

I Plan to Improvise

Reflections on a Decade In Data Science

Andrew Therriault, PhD

ASA Student Research Symposium - April 2, 2022

andrewtherriault.com | twitter.com/therriaultphd | github.com/therriault

Who am I?

Hi! I'm Andrew, and I'm a data scientist.

A decade ago, I left academia and joined the “real world”.

Depending on how you count it, I've had at least 9 different jobs since then.

This is my story.



2012



2015



2018



2022

“This is my story”? Really? Why should we care?

(This is a very fair question, so let's try to tackle it head-on.)

Over the past decade, I've managed to find myself in a pretty wide range of interesting and meaningful roles, including:

- Director of Data Science for the Democratic National Committee
- Chief Data Officer for the City of Boston
- Lecturer at Harvard and Northeastern
- Civic tech startup founder

The funny thing about this journey? I didn't really plan *any* of it. At every step in the process, it was a response to the present moment, nothing more.

Along the way, I've learned a lot about how to find my own path, and I hope that sharing some of those lessons will help you find yours.

But also... let's talk about privilege for a minute.

I'm a highly-educated, hetero, white, cis male who was born middle-class in the US in the 1980s.

Even if it hasn't always been easy, lots of others have had a harder time getting ahead in this field than I have.

Many of you will face challenges I didn't, and pretending otherwise won't make these problems go away.

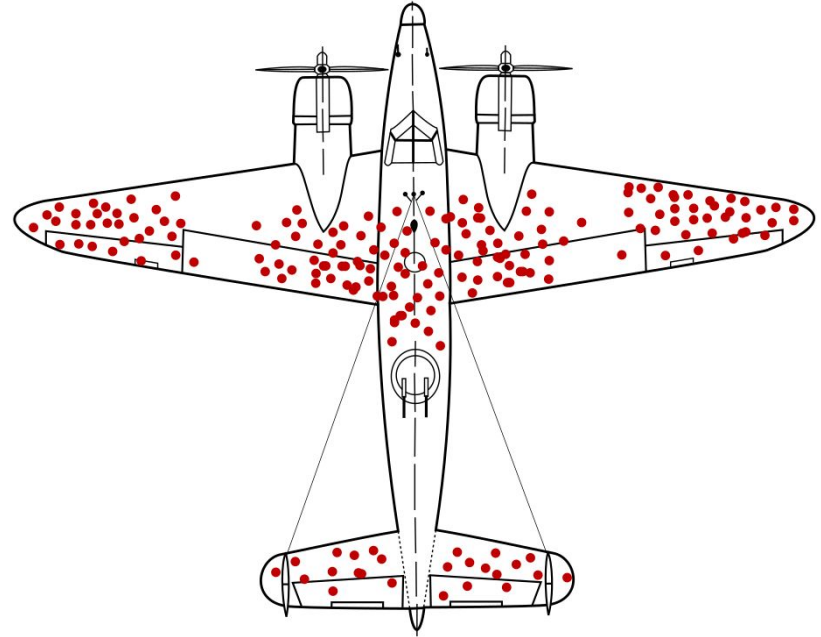


Illustration of hypothetical damage pattern on a WW2 bomber. Based on a not-illustrated report by Abraham Wald (1943), picture concept by Cameron Moll (2005), new version by McGeddon based on a Lockheed PV-1 Ventura drawing (2016), vector file by Martin Grandjean (2021).
<https://commons.wikimedia.org/wiki/File:Survivorship-bias.svg>

So what's the plan?

- We're going to start chronologically, looking at each of the roles I've had and thinking about, how I got there, what I did, and why I moved on
- From there, we'll see what lessons you can take from those examples, and how to apply them in your own lives
- I'll end with some final thoughts that may prove helpful as you get ready to start your careers
- We'll save some time for questions at the end

Sound good? Then let's get started...

**What Exactly Have I Been Doing
With My Life For the Past 10 Years?**

Preface

After working on the 2004 presidential campaign, I decided to go to grad school for political science, and started my PhD at NYU in 2006. My research focused on political campaigns, public opinion, quantitative analysis, experimental research, and survey methodology.

I graduated in 2011 and started a one-year postdoc at Vanderbilt. That fall, I applied for ~50 academic jobs, and after 6 months I had just 2 interviews and 0 offers to show for it.

So in May of 2012, I decided it was time to pack up the car and hit the road...

2012-13: Pivotal Targeting / Lightbox Analytics

What I did:

Research and business development for an analytics startup focused on political and public sector projects.

How I got there:

The founder was a professor at Caltech I knew through the political methodology community.

Why I moved on:

The company wasn't doing well, so when I got an offer to go work for one of our clients, I took it.



