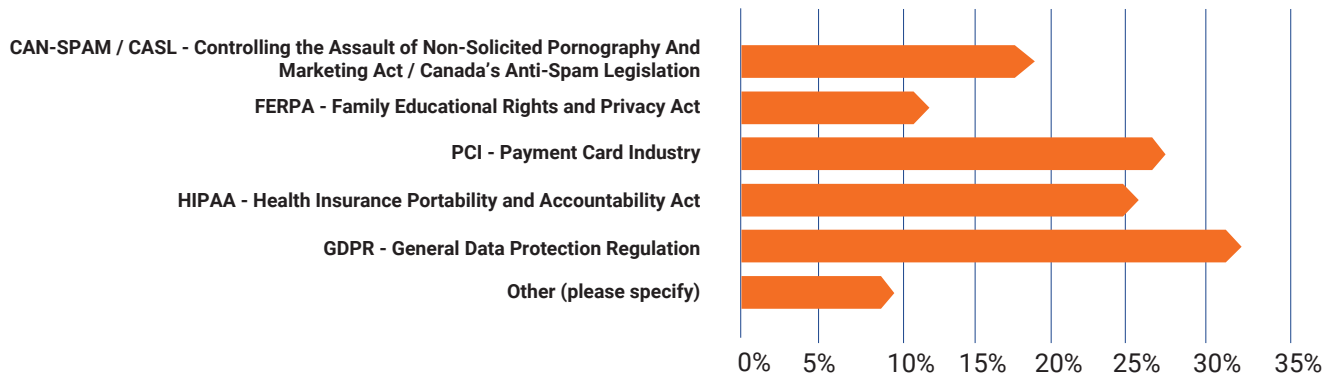
The vast majority of respondents (71%) customize their data reporting to meet the needs of granting bodies. This corresponds with the significant variation in granting body expectations, needs, and requirements.

STANDARDS

If you collect data on race, ethnicity, gender identity, sexual orientation, or disability, do you use this data to make decisions about service or program delivery?

26% No
31% We don't collect this data
20% Yes, but we don't talk about this publicly
23% Yes, we talk about this publicly
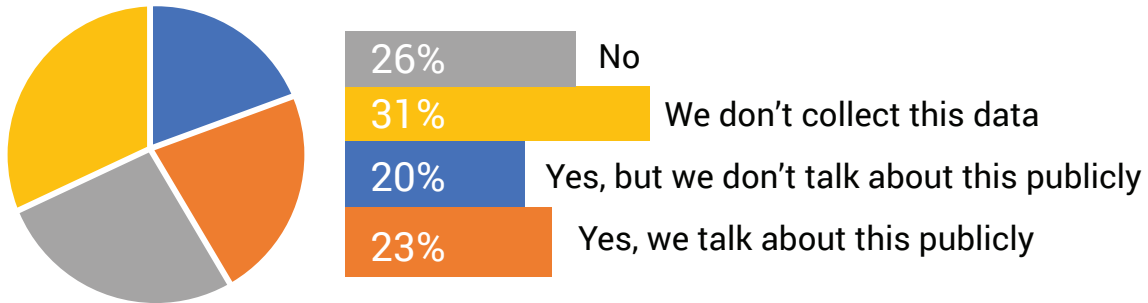
Which of the following data standards or policies do you monitor? Please select all that apply.

Nearly 1/3 of respondents do not collect personal demographic information. This aligns reasonably well with the data collection table above. A quarter do not use this data to drive decision making. Those who do use the information for delivery or decisions are evenly split regarding disclosure of those uses.

No more than a third of respondents indicated monitoring any of the standards listed in the survey. The 10% who indicated OTHER mostly specified some industry-specific standards. Not surprisingly, monitoring of the listed standards also aligned closely with the organization's main line of business. The 28% that indicated monitoring PCI compliance were mostly larger organizations that used more custom systems for their financial and donation data. It seems likely that other organizations rely on their donation tools to handle this requirement.

