Becoming a Data-Informed Organization

How to Assess Your Nonprofit's Data Maturity and Create a Culture of Continuous Improvement

October 2017

in partnership with

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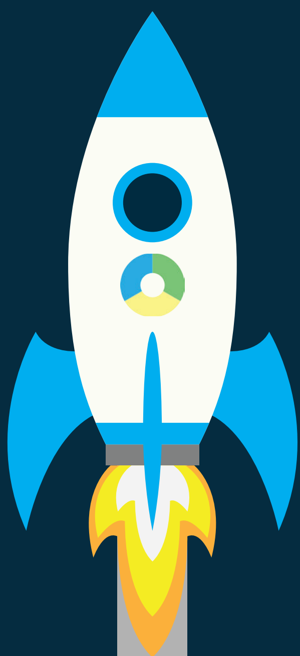

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FOREWORD

Hi, Aspiring Data Whiz,

"Data" seems to be on just about everybody's mind these days, doesn't it?

Between industry buzzwords and new technology, "data" is a word we just can't escape. There's so much data out there that we now have big data. It's every organization's goal (if not a requirement) to become more data-driven. And we're so data-obsessed that normal data just won't cut it anymore—we now need smart data, predictive data.

It can be a little overwhelming. But at the end of the day, why does data matter to you and me?

For nonprofits, data is simple: it's your people. Your data represents the people that support you, the actions they've taken for your mission, and the impact your organization is making on the world.

In other words, your data is a big deal!

That's why we are so excited to be supporting Idealware in the creation of this report about data maturity. It's so important for all nonprofits to have an understanding of the data they have at their fingertips. Tracking the right data, and using that data to create a solid organizational strategy, can make a world of difference for your mission and the cause you serve.

Wherever you are on your journey to data maturity, we hope this report helps your organization:

- Understand what data you need
- Measure that data in effective ways
- Create new strategies backed by data
- Make a bigger impact with the data you already have

Every organization is different, but doing more with data is a goal we can all aspire to—and this Idealware report will help you get there. As you read through, remember: your data is a big deal. Be sure to make the most of it.

Best of luck,

Jeff Gordy
CEO & Co-Founder
NeonCRM

WHAT IS A DATA-INFORMED ORGANIZATION?

At its most basic, a data-informed organization is one that collects and tracks information about constituents—from simple things, like contact info or event attendance, to more complex ideas, like the different ways they interact with your programs—and acting on what you learn from that information.

The ideal is for data to be incorporated as part of the culture at your nonprofit so that it becomes second-nature to collect and act on it, and so your executive director, board members, and staff don't make decisions about programs or services unless they are supported by data. This idea of a "culture of continuous improvement" is a lofty one—we should note that not all organizations reach this level of data maturity, and not all want to.

The polar opposite of this data-centric organization is one that does not collect or track any information at all, and that makes uninformed decisions. For small nonprofits lacking resources and not yet collecting even basic data, the process begins with much more modest steps.

Data maturity is a progression, or a spectrum. Most organizations fall somewhere between those two points. In this report, we've defined five stages overall, and identified the factors that comprise them across a range of areas, including Organizational Focus, Data Use, Staffing, Technology Systems, Leadership/Culture, and Data Collection.

How do you know where your own nonprofit sits on this spectrum? We've also included a brief self-assessment to help you determine the status of your own efforts, which is the first step toward advancing. In fact, we'll tell you more about the actions you can take as an organization to progress along these stages. It's worth noting that it's possible for different programs within a single organization to be at different stages on the spectrum.

Not having the right tool for the type of data collection you seek to do can be a barrier.

Tracking data requires a few things, including the right tools, know-how, and buy-in from your executive team, board, and staff. Tools can be as simple as a paper forms or an attendance sheet, or more complex—like online survey tools, spreadsheets, and CRM databases. Not having the right tool for the type of data collection you seek to do can be a barrier to moving along the spectrum. But there are other barriers, too—some are universal, others apply to each particular level of data maturity. As we detail the stages in this report, we'll spell out possible barriers to success for each. These barriers can feel overwhelming when listed in a row, but not every organization will face every barrier. Acknowledging what is keeping you from moving forward is a key step toward improving your use of data.

