

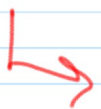
Analysis Plan

- Uncertainty is one of the principal characteristics of data science work.
- If nothing were uncertain, a data scientist wouldn't have to explore, hypothesize, assess, discover or otherwise scientific methods to solve problems.
- If all of our Projects consisted only of absolute certainty, there would be no sign of statistics in Data Science.

"

Every Data Science Project comprises of a series of open questions that are subsequently answered through the Scientific Process. "

- For new Data Science Practitioners, it's quite a fun to load data, clean it, explore random things & run models. But unfortunately when you have an infinite number of ways to summarize model data, you can end up spending weeks working with data only to discover that nothing you've produced answers the business question that was proposed.



Realization that you haven't done something relevant is worst feeling.

Solution

Have a **GUARDRAIL** — The Analysis Plan

↳ 1. Spend time Understanding the data.

2. Write down everything you plan on doing with Data.

⇒ Think of this as a tentative route through a city with streets that are Constantly under construction

↳ You know where you'd like to go & few ways to get there but at every intersection, there might be road closed, there might be bad traffic etc.

↳ You'll have to make decisions as you arrive at these obstacles.

→ Have an **OUTLINE** of a few things you **WANT TO DO**.

→ Keep **TRACK** of how much you have **COMPLETED**.

- When you've done everything on the plan, you're done ✓
- You're not only have a way of knowing whether you're off the plan but you have a tool for tracking progress & keeping yourself accountable.

" Make a Linear Regression on Sales By Region. "

VS

" Find out why sales are down. "



You Can Write Code & Do that



Not easy to do right away

! MAKE SURE ALL TASKS ARE ACTIONABLE

If the tasks you have laid out in your Action Plan are not Actionable then it is not going to be easy to tell if you are making progress.

- Making your tasks actionable will make you tell easily whether you're making progress towards the end goal.
- It's also going to make doing analysis easier because you don't have to worry about what to do next.
- Remember to be flexible!



It would be a mistake not to consider new information as it arrives.

- It's a good idea to:-
 - Pause Periodically throughout Project
 - Take stock of Everything You've Learned
 - Consider **New** information in context of **LARGER GOALS**.
- It's likely that as you do the analysis, you realize that you left something important out of the plan.
 - ↳ Also you may come up with new idea.
- Analysis plan is useful because it creates a conversation around what to remove instead of making you attempt to do an impossible amount of work.
- Once you have created the analysis plan, make sure that it's included at the top level of a repository.
 - ↳ By including an analysis plan as part of your portfolio project, you are gonna give yourself a clear sense of direction.
 - ↳ It's also a HUGE signal for Hiring Managers as it shows that you are able to think through ambiguity.