What policies related to data does your organization have in place?	Data Retention	Data Archiving	Data Access	External Data Sharing
Custom policy explained to all staff	10%	8%	15%	13%
Custom policy specific for organization	24%	21%	28%	26%
Custom policy with regular review and training	9%	7%	8%	8%
Generic policy not adapted to organization	22%	22%	19%	18%
I don't know	15%	17%	12%	15%
No policy	20%	25%	18%	19%

Only 2/3 of respondents indicated that they had or knew about data policies. Given that survey respondents have some responsibility for organizational data, being unaware of a policy is equivalent to having no policy at all.

Data access and retention had the highest rate of policy presence. When a policy exists, it is most likely to be custom for the organization but not fully distributed. Generic policies were the second most common. There is some correlation between organization size and age and the level of customization.

STAFF AND DATA

Who in your organization is responsible for ensuring the organization is compliant with relevant laws or data policies?
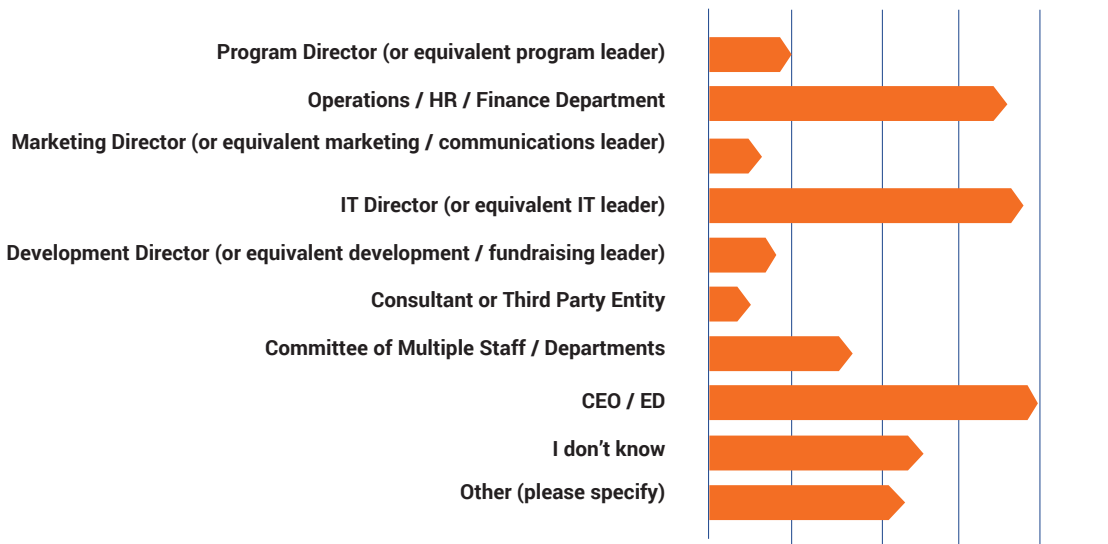
Who has authority for adopting new technologies that could have impacts on data collection or use? Please select all that apply.
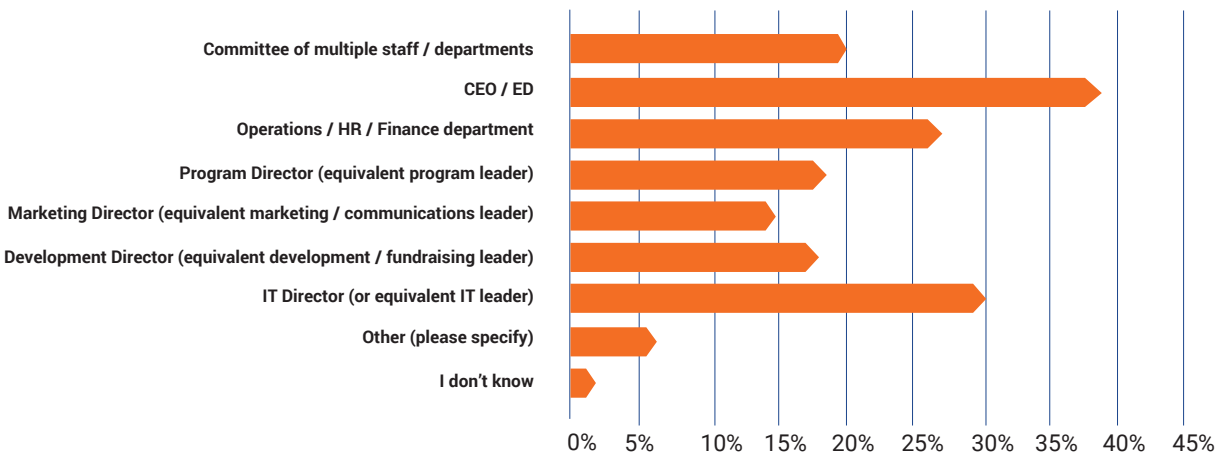
Compliance authority tends to belong to with organizational leadership. The most common responsible parties are the CEO / ED, heads of IT, and heads of Operations / HR / Finance. Given the significance and potential business implications of compliance, this makes sense. Respondents who indicated "other" fit into two broad categories. Many had a specific Compliance Officer or equivalent (especially larger organizations); the bulk of the others indicated hybrid responsibility, usually across the three most common categories.

