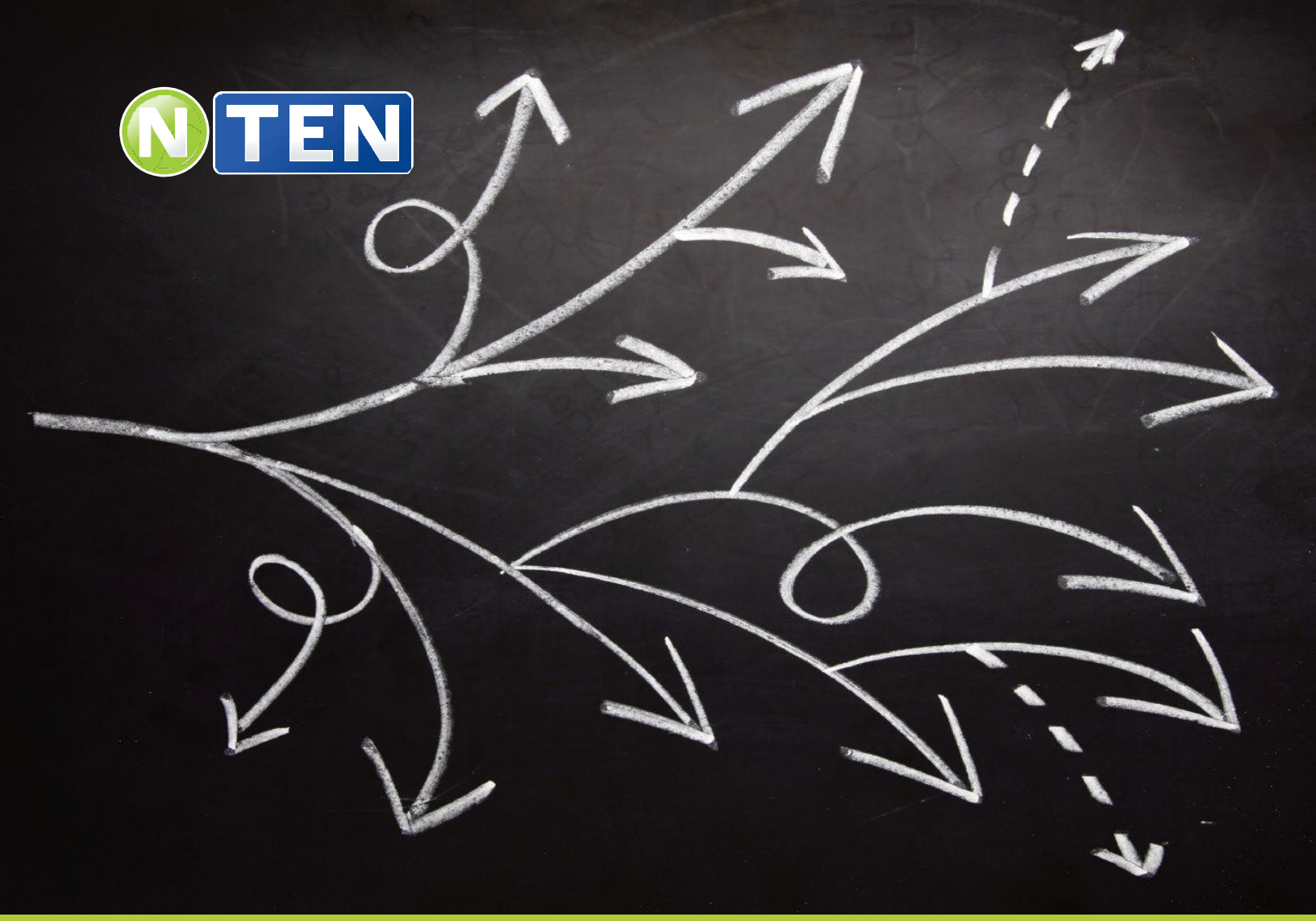

Getting Started with Data-Driven Decision Making: A Workbook

JANUARY 2 13

An NTEN Workbook prepared by idealware

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Introduction

Over the last few years, NTEN has been working with nonprofits to understand how to better wrangle all the data they're creating and that's available to them into improved results—more mission impact. In 2010, we organized an online workshop we affectionately titled "Taming the Data Monster." That workshop focused on the data and "story" side of the equation: how to translate the data you have into a snapshot of the work you are doing today (and yesterday). The workshop was designed for the Communications and IT Staff who have the task of collecting and distributing data in effective and meaningful ways. But what about the steps an organization has to take *before* collecting or analyzing the data? How do we determine *which* data matters in the first place, and how that data will impact the *direction* of our work?