Becoming a Data-Informed Organization

As you read through the stages and steps, it's easy to find the information is overwhelming, or to think that it doesn't apply to your nonprofit. You may realize that you're not going to flip a switch and make it a data-driven organization, and that's a good realization to make. Our goal is to help you identify where your nonprofit falls on the progression, to help you find the steps you need to achieve the next stage, and help you realize that there is no perfect position to reach. The entire process is a nuanced one with a progression over time, and it's OK to be anywhere on that progression—as long as you strive to advance in a strategic way.

They say the journey is often better than the destination, and that's true here, as well. There is no perfect organizational state of data-driven decision-making. The goal for all nonprofits should be the journey itself of always trying to get better at it. There are small steps you can take at each stage of the progression to improve—not every action will advance you to the next level, but again, the important part is to be moving forward.

Your first action should be performing the self-assessment to identify where your nonprofit currently falls on the progression; then you should start thinking about where you want to be in the short-term, and later in the long-term. Then you can start identifying the steps you need to start moving toward that goal.

Often the biggest impediment to collecting and using data is not knowing where to start. There's no silver bullet or magic wand, but the single biggest-and-simplest thing you can do to improve the data maturity of your organization is to form and enforce a consistent commitment to gathering data that helps inform strategic decision-making—even if it's the data you're already gathering.

There's a place for data in every organization, no matter the size. It should play a role in decision-making for every nonprofit—some role—but that role is going to look different for everyone.

Ready to get started?

THE DATA-DRIVEN ORGANIZATION: A SPECTRUM OF DATA MATURITY

Below you'll find an overview of the spectrum we developed for this report. You can find the full rubric we used to build it in the appendix on page 22. (How did we arrive at this rubric? See our *Report Methodology* on page 25.)

This is not a formal spectrum of data maturity—there's no certification process, nor do you need to know the ins-and-outs of each stage. We created this spectrum as a conversation starter, and as an intellectual exercise to help nonprofits better understand the idea of a culture of continuous improvement, visualize it as a progression, and give them actual steps they can take to move forward.

As you can see, we've identified five stages of data maturity. Stages are not absolutes, not black and white—they're rough points along a line, and your organization should fall somewhere along the line. As we detail each stage, we'll also list potential barriers to advancement to the next level.

Stage One: Getting Started
Organizations at this beginning level have not yet reached the point with their data efforts where data can be used to make decisions.

Stage Two: Piloting
Organizations at this level have a strategy around data, even if it's limited, and are making the effort to collect and use it to inform decisions in at least one or two pilot program areas.

Stage Three: Establish Organization-Wide Practices
Organizations at this stage are rolling out the principles piloted in Stage Two to the entire organization with the buy-in of the Executive Director and most of the staff.

Stage Four: Data-Informed
Organizations at this stage aren't just acting on data on a case-by-case basis—they've built it into their decision-making framework.

Stage Five: The Data-Centric Organization
Organizations at this stage are thoroughly immersed in data—data is part of the "organizational DNA," and they've redesigned or adapted their cultures to include data in all areas of decision-making.

STAGE ONE: GETTING STARTED

Organizations at this beginning level have not yet reached the point with their data efforts where data can be used to make decisions.

While they may be doing some basic data collection—email addresses, counting how many people attend adult education programming—organizations at this level are not acting on that data. There's no coherent strategy in place, no overall data leadership, and little (or no) specific focus on data.

At this stage, they're probably not collecting feedback from constituents in the form of surveys or other means, and in their day-to-day work, staff have little consistent reference to data other than for funder reports or individual contact information—and likely are unfamiliar with how or why they should be using data.

As we'll see, a data champion—someone who believes in the idea of using data to improve programs and make better decisions and pushes the organization and its leaders to buy in to the idea and implement it—is a critical piece of a data-centric organization, so it's no surprise if nonprofits at this level do not have anyone in charge of data. They also are not likely to have the right technology in place to support tracking key information about most constituents.

Barriers to Success

Because this is the lowest stage, there aren't really barriers to reaching it—but there are barriers to prevent you from progressing beyond it. Common concerns include a lack of time and money; many nonprofits are struggling to survive, understaffed and underfunded, and it's hard to take on anything else. It's not uncommon for there to be "human" barriers, including a lack of buy-in from directors and board members, or even from the staff members who would be responsible for gathering the data.

A data champion is a critical piece of a data-centric organization.

In addition, fear is a common obstacle. People often misunderstand what data gathering means, and are afraid of privacy concerns, or afraid of evaluation—for example, staff members might fear that if a program they're involved with is evaluated, they might lose their job. Finally, there's frequently a concern that any number of these barriers will result in data being collected poorly or improperly, leading staff to decide "If we can't do it right, we shouldn't do it at all."