Authority for the adoption of new technologies is similar, but not as stark. Responsibility often goes to the person or area that will be implementing and monitoring the technology, usually in concert with one of the three top-level decision-makers. Those who indicated "other" frequently have a committee or department dedicated to the review and adoption of technology.

Please provide the Full-Time Equivalent (FTE) amount for the following responsibilities fulfilled by a staff person inside your organization.

	Data Administration	Data Quality	Data Collection	Report Creation	Impact Analysis And Evaluation
MEAN	1.35	1.25	3.52	1.83	1.44

Please provide the Full-Time Equivalent (FTE) amount for the following responsibilities fulfilled by a consultant or third-party entity responsible for your organization's technology and/or data.

	Data Administration	Data Quality	Data Collection	Report Creation	Impact Analysis And Evaluation
MEAN	0.43	0.29	2.10	0.35	0.40

Other than Data Collection, the FTE responsible for data activities was remarkably consistent across participating organizations. While larger organizations naturally had more FTE for most activities, the scale was not direct.
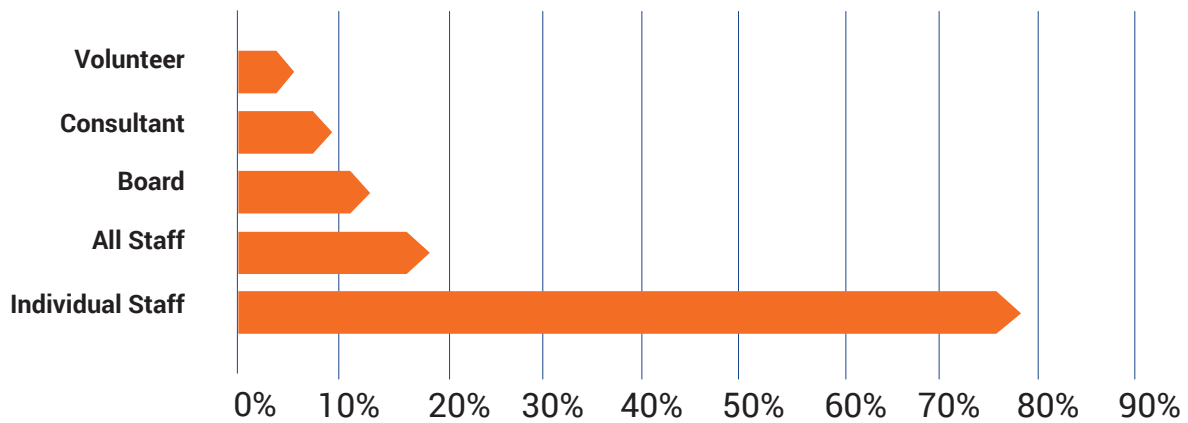
The one exception was data collection. This labor-intensive activity saw a significant increase in human resources in larger organizations. Not surprisingly, it was also the area where third-party assistance was most common.