In 2012, NTEN was able to survey a sample of US nonprofits to find out how they were doing when it comes to being data-driven: were they collecting data and tracking metrics? Were they finding that data useful for making organizational decisions? With the financial support of Google and the research expertise of Idealware, we published the 2012 State of Nonprofit Data report which indicated that nonprofits weren't having success with those strategic steps in the equation: almost all nonprofits were collecting and tracking some type of metrics, but only a small fraction were finding that data useful for making decisions that impacted their programmatic work. Clearly, there was a disconnect between the tactical work of collecting and tracking data and the strategic work of defining and using the data for the organization's mission.

With this workbook, we hope to provide nonprofit leaders with a set of worksheets that will help guide thinking and planning around more effective data *strategies*.

While these worksheets are part of the strategic process of defining the right questions, metrics, and plans for effecting data-driven decisions, and this workbook is designed for nonprofit leaders—executive directors, board members, and other organizational leadership staff who develop strategies and are responsible for making organizational decisions—it will be helpful to include input and discussion from various staff. For example, worksheets 4 and 5, especially, could benefit from input from your program, communications, and data or IT team members.

Overall, we acknowledge that it's important that your entire team buys-in to the strategy—data collection, analysis, and reiteration is a cultural shift for many of us, and it's something that can't be done once or intermittently or inconsistently across your organization if we're going to be more effective. All of this takes investment of time and resources as well as vision. That's why this workbook includes worksheets that will help you think through the "onboarding" and budgeting processes as well.

You may want to go through this workbook separately for various projects or go through it again to re-define or update your metrics. In any case, we hope you'll find this workbook helpful for launching or improving data strategies that will impact your organization's work.

We'd like to thank Google for providing financial support for this project, and Idealware for helping us produce this workbook.

Annaliese Hoehling
Publications Director, NTEN

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Welcome

Could you use more help thinking through how to use data to help your organization make decisions? If so, you're not alone. Our recent report on how nonprofits are using data showed that although some organizations are relying heavily on data, a number were doing very little to measure their work.

Measuring may not be as difficult as you suspect. When we talked to experts, they agreed that simply starting to track a few strategic metrics was a huge step toward a more data-based culture. Once your staff has data that they can use to make decisions, they will often start to want more. A few, straightforward metrics can start the snowball to a more broad-based program.

Getting started isn't a trivial process, however. What metrics will be useful and actionable—but not require a ton of time to collect and understand? How do you define and communicate data in order for your organization to make decisions?

This workbook will help you with those questions. If you have a vague idea of what you'd like to measure, you can start with the first worksheet and proceed in order through the workbook. It will walk you through the process of choosing and refining initial metrics, defining how you will collect the data, and explaining how to disseminate that data for decision making. If you're further down the path than that, feel free to pick and choose the worksheets that make sense for your needs. You may just want to think about the process for creating and using your metrics or narrow down a list of metrics that will have the most impact.

As you're thinking about data-based decision making for your organization, don't forget the other resources in this research series. The 2012 State of Nonprofit Data report provides information about what nonprofits are doing with data and the factors that contribute to (or impede) success. We've also gathered ten case studies outlining how ten different organizations are using data to make decisions. They are available online in NTEN's case study section..

Don't feel overwhelmed by data. The journey to data-based decision making, like any, begins with the first step. In this case, you can begin with the first worksheet. Once you start defining the metrics that will help your organization, you may find that it's easier than you thought.

1. Define Your Action Question

This workbook is designed to help you hone some of the metrics that will be practical and meaningful for you in a particular area. To focus your efforts more productively, start by identifying the general area you want to use this workbook to explore in more detail. Choose an item from the box to the right that resonates with you, or define your own based on a topic your organization has been talking about.

What's an area you want to explore?