Moving Forward

The idea of Stage Two is that organizations are piloting something that allows them to collect and then use data to make decisions. How do you get there? Start where you are and do what you can. Your efforts may not result in gathering comprehensive data about anything, but if they lead to a coherent strategy for what you can collect and how you can use it, that's a success. Form the intention to make data a part of your work, and make doing something with a priority. A pilot program will fail if it's not tied to intent. How will it inform your work? How will it help your programs? What steps are reasonable to take, and how will you measure success?

Find or become a data champion. A pilot program will fail without someone to shepherd it through. Your champion doesn't have to be someone in a leadership position—enthusiasm and support are valuable at any level—but having someone with the ability to make things happen can go a long way toward overcoming obstacles.

STAGE TWO: PILOTING

Organizations at this level have a strategy around data, even if it's limited, and are making the effort to collect and use it to inform decisions in at least one or two pilot program areas.

This is likely due to someone on staff who is driving thinking around the idea and importance of data. Despite the influence of a "data champion," not all staff are on board at this stage—and maybe not even everyone in a position of leadership.

Nonprofits at this stage have defined processes for what information is entered about who, and when. They're tracking detailed contact information and relevant demographics, and participant data for some programs, though resistance among staff members may result in inaccurate or incomplete data collection. These organizations are using some metrics to inform their work, but only specific pieces of it—possibly for a single program, or even just a single staff member. The staff that is working with metrics has some basic abilities to understand data trends and to create charts and graphs that makes the data accessible and useful. They may even be gathering audience feedback through surveys or other means, though likely only for one or two programs, and maybe only on a trial basis.

Barriers to Success

Overall, the intent of Stage Two is for organizations to be doing something with data that is not overly taxing or needlessly complex so that the barriers to success are not too intimidating. Barriers at this level are not about lack of time or money or technology, but about the human side of things, which is where they are most likely to fail. What prevents organizations from succeeding at piloting data programs?

Barriers at this level are not about lack of time or money or technology, but about the human side of things.

Commonly, an inability to get out of crisis mode. They need to be able to be able to focus time and attention on the project—even if it's just two staff members. Follow-through is also a problem. It's not enough to form the intention and strategy—the data champion has to continue throughout the duration of the pilot, making sure data is collected, looked at, and considered.

It's important to prioritize the cultural adoption of data. Make sure there's buy-in from necessary staff; a willingness to look at data and learn something rather than just relying on gut instincts; and the prioritization of constituent feedback. Without it, your data efforts are more likely to fail.

Moving Forward

How do you get to Stage Three from here? In general, you'll build upon the work you do in this stage to roll it out across the organization. You'll be able to take what you learned from your pilot and apply it to make it easier to succeed there, as well.

Leadership becomes increasingly important as you progress with data. It's a defining characteristic of Stage Three to have buy-in from the executive director and organizational leadership. To successfully move to an organization-wide data effort, it will need to be a priority for the entire nonprofit, communicated from the top down. You'll also need to invest resources in data to reach the next stage—that definitely means time, and most likely money as well, which will be a hard sell without leadership on board.

You'll also need experience and knowledge here. This might be someone on staff who understands—or learns—how to use data strategically, or it might be a consultant. This is a good time to seek examples or resources from similar organizations or professional associations in your field.

In addition, you'll need the right technology and processes to support the strategy and effectively back up your tactics. The technology might be a database or reporting package or hardware to make it easier to collect data from your programs. The processes will ensure that the data you collect is entered appropriately, consistently, and accurately.

You may need to tweak or customize your technology and processes to support your efforts at this stage, but as those efforts grow, your technology may also need to grow to keep pace.

STAGE THREE: ESTABLISH ORGANIZATION-WIDE PRACTICES

Organizations at this stage are rolling out the principles piloted in Stage Two to the entire organization with the buy-in of the Executive Director and most of the staff.

There should also be a coherent strategy around data, like a logic model. Organizations at this stage have clearly defined their target populations and defined what they will measure in order to gauge whether their programs are succeeding.

There's an organization-wide effort to collect useful program data, and while that data is used in decision-making, it may not yet be used consistently. There is some kind of feedback loop for staff involved in data efforts, even a rudimentary one, that allows those who enter data to see the results—which not only informs their work, but can go a long way toward building the case for the importance of data-driven decision-making.