Who participates in the following activities at your organization? Please select all that apply.
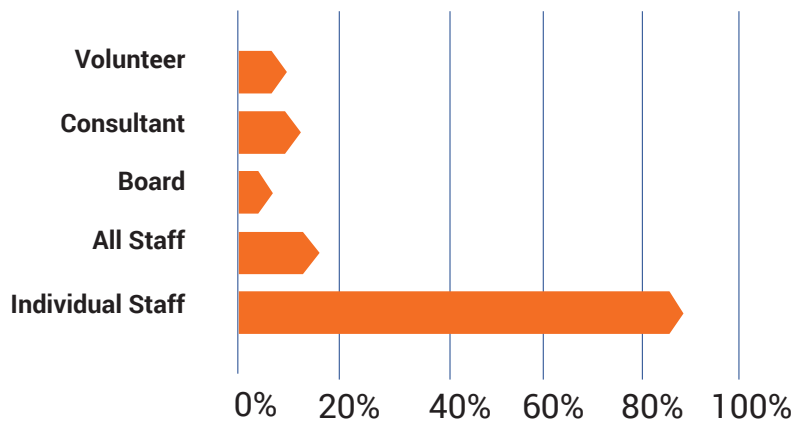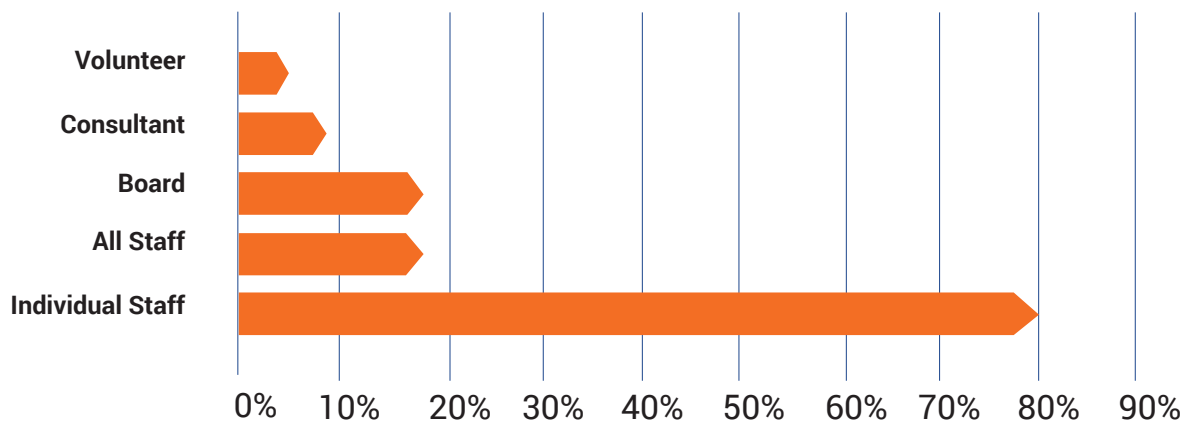
PLANNING FOR DATA COLLECTION
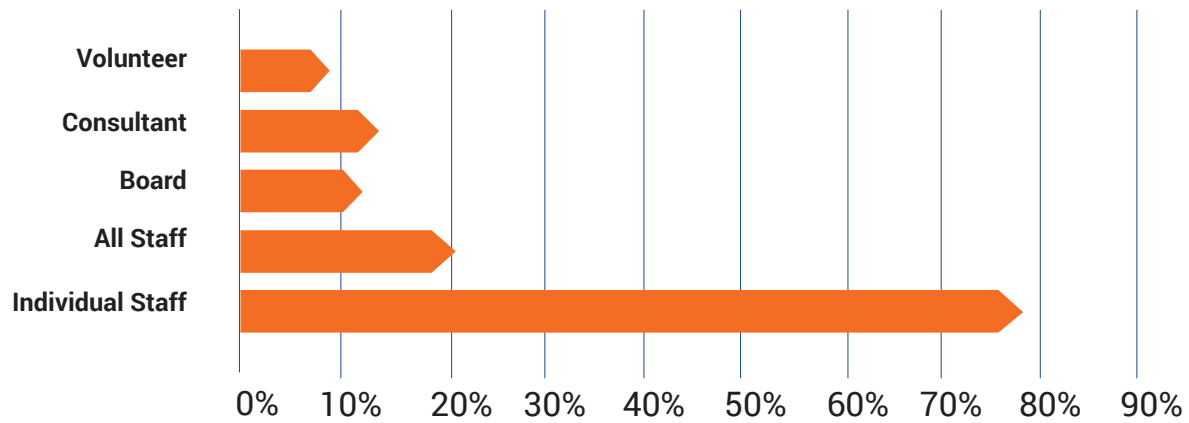
PLANNING FOR DATA USE