Facebook outreach

POSSIBLE ORGANIZATIONAL AREAS FOR EXPLORATION

- *Recruiting clients*
- *Efficiency of a process*
- *Projecting future income*
- *A specific program*
- *Annual campaign*
- *Facebook outreach*
- *Email list-building*
- *Staff development*
- *Staff recruitment*

... Or choose your own

Now define a particular action question within that area. It's not going to be easy—your action question must be specific enough to be measurable and to help you decide how to move forward, but also important enough to really matter to your organization. Let's start by brainstorming.

What are some tactical questions you'd ideally like to be able to answer in this area that would help your organization improve?

1. How can we use Social Media to reach a wide spectrum of people?

2. How can we improve our Concert Attendance using social media?

3.

4.

5.

WHAT MAKES A GOOD QUESTION?

Stumped as to the type of question we're looking for? Try to think of something that will help your organization improve and that you can have an impact on—but that can also be tested and measured. For example, "How can we improve fundraising?" is too broad—it's not easy to pin down what you would specifically do to affect or measure it. "What's our email open rate?" is too narrow and it's not clear how it relates to organization goals. Look for a question that's both important and detailed enough to be testable, such as "Is our blog worth the time we spend on it?" or "How can we improve program attendance?"

Let's drill a little more deeply into those questions. Refer to the questions you defined above by number.

QUESTION	Will the answer to this question help you improve as an organization?		Will your actions as an organization affect the answer to this question?		Can numbers help you answer the question?		Is the question testable? Can you create a hypothesis about a potential answer, and then test it?	
	Yes/ No	Why or why not?	Yes/ No	Why or why not?	Yes/ No	Why or why not?	Yes/ No	Why or why not?
1.	yes	It'll help us gain a more diverse audience.	Yes	Because we're trying to better our community relations.	Yes	We can use numbers to figure out how to reach students.	Yes	Because we need to be able to expand our network and see all the data.
2.	Yes	It'll help us reach the community even more.	Yes	Because I'm the one promoting the events.	Yes	To calculate how people found out about our events.	Yes	Yes, it'll help us gauge where we stand with our social network promoting.
3.								
4.								
5.								

Think through the answers you gave above. For one or more of the questions, were you able to answer "Yes" in all of the boxes? If so, pick one of those questions to explore with this workbook, or combine multiple questions together to define one overarching question. (Note that if you combine multiple questions into one, you might want to plug it into the table above to make sure it fits all the criteria.)

Write your question here:

How can we promote our concerts better through social media and engage the community more than we are?