What are these organizations collecting? As much contact and demographic info on constituents as is useful, and detailed participation data on all program participants. In addition, they're collecting some data that can be used to gauge program success beyond just participation. Feedback is collected from constituents on most programs, and is considered in decision-making for them.

Organizationally, data plays a larger role in the day to day work. Metrics are reviewed in team meetings, and some decisions are tied to data points. Most staff have ability to understand data trends, charts, graphs, rather than one or two people carrying the load. Some staff members are also analyzing data to look for unexpected trends, with substantive changes to activities being occasionally made based on the results.

At least one staff member is in charge of the quality and usefulness of collected data, and there is a process for checking the quality of data and for hygiene and maintenance. There is official time allocated to the data support role, which is a display of leadership's commitment. The organization has skills and/or training in place to ensure that staff know what they should do for good data practices, and easy-to-use technology that supports tracking all the key information needed and the reporting required to make decisions.

Data does not make the human element less important—the human element can have a great impact if there is data behind it to back it up.

Barriers to Success

At this stage, organizations need to have a strategy—how to measure programs, what's worth the effort to ask staff to collect, how data will be analyzed—and systems in place for how to support that strategy, including software, processes, and training. One won't work without the other. Technology is critical at this stage, as well. If you're making do with software, this would be the time to invest in a system that not only meets your current needs but that will support what you will ask of it in Stage Four and beyond.

As nonprofits move toward a more data-centric culture, more and more of the organization becomes a part of it—which makes staff education and buy-in even more important. It's important to make sure staff understands not just the processes but the value of data and that it's a useful tool worth the time to collect and analyze.

Training can go a long way toward eliminating these fears by demonstrating the value and efficiency of good data practices.

Some staff may find the cultural shift to data threatening. It's not uncommon for some people to feel that the importance of what they do can't be measured. For others, it may seem like a waste of time to get constituent feedback on things they "already know." Data does not make the human element less important—the human element can have a great impact if there is data behind it to back it up. It's also common for staff to feel that additional work required to gather or enter data is too much of a strain on their time. Training can go a long way toward eliminating these fears by demonstrating the value and efficiency of good data practices.

If you don't allocate staff time specifically to data projects at this stage, or have someone in charge of the data efforts, including allocation, quality, cleaning, staff support, and more, those projects are more likely to fail. This doesn't mean a full-time position (at least, not necessarily), but it does mean someone on staff with data in their job description.

Moving Forward

By the time a nonprofit reaches Stage Four, almost all of the decisions it makes are tied to data. So it's important for Stage Three organizations to make a culture shift to consider data (quantitative and qualitative, internal and constituent feedback, ROI considerations) as an important precursor to decision-making. If staff don't feel uncomfortable about making decisions without data behind them, the culture has not shifted sufficiently.

You need to carefully consider what data should be collected and used, making sure the strategy is appropriate for the specific needs and capabilities of the organization. What's straightforward to collect? What is more difficult to collect, but critical for measurement and decision-making? Make sure you're not spending notable time collecting things that you don't need. Choose data points that will inform your goals, not just those that you think might be interesting. Too much data can overwhelm staff and clutter reports.

You must have the software and processes to support your strategy in place to allow you to enter data with reasonable ease, and to produce the metrics you need. Make sure your processes ensure that staff know what to do and how to do it, including entering, cleaning, and using data. Invest in training to support them in these efforts.

Finally, make sure there's a feedback loop that allows people entering data to see reports and metrics based on it. What data is collected should be directly informed by what data is needed and used. This is not a one-time decision, but an ongoing conversation.

STAGE FOUR: DATA-INFORMED

Organizations at this stage aren't just acting on data on a case-by-case basis—they've built it into their decision-making framework.

For each program, they have a written plan that describes what metrics are needed to understand whether it is having a measurable effect on the people it serves, whether it's worth the resources, and whether it is reaching the right populations. This plan addresses both day-to-day and long term decision making. They also use external metrics and research to inform decisions and evaluate programs against others, and effectively use passively collected data (such as website analytics) to supplement what they know about their audience and programs.

There is no data champion—the ED, leadership team, and staff *all* champion using data to drive thinking, and the board reviews key metrics and weighs them when helping guide the organization's future. Staff generally believes that efforts around the collection and use of data are important to the success of the organization. Data roles are distributed in an effective way to ensure there's no "data silo."