CREATING REPORTS

Volunteer	
Consultant	
Board	
All Staff	
Individual Staff	

0% 20% 40% 60% 80% 100%

ANALYZING DATA

|	
Volunteer	
Consultant	
Board	
All Staff	
Individual Staff	

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

Approximately 80% of respondents indicated that specific staff had responsibility for each of the data activities identified in the survey. This makes sense, as specific data responsibility can easily be tied to individual position descriptions.

The smaller the organization, the more likely they were to say ALL STAFF, indicating a collaborative approach and the need to share duties when there are fewer individuals. Volunteers were also used more by smaller organizations, although with less strong correlation.

CHALLENGES

Which of the following are challenges for you and your organization in data collection? Please select all that apply.
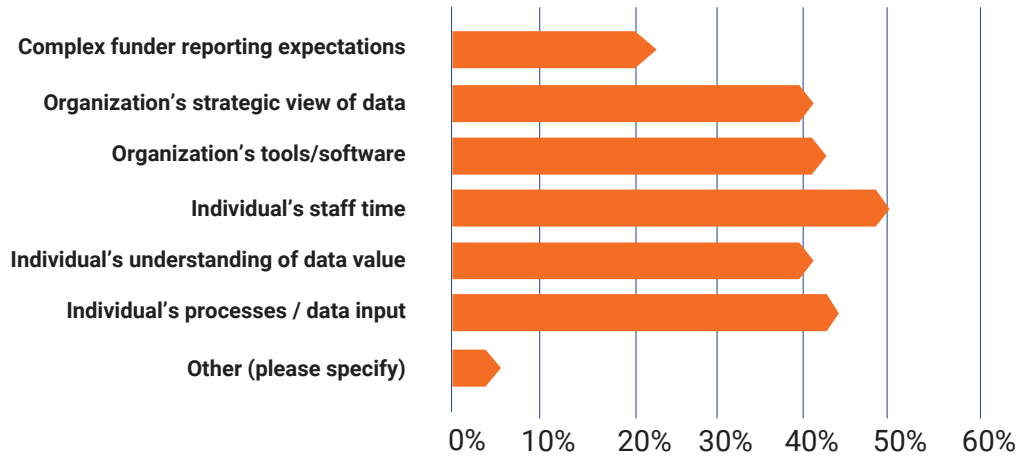
Which of the following are challenges for you and your organization to successfully adopt technology (that supports successful data use)? Please select all that apply.
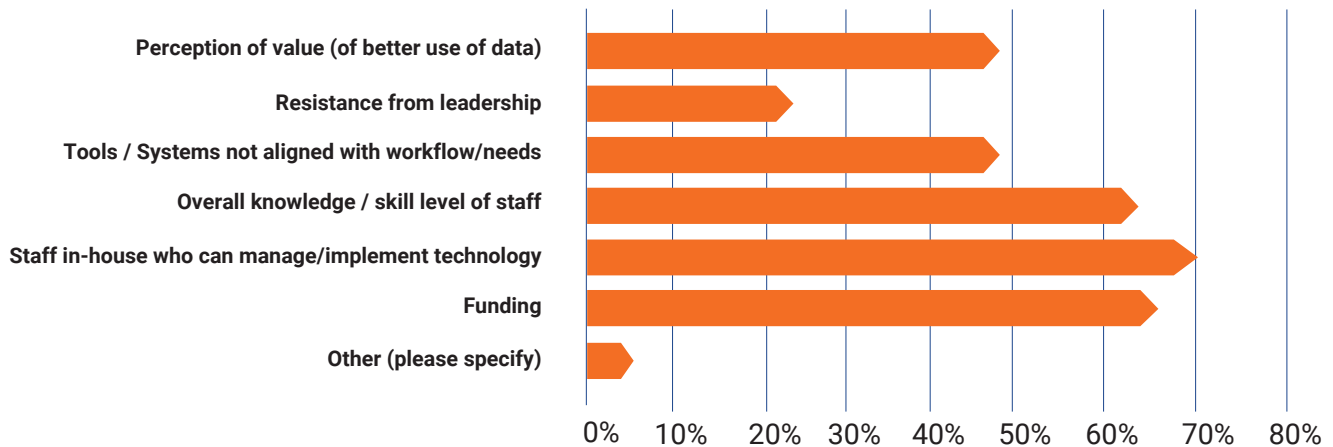
Fully 40% of respondents indicated that they experience most of the data collection challenges identified in the survey. Data complexity was the least significant, while the trio of challenges related to individual knowledge, skills, and abilities was the biggest.