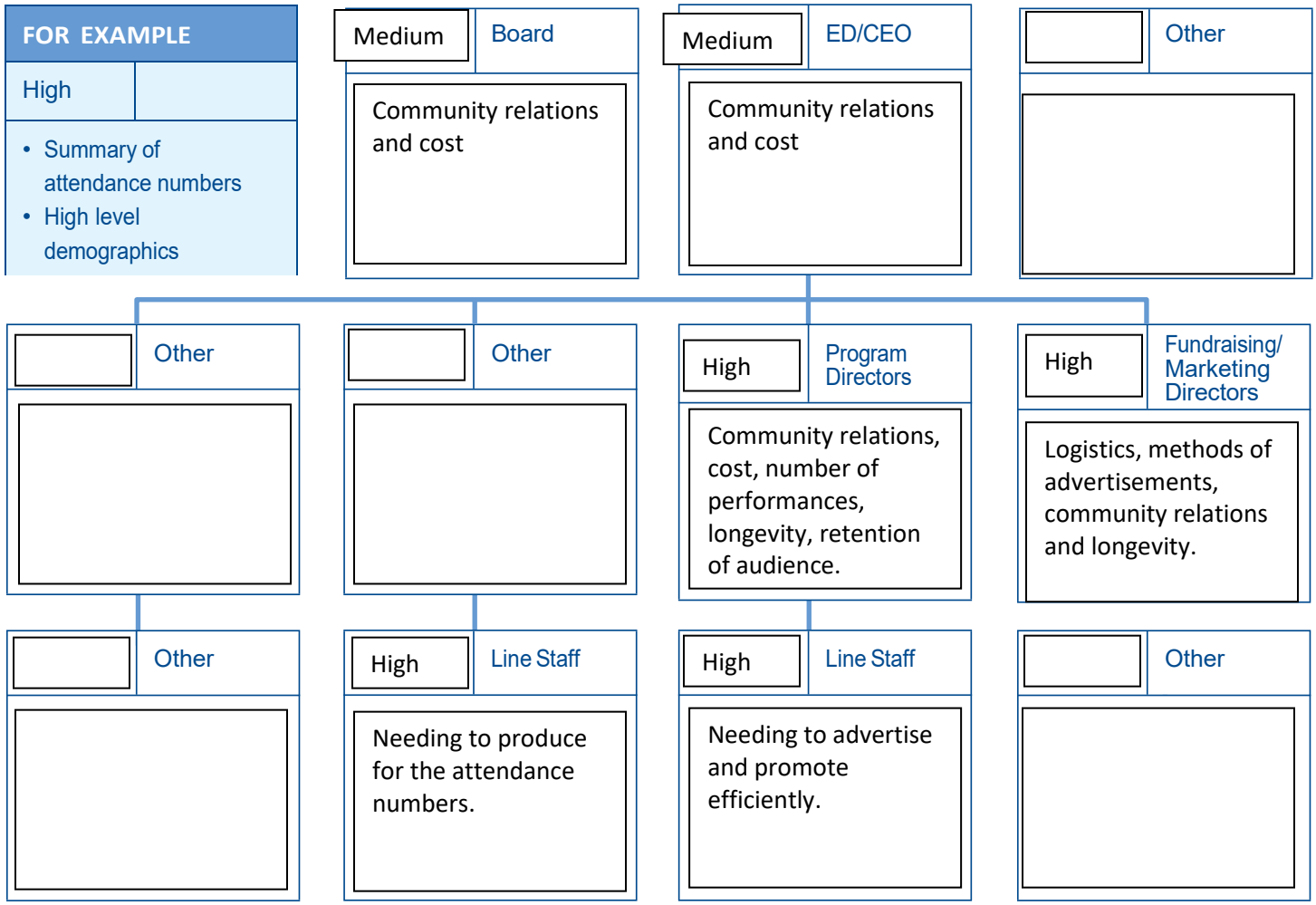
Did you answer "No" to at least one of the criteria for all of your questions in the table above? If so, those questions will be difficult to answer using metrics. Brainstorm some other questions that are important but also measurable to get to a place where you can define an **action question** that will be the framework for the remainder of this workbook.

2. What Does This Question Mean To Your Organization?

What would different people in your organization want to know about this question in terms of how it affects their own jobs? How much does each care about the information at all? It's likely that there are a number of different perspectives about it. Not sure what people would like to know? Ask them...

In the mock organization chart below, do two things:

- In the small box in the upper left, define how important the information would be to each type of role in your organization (High, Medium, or Low).
- In the larger space in each box, list some of the key pieces of information that a person in that role in particular might be interested in seeing. Don't worry about what's possible or practical just yet, simply brainstorm what they'd ideally like to see.



Now that you've thought that through, do a reality check: Do other people care about this question too? If you're the only person who really cares, is it an important question for your organization?

3. How Will You Know What the Right Metrics are?

Soon we'll define metrics to help you answer your question. Metrics provide a numerical yardstick to help you determine whether your efforts are making a difference—and if so, in what direction. Before we go too far down that road, think through how you'll judge whether the metrics will actually help you define what you really want to know.

There are different ways to think about this. Pick **one** of the questions below that seems to make the most sense in the context of your overall action question and write a brief description of what success will look like in this process.

1. What specific decisions do you want to be able to make based on the answer to your question?

2. ...OR What things will you need to understand in order to feel you have real knowledge to address your question?

I believe that I'd need to understand how people get their information. How they're drawn to events, and or which events they'd attend. What grabs peoples attention in a visual, and audible way.

3. ...OR Will any answer to your question feel like success, or will you need to achieve a specific result to feel successful?

4. What Could You Measure?

There are a lot of different things you could measure for any given thing. Brainstorm the different actions you could take that might have an impact on your overall question and the metrics you could use to measure it. A metric is a number—often either a count or a percentage—that measures your success in an area.