Data-collection practices are optimized to help staff succeed. They collect only what's necessary to meet needs, and use only methods easily supported with technology that result in accurate, easy-to-maintain information. Similarly, constituent feedback is solicited in measures that fit the organization's needs and in ways that are actionable, with specific constituent feedback metrics tracked to determine the level of success of activities.

Across the entire organization, almost all decisions are tied to data. A good way to make data-based decisions is by testing hypotheses and moving forward based on measured results. Within the organization, someone is given the responsibility of translating data to useful metrics and visualizations. Investment decisions include ROI analyses. Reports are readily available to staff who want them. Dashboards and/or data visualizations are used to help make decisions, and data literacy is an important skill for most positions. Specific metrics are defined to evaluate the success of some initiatives, and data transparency—the sharing of information with the public—is considered and implemented when and where it makes sense.

Nonprofits at this stage have made data-driven decision-making a cultural change across the organization.

The nonprofit's technology systems can connect data across constituents to produce all the metrics defined above.

Barriers to Success

Nonprofits at this stage have made data-driven decision-making a cultural change across the organization. Changing a culture is hard, and requires more than just buy-in that data is good and that it can augment "gut" decisions. It requires a wholesale consideration of data from almost every staff member or leader at most levels of the organization. Inadequate ongoing buy-in from those entering data on the front lines will lead to failure at this stage. It's important for staff to dedicate time and effort to ensuring the collection of high quality data, and training is a good way to help with this—not just on how to use the organization's data specifically but on models and best practices for data-based decision-making in general. Making data collection and reporting a regular part of meetings, decisions, and all aspects of your work can create familiarity and acceptance so that using data becomes second nature. Staff turnover can be a hurdle, which makes it all the more important to "bake" data into the culture.

Getting to the previous stage is possible as a "big bang" leadership effort, but this stage most likely requires a sustained and steady attention to optimizing and iterating practices and processes from the entire organization over time.

One thing to watch is that you're only collecting data that you really need, and that the software is user friendly. It can be tempting to collect everything that could be used in decision making, which then puts too much burden on the front-end data process (entering, cleaning).

Moving Forward

Stage Five may not be the right stage for every organization, as it implies that data is a critical organizational priority, used in virtually everything. But for those looking to make the leap to Stage Five, their focus should be on tying all strategies to data. This is the defining feature of the next stage—that there are data-backed goals for all strategies, programs, staff performance, and every other piece of the business. Success for the organization is gauged by whether these goals are met.

To achieve this kind of data culture, there must be a strong desire and commitment from strong leaders. Leadership must be willing to break with habit and tradition and develop and welcome new ways of working. This does not mean consultants or incremental change—it means broad cultural changes at an organic level.

It's critical for the ED and board to establish and reinforce this culture, not just at the onset but with every action and every decision and every breath.

STAGE FIVE: THE DATA-CENTRIC ORGANIZATION

Organizations at this stage are thoroughly immersed in data—data is part of the "organizational DNA," and they've redesigned or adapted their cultures to include data in all areas of decision-making.

Metrics are defined for all program areas, and these metrics are used to monitor programs, evaluate staff, and correct course when needed. All programs are validated by external organizations or third parties, or are built upon credible research that links the organization's outputs to established outcomes. There's a process in place for staying on top of relevant research on best practices for programs and for the collection and use of data.

The board uses metrics to evaluate and think about performance, and all staff—including the ED and leadership team—are driving forces behind the organization's data orientation. There's ongoing consideration of what should be collected based on what is used, and consideration of new methods to track and find data. Constituent feedback is rigorously weighed alongside other metrics to align programs with constituents' needs

Targets for key metrics are defined in order to monitor and evaluate each organizational area, and tied to performance reviews in most roles. Metrics are used to prioritize resource allocation across different programs/ departments. Staff does regular data analysis to review trends and make predictions for future, and changes are made to activities based on these analyses. All metrics are calculated at the frequency at which decisions are made. Hypotheses are frequently made and tested, with the results being analyzed and acted upon. The organization has allocated a right-sized staff (including someone on the leadership team) to handle data strategy, cleaning, quality, metrics, visualization, support (either together in a department, or distributed). Third party firms are used to audit or conduct studies as appropriate for strategy.

Stage Five is the ultimate stage on our spectrum, but it doesn't mean data perfection.