Those who indicated OTHER had a wide variety of challenges, with dirty data, funding, and training being the most common.

Technology adoption responses were somewhat more varied, although individual staff characteristics were the largest again

Please rank the following challenges in data use in order of impact for your organization. 1 = the highest challenge; 6 = the lowest challenge. The numbers in the table below represent the average response to each question based on this scale.

|	Individual's Data Literacy/ Skill	Individual's Strategics Application Of Data	Organization's Appropriate Tools/Software	Organization's Data Silos By Department Or Team	Data Quality	Complex Funder Reporting expectations
MEAN	3.09	3.25	3.28	3.39	3.21	4.63

Aligning nicely with the previous questions, Complex Funder Expectations was by far the lowest challenge identified by respondents. The other five challenges clustered fairly tightly around 3, but did rank clearly:

- Individual's data literacy/skills
- Data quality
- Individual's strategic application of data
- Organization's appropriate tools/software
- Organization's data silos by department or team

The importance of the individual plays out in this view of the challenge question as it did in the others.

RESOURCES

In the coming 3-12 months, which of the following investments or projects do you or your organization plan to undertake? Please select all that apply.
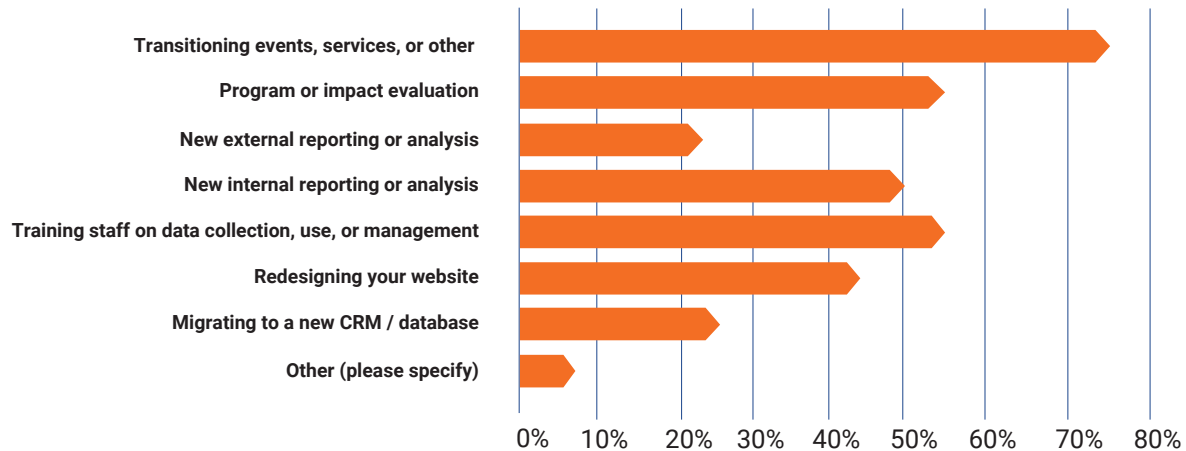
What is the percentage of staff at your organization with the skills and access to create and run customized reports from your data?
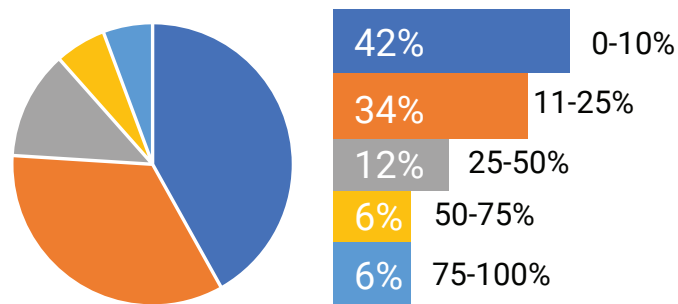
Most respondents have two or three activities that they plan to undertake within the next year. Fully three-quarters indicated plans related to the COVID-19 pandemic, which is not at all surprising.