1. WHAT ACTIONS COULD YOU TAKE THAT WOULD HAVE AN IMPACT ON YOUR ACTION QUESTION?						
Action	What **metric** could you use to measure this?	Do you have the ability to affect the measurement? Is it something you could change through your actions?	If you were to measure this, how many people in your organization would care?	To what extent would seeing a measurement for this help you improve your organization?	To what extent would your org's actions quickly result in a change to the measurement?	Now sum up the last three columns to create a Usefulness Score
	For instance, # participants, % satisfaction, # units provided.	Answer Yes or No.	1= Almost No One 5= The Whole Organization	1= Only slightly 5= Completely transformed	1= Very hard to see change 5= Actions visibly change metric almost immediately	
Keep track of attendance	Number of attendees.	Yes	3	3	3	9
Keep track of posts on F.B	Number of views and clicks.	Yes	5	5	4	14

2. WHAT ACTIONS COULD YOUR CONSTITUENTS TAKE THAT WOULD AFFECT YOUR ACTION QUESTION?						
Action	What **metric** could you use to measure this?	Do you have the ability to affect the measurement? Is it something you could change through your actions?	If you were to measure this, how many people in your organization would care?	To what extent would seeing a measurement for this help you improve your organization?	To what extent would your org's actions quickly result in a change to the measurement?	Now sum up the last three columns to create a Usefulness Score
	For instance, # participants, % satisfaction, # units provided.	Answer Yes or No.	1= Almost No One 5= The Whole Organization	1= Only slightly 5= Completely transformed	1= Very hard to see change 5= Actions visibly change metric almost immediately	
Get informed.	# of community members	yes	3	4	3	10
Care	Number of consecutive events	Yes	2	3	5	10

3. WHAT ACTIONS COULD OTHER PEOPLE TAKE THAT WOULD AFFECT YOUR ACTION QUESTION EVEN IF THEY AREN'T IMMEDIATELY ASSOCIATED WITH YOUR ORGANIZATION?						
Action	What **metric** could you use to measure this?	Do you have the ability to affect the measurement? Is it something you could change through your actions?	If you were to measure this, how many people in your organization would care?	To what extent would seeing a measurement for this help you improve your organization?	To what extent would your org's actions quickly result in a change to the measurement?	Now sum up the last three columns to create a Usefulness Score
	For instance, # participants, % satisfaction, # units provided.	Answer Yes or No.	1= Almost No One 5= The Whole Organization	1= Only slightly 5= Completely transformed	1= Very hard to see change 5= Actions visibly change metric almost immediately	
Care for the arts	Statistics on the arts and community	Yes	3	5	5	13
Attend more events	Importance of the arts	Yes	5	3	5	13

Draw a line through anything in the table above that you said in the third column you didn't have control over. Here you should be focused on being able to measure and improve your own actions, so measurement of external factors is less relevant.

For the rest of the rows, based on which have the highest total score in the righthand column and your gut reaction to how well the total score reflects reality, choose six that seem promising for exploring your action question. For each, copy the **metric**, from the second column, and the overall sum for that row into into the table below.

Metric	Sum (Usefulness Score)
Number of Attendees.	9
Number of views and clicks.	14
Number of community members.	10
Number of consecutive events.	10
Statistics on the arts and community.	13
Importance of arts and community.	13