Barriers to Success

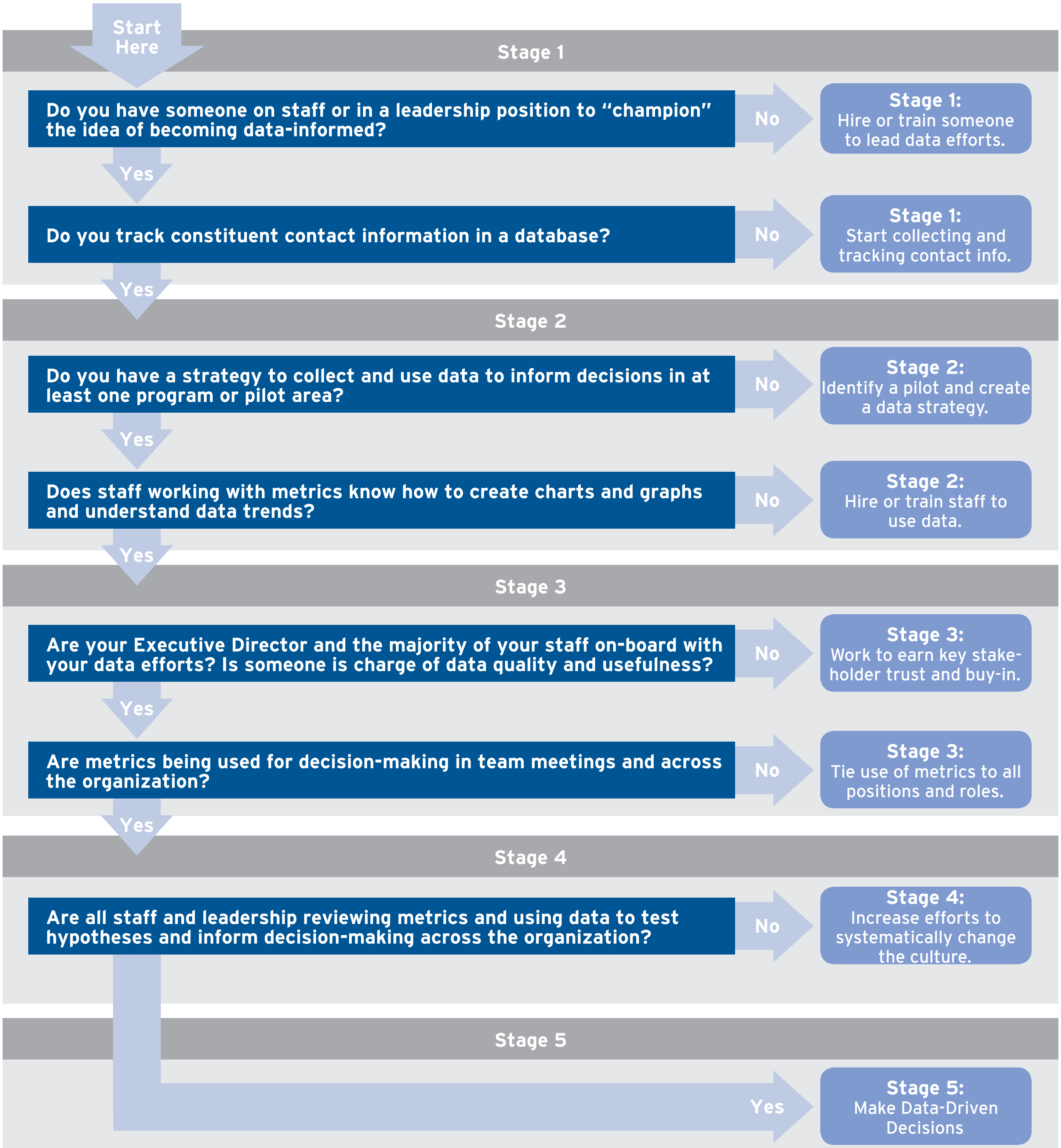
Stage Five is the ultimate stage on our spectrum, but it doesn't mean data perfection. Being a data-centric organization is an ongoing process that requires a steady forward pressure and constant iterations and retooling. This means data must be a critical priority across the entire organization. At this level, the board and ED have to clearly model the idea that measurement is a top priority tool that should be continuously considered.

