Bertrand Russell said *one of the signs of the onset of a nervous breakdown is the “belief one’s work is terribly important.”*

So, Enjoy the process. Have a sense of play with your data.

Don’t strive for answers. Ask questions. Be an explorer. Turn the data over and over, round and round, until you don’t know which end is up.
Go outside. Take a hike. Come back and start over. Throw everything out and look at the source data from scratch.

The fun is in the chase. Whatever it takes to get your mind set to fail and fail again. Eventually, your head clears and your data takes shape.

This can happen on paper, not on your laptop or mobile device.

Analytic tools don’t do this work for you. Your brain does.
Now let’s take a look at data collection. Reviewing what you count and why and, more important, what you don’t count and WHY NOT? is the first phase toward understanding.

A hard look at data collection practices can be startling.
Self-knowledge through self-tracking using technology.

The movement began with blood pressure and glucose readings and has spread to the IOT.

**Entrepreneurs** are all over this. Track your health, your food intake, your
activity levels.

You can aim for self-understanding, behavior change, self-improvement with goal-setting and progress mapping.

Let’s look at a simple example.
Here’s some data my iPhone tracked of my outdoor exercise. These are raw counts.

The numbers are uncooked, but it forms the basis of data that can be analyzed further.

{Click to Dashboard} Besides the Hermes packaging, does this one offer
something more?

Here, walking distance is combined with steps taken and stairs climbed.

The bar chart shows flights climbed before I left the house for my walk.

Walking distance takes over from there and by 11:21 i was booking it.
Let’s scale up a bit. Turn the phone lengthwise, and it gets better. I love Auto Scale. Now, I see periods of activity alternate with periods of inactivity over one month. My calves remember that day I took a concentrated 15 mile walk.

What if we track activity like this in the workplace? Sure, we already do this in some form, but how might we get more useful data that reflects activity and offers insight into the services we provide by recording work we actually do.
You can track anything. Preferably something that matters to you. What might matter a lot is hidden work that nobody counts but has an impact all the same. Awareness has benefits.
I find one big reason we neglect to quantify certain activities is their everydayness.
I was walking long before I tracked my walks.

I took my first steps at 10 months. It took a while to learn that keeping track of
exercise can impact my behavior in ways I hadn’t considered.

I feel really lousy when the bar chart is flat over a long period. But, I can change that.

I can go out and walk and raise the bars. Impact? I feel better. I get to know my surroundings.

I see trees and people and pets and plants and babies in strollers. I get off the sofa. I sleep better.
This can be tracked too. And ANALYZED. Remember those entrepreneurs out there.

They’ve got it covered.

Now sleeping has to be the most everyday activity you can safely ignore. Or not think much about,
despite those scarifying articles about sleep deprivation.

Once you track your sleep, you know where you are in the range of sleep satisfaction.

This may prompt you to find time to sleep more or ways to sleep better. For example, these diagrams reveal a regular sleep pattern and one disrupted by alcohol. Rack up too many of those and you’ll find that tracking can impact behavior.

{point to bottom right chart} btw, research
on this chart was really fun, till the morning after.
Before doing the data analysis, we want to remind ourselves of something. Inside the mountain of data libraries are buried under, we find people and these people are counting stuff with potential for telling compelling stories.

It’s not the data doing this, it’s the people. Obvious, isn’t it? We all know how easy it is to get a straightforward analytical question answered by our cloud-computing next generation
systems, don’t we?
This is where my slide notes say you laugh.

People in libraries still do most of manual counting and tracking (mostly in spreadsheets). Deriving stories you can visualize from this data is a challenge. We’ll talk about approaches in minute, but for now, let’s all agree that People count in this equation.
I tossed this in because it elevates the principle way above just me saying it.

Data Analysis pros are writing about the people factor all the time.

“We need to remember that behind the data are stories and inside those stories are people and those people are connected to the statistics.”

--Sarah Slobin, visual journalist at WSJ

It’s also good to note that data analysis is aimed at an audience.

You think about the people counting to compile your data and the users who want your information to meet their needs.

What perspective on our data are we
sharing? What angle do we have on our data?

Have we taken a fresh look to see what’s revealed to us and other?
Here’s the same old Acquisitions Stats everybody does. Since Year One.

Not bad, seems pretty thorough. The only trouble is the 5-member team in the unit was doing tons more than this and only they knew it.
These are the numbers that got passed up the chain.

They do a decent job of conveying collection growth and change compared year over year.

They show some staff activity by listing claims, cancellations and rushes that indicate a level of service.
We still track all these numbers in exactly the same format as before, but this doesn’t tell our whole story anymore.
To do things differently and gain some insight into our work we decided to list more detail and find ways to COUNT work that was being made invisible by the strangulating hold of traditional metrics.
We’re more than that. Remember the everydayness principle.

Here’s a more accurate view of work that goes on every day in the unit

and was ignored in reporting before we dumped acquisitions and evolved into Order Services.

Key word is services. Some of these
trackers look the same but what we track about firm and approvals

is much more detailed than before.

Approvals shipments are tracked by vendor. Shelf-ready shipments are tracked on a pass/fail basis.

We monitor vendor performance.

Fallout is counted.

Cataloging on receipt is documented religiously so we know exact quantities of our purchases

that bypass the cataloging workflow and go straight to stacks because we catalog it out-of-the-box.
Notice you see some specifics here missing from the first data collection set.

Vendor names and special workflows pop up everywhere.

Spanish/Portuguese, LC New Delhi, Marcive GPO, DVD tallies and counts.

Daily tracking and tallying of shipments processed into and out of Order Services are the norm today.

We want to capture all the hard data we can on the volume and impact of our work.
Tracker
googledocs spreadsheet

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<th>Records Loaded</th>
<th>Errors</th>
<th>Straight to Stacks</th>
<th>Fallout</th>
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Original data source - google spreadsheet for all trackers

Counts by date records, errors, straight to stacks and fallout
Tableau data store, everything we track in all units dumped here.

This is the chaos out of which we make order.
Find a story to tell

Shelf-Ready approvals AND firms: errors and fallout.

Clicking through the ton of views in Tableau makes me dizzy.

It will you too, but if you slow down and look at all the changing views
you will most likely spot something you hadn’t thought about,

even if you KNEW it all along….and where there are bumps in your road.
Beginnings and middles

Shelf ready approvals and firms - straight to stacks vs. all shipped purchases.

These measures can be combined or correlated to tell a story about what IS working just fine and
Analysis A

Happy Ending

Raw numbers in a horizontal bar graph - makes your data shout out
Get a bigger picture for perspective on your DATA....

Look at your catalogers output compared to your acquisitions cat on receipt output and show the impact

Remember to go OUTSIDE your box
to give your audience some insight into why

this activity in Acquisitions really is a boon to library users
Vizable Multivariate

<table>
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<th>Spanish/Port vendors</th>
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Shameless Plug:

Vizable is a free app that turns your data into beautiful, interactive graphs.

If you have a tablet, data, and questions, Vizable is for you.

Simply import CSV formatted EXCEL data and play around till you drop.
Nice visualization of data analysis of foreign approvals

Brings to the surface the dominance of one language cultural area over others