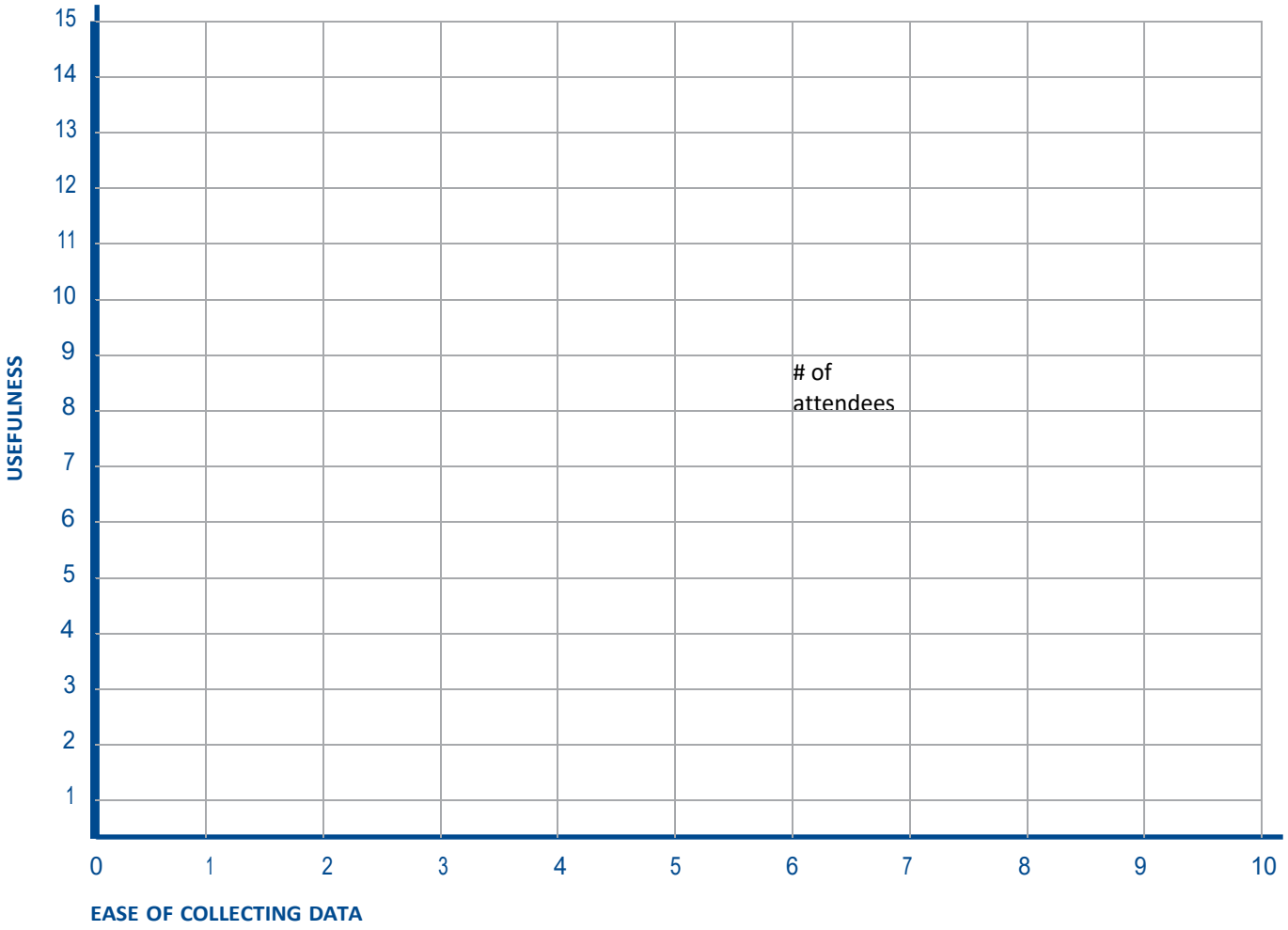
5. What Data Do You Have?

The next step in this process is to identify the data sources for the metrics you've said you'd like to track (if you can't collect the data, then you won't be able to track that metric). For each of the six **metrics** you defined on the previous page, think through the data you have that relates.

Metric (from previous worksheet).	What related data is currently **manually entered** into a system?	What related data is **automatically tracked** by a system?	What additional relevant data about actions, perceptions, or processes could your **staff collect** that they aren't currently collecting?	What related data could you **get from other** organizations or public sources?	Looking across what you've written for each column, score the overall ease of collecting data to get this metric. 1= Would require vast new investment 10=We already have it
Number of attendees.	All	All	None	Demographics and age	6
Number of views and clicks.	All	All	None	Additional data collected from firms.	4
Number of community members.	All	All	None	None	10
Number of consecutive events.	All	All	None	Surrounding events that contradict ours.	5
Statistics on the arts and community.	All	All	All	How the arts effects a community.	7
Quality of arts within the community	All	All	None	The quality of life with the arts.	7

6. Find The Metrics That Make Sense For You

You've rated the usefulness of each metric (in Worksheet Four), and the difficulty of getting the data (in Worksheet Five). Now plot each metric using those two scores.

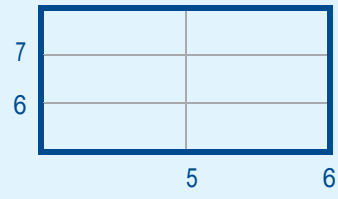


It likely makes sense to start with the metric that is closest to the top and right of the plot. Choose one metric (or a small number) that will provide you the biggest bang for the buck. As you grow comfortable with that metric, you may want to add more that also seem useful into the mix.