You will not succeed at this level without the right people on staff and in leadership roles. Your staff needs to be able to embrace the opportunity to learn, and leadership must be willing to fill roles with people who support data efforts and replace those who do not. Just having staff who support the mission is not enough—you'll need to invest in ongoing training and development to keep them up to speed on using data and measuring outcomes, and you'll need to invest in technology that facilitates that work.

Another way to fail is by trying to go too far too fast. Changing your culture and embracing data at all levels of decision-making will take time, and it will take patience. Don't rush it and don't expect overnight results. Pushing too hard can get in the way of success, even if it comes at a more reasonable pace.

SELF ASSESSMENT

To move forward on the spectrum, you first need an idea of where you're starting out from. Beginning at the top of the flowchart on the next page, follow the arrows to determine your current state of data maturity.



APPENDICES

APPENDIX A: RUBRIC

In the following rubric, the rows list the criteria we've identified in a range of areas for each stage of data maturity: Organizational Focus, Leadership/Culture, Data Collection, Data Use, Staffing, and Technology Systems. These are the criteria we used to write the narrative descriptions of each stage in this report.

	STAGE ONE Getting Started	STAGE TWO Piloting	STAGE THREE Establishing Org-Wide	STAGE FOUR Data-Informed	STAGE FIVE The Data-Centric Organization
Organizational Focus	Some data may be collected, but there's not yet a coherent strategy.	There is a limited strategy and an effort to collect and use data to inform decisions in at least one or two pilot program areas.	The organization has clearly defined their target population, and what they will measure in order to gauge whether programs are succeeding (for instance, with a logic model). Organization-wide effort to collect useful program data; data is used in some decisions but not consistently.	Organization has a written plan that describes what metrics are needed to understand whether each program is having a measurable effect, is worth the resources, and is reaching the right populations. This plan addresses both day-to-day and longterm decision making. The organization knows what sources are available for useful external metrics or research.	Metrics are defined for all program areas. These metrics, with targets, are used to monitor, evaluate staff, and course correct. All programs are either validated via external third parties, or based on credible research that link the organization's outputs to established outcomes. Organization has a process for staying on top of relevant research on both program and data best practices.
Leadership/ Culture	No overall data leadership; little specific focus on data.	A staff member drives thinking. Some staff are on board but others may actively resist collecting/ using data.	The ED is actively involved in data strategy. Staff are generally on board with collecting important data points. There is at least a bit of a feedback loop so that those who enter data can see results.	The ED, leadership team, and staff all drive thinking. Board reviews key metrics and is familiar with them. Staff generally believe that their efforts around data collection/use are important to the success of the organization (which requires robust feedback loop).	Board uses metrics to evaluate and think about performance. ED, leadership, and staff are all key forces behind a data orientation—data is part of the "organizational DNA."

Data Collection	May have contact information for most constituents and/or attendance data for key events. Tallies, counts, basic demographics on participants. May be no collection of feedback from constituents.	Defined processes for what information is entered about who and when. Full contact info and relevant demographics; participant data for many programs. Survey/ Satisfaction/ beneficiary feedback collected for one or two pilot programs.	Full contact/ demographic data as useful on constituents; Full participation data (as makes sense for bang for buck) on all program participants. Some data collected to gauge program success (not just participation). Feedback collected from constituents on most programs and considered in decision-making.	Data collection is optimized to what makes sense based on needs, effort to collect it, and effort to ensure high data quality. There is a feedback loop between what data is needed for decisions and what data is collected. The organization makes effective use of data that can be passively collected (like website analytics). Constituent feedback is right-sized for the org. Specific constituent feedback metrics are tracked to determine the level of success of activities.	There's ongoing consideration of what should be collected based on what is used, and consideration of new methods to track/ find data. Constituent feedback is rigorously weighed alongside other metrics to align programs with constituents' needs.
Data Use	Little consistent reference to data other than for funder reports or individual contact information. Staff may have little familiarity with how or why to use data.	Some metrics are used to inform specific pieces of work. Staff who work with metrics have ability to create and understand data trends, charts, graphs.	Metrics are reviewed in many team meetings; Some decisions are tied to data points. Most staff have ability to understand data trends, charts, graphs. Staff analyzes some data to look for unexpected trends. Substantive changes are occasionally made to activities based on data analysis.	Almost all decisions are tied to data; investment decisions include ROI analyses. Data/ reports are readily available to those who want to use it for decision making; Dashboards and/or data visualizations are used to help make decisions easier. Data literacy is an important skill in most positions. Specific metrics are defined to evaluate the success of some initiatives. Data transparency is considered; info is made public as makes sense. Small "tests" are defined with hypotheses as to what will work, conducted, and learned from.	Targets for key metrics are defined in order to monitor and evaluate each org area, and tied to performance reviews in most roles. Metrics are used to prioritize resource allocation across different programs/ departments. Staff does regular data analysis to review trends, predictions for future, and changes are made to activities based on these analyses. All the metrics are calculated at the frequency at which decisions are made. Tests—with hypotheses, analysis, and learnings—are common.