Evaluation and training, both of which are regular, ongoing activities at most organizations, are the next most frequent.

Reflecting the importance of the individual in the organization, fully three-quarters of respondents have 25% or fewer staff capable of running custom reports. These responses were inversely proportional to the size of the organization. Smaller respondents had more staff who could do more things.

Which of the following resources would be most valuable to your organization?

	Staff training	Updated or upgraded tools/ systems	Eliminated paper or duplicative processes	Improved user interface/user profile options on website	Case studies
Very valuable	29%	31%	30%	23%	5%
Valuable	39%	32%	28%	33%	18%
Somewhat valuable	25%	28%	25%	28%	43%
Not needed	6%	9%	16%	16%	34%

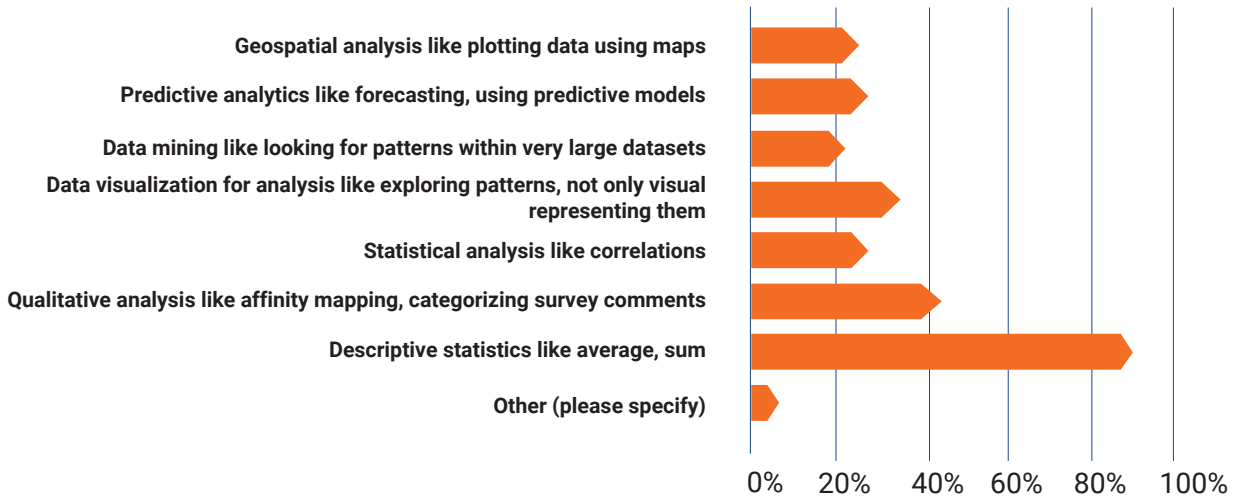|	Template or other resources	Dedicated funding for data management and analysis	Consulting (pro bono or paid)	Technology and systems audit
Very valuable	14%	44%	24%	20%
Valuable	32%	30%	32%	33%
Somewhat valuable	42%	18%	30%	33%
Not needed	11%	7%	14%	14%