What metric will you start with? Number of attendees.

HOW TO PLOT YOUR METRICS

If your metric had a sum of 6 according to worksheet four, and a score of 5 according to worksheet five, then you'd plot that metric like this example.



7. The Metric Creation Process

Even if the data is readily at hand, the metrics won't create and distribute themselves. It's important to map out the flow of how the data will become an accurate metric—both to make sure you've thought it through, and to acknowledge the actual work that will be required from your staff to ensure success. Think through this process for your metric.

Data Sources

Our work study's counting individual concert goers.

How is this data entered into a system?

It's entered into Microsoft word for statistical use.

What's the incentive to ensure it's entered?

Keep track of attendance to grow.

Where is it stored?

Online data base to be shared with superiors.

Who creates the metric from the data?

I do

Who distributes it?

I do

Who's in charge of this whole process?

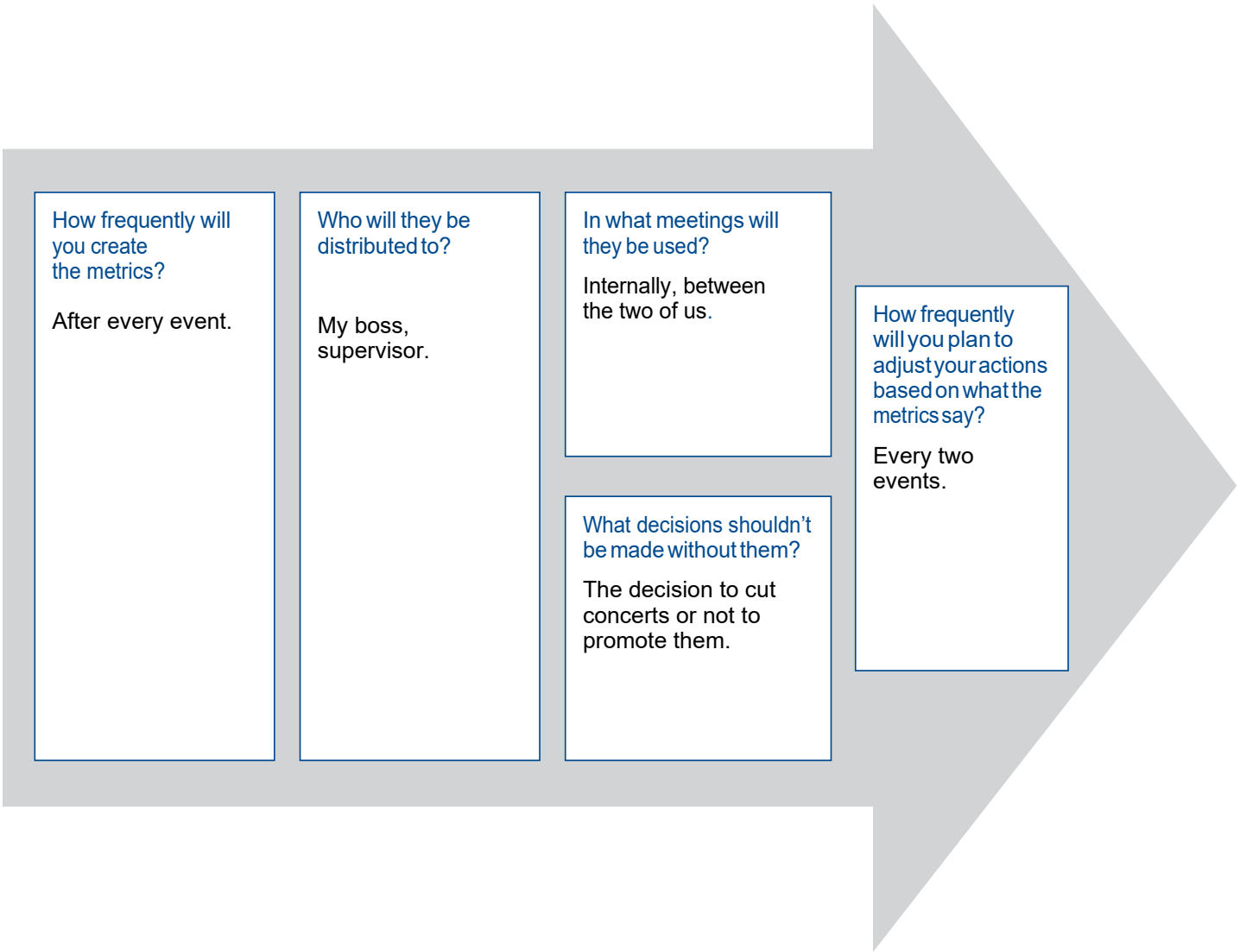
I am, to ensure it goes smoothly.