Staffing	No one specifically in charge of data.	At least one staff member is in charge of helping org understand and collect data.	At least one staff member is in charge of the quality and usefulness of collected data, and there is a process for checking quality and cleaning data. There is official time allocated to data support role. The organization has skills and/or training in place to ensure that staff know what they should do.	Someone is in charge of translating the data to useful metrics and visualizations. The process for ensuring data quality and cleanliness is right-sized Data roles are distributed in an effective way across the organization to ensure there's not a "data silo."	The organization has allocated a right-sized staff (including someone on the leadership team) to handle data strategy, cleaning, quality, metrics, visualization, support (either together in a department, or distributed). Third party firms are used to audit or conduct studies as appropriate for strategy.
Technology Systems	Technology may or may not support tracking of key information about most constituents.	Technology supports tracking of key information about most constituents, sufficient to inform a specific piece of work. Technology infrastructure—computers, internet connections, etc—is sufficient to support data systems	Technology supports tracking of all the key information needed to track, and reporting required to make, decisions. Technology system is relatively easy to use for most data entry. Staff are trained in how to use the system.	Technology system can connect data across constituents to produce all the metrics defined above needed for decisions. System is straightforward for those entering data, and they can see reports that are informed by their data	(No additional system requirements to reach this phase—organizational only.)

APPENDIX B: RESEARCH METHODOLOGY

This publication is the culmination of four years of research that began with a project to understand data maturity among synagogues, and then expanded to look at how that same approach could be generally applicable to nonprofits. Like all of Idealware's work we relied on a variety of research methods and perspectives.

In December, 2013, Idealware co-facilitated a day-long gathering with the Measuring Success consulting group to discuss the data maturity of synagogues at UJA's New York office. This day of training was framed around a collaborative process of workshopping the states of synagogue data maturity so that all participating organizations were better able to determine their own relationship with data and how to improve it. Participants in the program collectively identified stages to a Data Maturity spectrum to form the foundation for leveling synagogue data aptitude and identifying next steps toward improved maturity moving forward for the community. In addition, Idealware conducted a two-hour long focus group with a representatives from members of that community in 2014. During that conversation, we further refined the stages of the spectrum and gathered information about how the different stages specifically apply to synagogues. Idealware also conducted several one-on-one telephone calls with additional members in early May.

In June 2017, we began working with a consultant to create a rough draft of a rubric for data maturity based on our previous research as well as our existing knowledge of nonprofit programs and the kinds of decision-making that goes into them. We also did desk research to mine existing resources, both our own and others', and convened a steering committee of people with expertise in this area to review the draft.

APPENDIX C: ABOUT THIS REPORT

Authors and Contributors

Much of the research for this report was done by Laura Quinn, a nonprofit tech consultant (and former Idealware Executive Director). Current Idealware staff members involved in the report include the following:

Karen Graham, *Executive Director*
Chris Bernard, *Research and Editorial Director*

We're grateful for the time and feedback put in by our steering committee, without whom this report would not be possible:

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About Tech Impact's Idealware

Tech Impact is a nonprofit on a mission to empower communities and nonprofits to use technology to better serve the world. The organization is a leading provider of technology education and solutions for nonprofits and operates award-winning IT and customer experience training programs designed to help young adults launch their careers. Tech Impact offers a comprehensive suite of technology services that includes managed IT support, data and strategy services, telecommunications, and cloud computing integration and support. In 2018, it expanded its education and outreach capabilities by merging with Idealware, an authoritative source for independent, thoroughly researched technology resources for the social sector. Tech Impact's ITWorks and CXWorks training programs have graduated hundreds of young adults with the knowledge, skills and confidence they need to start their careers in the technology and customer experience industries. The organization also operates Punchcode, a coding bootcamp based in Las Vegas, NV. Learn more at www.idealware.org and www.techimpact.org.