Not surprisingly, funding was seen as the most valuable resource for data management, selected as VALUABLE or VERY VALUABLE by 74% of respondents. Better systems, less redundancy, and better training were the other significantly valuable resources.
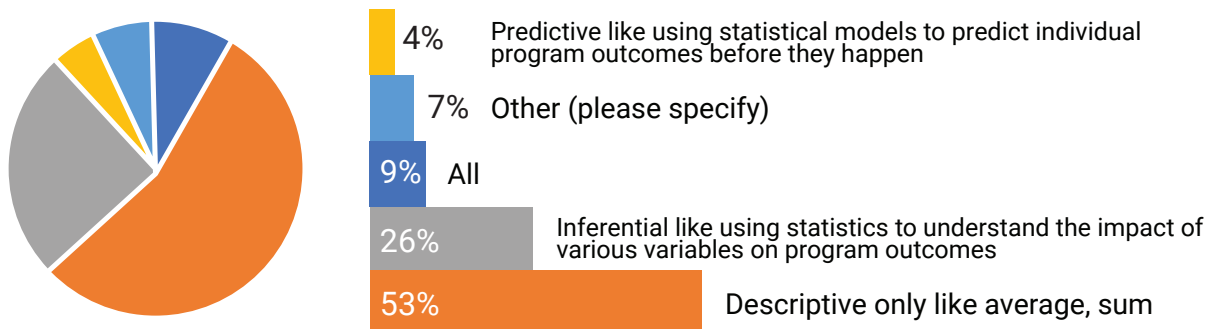
ANALYSIS

In the coming 3-12 months, which of the following investments or projects do you or your organization plan to undertake? Please select all that apply.
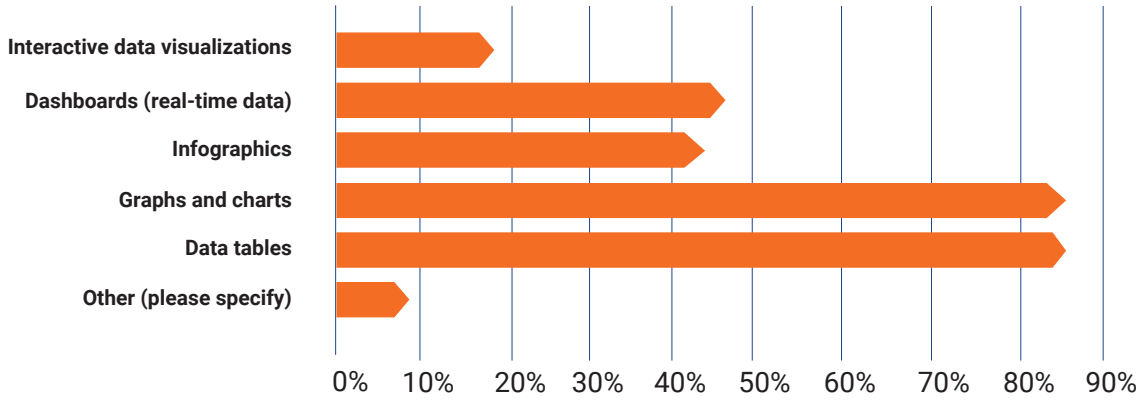
What is the percentage

What is the percentage of staff at your organization with the skills and access to create and run customized reports from your data?

4% Predictive like using statistical models to predict individual program outcomes before they happen

7% Other (please specify)

9% All

26% Inferential like using statistics to understand the impact of various variables on program outcomes

53% Descriptive only like average, sum

Over 80% of respondents use tables, graphs, and charts to present data. These are relatively simple and clear models that are available in the tools most respondents use (especially spreadsheets), so this makes sense. The kinds of data presented are also most common when they are most easy to present. Over 80% provide descriptive data analysis, and fully 50% provide no other form of analysis.

The survey also asked if respondents used machine learning or artificial intelligence (chatbots, for example) for five different tasks:

- Technical or administrative customer service
- Membership or donor support
- Program engagement or support
- Predicting donors
- Program tracking

Less than 10% said yes to any of these tasks, evenly distributed. Organizational size and budget were highly correlated to adoption.