How will you spot-check to ensure the metric accurately reflects reality?

Take my own count after the recital to see if they match with the work-studies numbers.

8. Define A Process for Using Them to Make Decisions

You not only need a process for creating your metrics—you need a process to actually use them. This is one of the most critical steps. If a metric measures in a forest with no one around to hear it, it does not make a sound...



How frequently will you check in on whether the metrics themselves are an effective way to measure what you're trying to measure?

After every recital to make sure things are going smoothly.

9. Create an Implementation Action Plan

Congratulations! You've defined a strategy to create and use metrics to measure a core question for your organization. But a strategy is one thing, and implementation is another—to speed you on your way to a successful rollout of your metrics, think through the implementation steps.

People You'll Need to Get Onboard

Who are the core individuals who will need to buy in? Think through both the official people who need to be onboard and the other people who might become barriers if they're not included. List them below. Then think through the right way to include them in the process: Email? Presentation? Discussion?

Person or Group	Method of Including Them
My supervisor	In person demonstration.
Professors	In person demonstration
Board Members	Board Presentation

Processes You'll Need to Define

On the previous worksheets, did you define processes for collecting, analyzing, or distributing metrics that need to be more fully fleshed out? If so, define what they are and how you'll put more detail around them. Maybe another meeting? More documentation? A larger project?

Process	Method of Defining
Number of attendees	Large project * Music Festivals*
Social Media outreach	Outside consultant/training
Statistics of the arts in the community	increase community relations
Number of consecutive events	increased outside performances

Things You'll Need to Allocate a Budget For

Have you defined a process that involves things that you don't already have–for example, a survey tool, a bar code scanner, a new staff member, or maybe a consultant to think it all through? Itemize anything new that needs to be paid for, and what process you'll need to go through to select and purchase the product.

Item to Buy	Purchase Process
Outside consultant firm	justification
Additional staff	increase concerts increase need for help
New equipment	increased quality of media

Other Things You'll Need to Make Happen

Are there other things that need to happen before you can move forward? List them here along with useful details.

Additional Step	Details
Helping people understand the importance of the arts.	Help them appreciate them.
Improving our outreach though improved media.	New equipment.
Adding quality events.	Spending money on guest artists.

Those are your next steps–but they're probably not in the right order.

Go back through that list and decide what you should do first: Talk to some people? Define a process? Put a number 1 next to that step. Determine what's next and put a number 2 next to it. Continue through the whole list until you have an entire action plan in approximately the correct order.

And then… go start with the first item on your list!

About NTEN

NTEN, a 501(c)(3) nonprofit, is the membership organization of nonprofit technology professionals. As a community of nonprofit professionals, we aspire to a world where nonprofit groups of all types and sizes use technology strategically and confidently to fulfill their missions. Together, the NTEN community helps members put technology to work so they can bring about the change they want to see in the world.

NTEN facilitates the exchange of knowledge and information within our community. We connect our members to each other, provide professional development opportunities, educate our constituency on issues of technology use in nonprofits, and spearhead groundbreaking research, advocacy, and education on technology issues affecting our entire community.

About Idealware

Idealware, a 501(c)(3) nonprofit, provides thoroughly researched, impartial and accessible resources about software to help nonprofits make smart software decisions. By synthesizing vast amounts of original research into credible and approachable information, Idealware helps nonprofits make the most of their time and financial resources.

Idealware specializes in combining traditional research techniques like interviews and surveys with software-selection methodologies—like detailed ratings of software tools against a rubric—to generate important new knowledge on affordable budgets. We then package our findings into approachable reports, articles, and trainings that help nonprofits make the on-the-ground decisions important to them.