2013-14: Greenberg Quinlan Rosner Research

What I did:

Senior data scientist on the analytics team for one of the Democratic Party's leading polling firms.

How I got there:

They were a consulting client in my previous role, and after mentioning that I was thinking of moving back east, they made me a job offer 2 days later.

Why I moved on:

The DNC made me an offer I couldn't refuse.



2014-16: Democratic National Committee

What I did:

Built the Democratic Party's first in-house data science team, which developed tools used by thousands of Democratic campaigns across the country and supported the party's own voter contact and fundraising efforts.

How I got there:

I was introduced to the DNC Tech leadership by a partner at an analytics firm I'd talked to about a job the year before.

Why I moved on:

Like many things related to 2016... it's complicated.



2016-18: City of Boston

What I did:

Appointed as the city's Chief Data Officer, leading the Analytics Team and providing guidance for data initiatives across all areas of city government

How I got there:

Saw the job posting, then mentioned it at a birthday party to a friend who turned out to be friends with the city's CIO and made an introduction

Why I moved on:

After the CIO and the mayor's Chief of Staff both left, support for new initiatives dried up and I hit a wall in terms of what we could accomplish. (Also, some personal reasons.)



2018-19: Facebook

What I did:

Manager for the Boston-based contingent of Facebook's Infrastructure Data Science team.

How I got there:

Recruited by a friend I knew through the data science community on Twitter who worked on the team.

Why I moved on:

Despite a lot of positive aspects of the position, I just couldn't be satisfied in a job where I didn't really care about the subject matter or the impact of the work.



2019-???: Independent Consulting

What I did:

Data science and strategy consultant for various clients, mostly in politics and the public sector

How I got there:

Lined up a couple projects soon after deciding to leave Facebook, and several more later. Nearly all clients were through people in my professional network (directly or indirectly), but a few others knew me only by reputation and reached out directly.

Why I moved on:

Technically still doing it, but currently all my consulting is done through my company.



2019-???: Harvard & Northeastern

What I did:

Taught original data science courses to graduate and undergraduate students in three different programs.

How I got there:

One program director knew me by reputation and reached out. Another knew me from a guest lecture I gave during my time at City Hall. And for the third program, I'd already been an advisor to the department for several years based on my work in politics and academia.

Why I moved on:

Still teaching, though only periodically due to bandwidth.



2020-???: Civin

What I did:

Lead a civic tech startup which provides consulting services focused on local government data programs and is currently developing its own civic data software platform.

How I got there:

After several informal early-pandemic calls with my former CDO counterpart in San Diego, we decided to start a company, and our launch client was one of my freelance consulting clients.


Why I moved on:

N/A. We're still going (and even growing!).

CIVIN *Trusted Partners for Civic Innovation*

We created Civin to help state and local governments and other public sector agencies make the most of their data and technology.

Read below for details on how we can help, and [reach out to us](#) to talk more about what we can do.



Get the latest updates from Civin by signing up for our email list:

Sign Up

...but what does it all mean?

Lesson 1:

You cannot see or control the future. You can only create the conditions that make success more likely, and then make the most of whatever opportunities present themselves to you.

Lesson 2:

Look for opportunities to work in a subject area that you care about and develop your own unique expertise.

Lesson 3:

Spend time building your professional network and image, through conferences, meetups, blogs, social media, etc.

Lesson 4:

Develop personal connections within your professional network, because those are the ones that will prove most valuable over the long term.

Lesson 5:

Your next job is almost certainly not going to be your last job, so don't demand perfection – sometimes a job is just a job, and that's OK.

Lesson 6:

Be intentional about your choice to stay in a job or leave, and when the time comes to go, choose your next steps carefully but not timidly.

Lesson 7:

You are going to have setbacks, failures, and bad surprises, so don't overreact when things don't go as planned. Just learn and adapt.

Lesson 8:

Your reputation will follow you around forever and shape your career in ways you can't foresee. Always be the sort of colleague people want to work with again and recommend to others.

A few last thoughts

- As you start making plans:
 - Your ideal career could (and should) look quite different from mine
 - Think about your core values, and make choices that align with those
 - When deciding what you want out of your career, remember to include your non-work goals in those calculations
- Once you're on your way:
 - Recognize that there's a limit to how much you can control about your career, and be ready to change course if and when you need to
 - Be sure to pace yourself, prioritize your well-being, and be wary of burnout
 - When you do get to the point where you've found some success for yourself, remember to pay it forward and help others find theirs

**One final request: remember to have
some fun along the way. Good luck!**

*Find me on Twitter @therriaultphd or email andrew@civin.co
Slides are available at <https://github.com/therriault/slides>*
