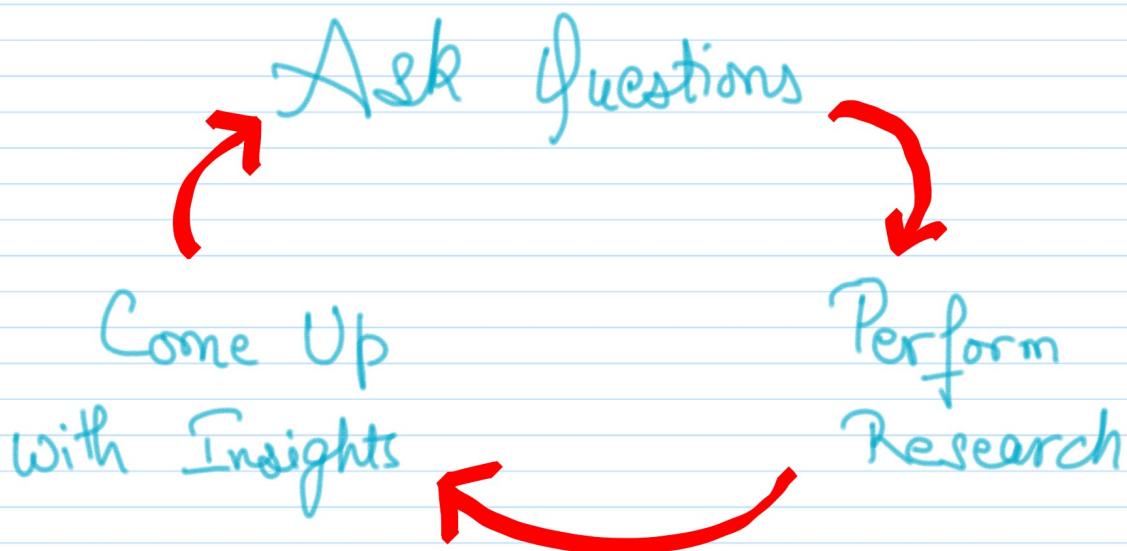


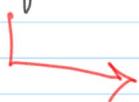
# EMBRACE AMBIGUITY

X Data Science doesn't mean applying scientific methods directly!

→ At the core of using scientific method, there is a loop of discovery.



→ One need to be flexible to changes, whether its a change in assumption or question.



This means rather than always trying to find right answers, you need to look for

VALUABLE & interesting questions.

→ Data Science isn't a concrete plan. You need :-

- Adaptability
- Exploration
- Creativity

- A good data Scientist is Curious , they notice things out of place in environment & ask **WHY?**. To them the world & everything in it is a **DATA!**
- They have an ability to be fascinated by the ordinary & the willingness to understand context & processes.
- The **LOVE OF EXPLORING** is key to success in a data science career.
- The love of **EXPERIMENTING & REFINING** is key to the data science mindset.
- You've got to cultivate a sense of joy when working with ambiguity & asking question & trying to understand situation.

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Don't crave for planning & objectives or Certainty. There is no hand holding design work because someone else isn't going to think & question out of box for you!

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Re-wire how you think about work.

# Data Science $\neq$ Planning

- Nature of Data Science is experimental.
- You don't know the answers to the question unless you get in there & start exploring. You won't know how long will it take to produce the result right at the start.
- The easiest approach to work on is to come up with an idea & work on it.
- Companies give you paychecks for giving insights into your progress & this is what working in data science different.

## Typical Project :-

Most software developers speak fluent Project Management

- Software Requirements
- Project Scope
- GANTT Charts / Schedule

There is a natural tendency for these developers to follow project management practices.

Here Project Management defines a PROCESS!

A defined product / service is delivered.

# DATA SCIENCE PROJECT

Project Management is not Absent but it has different goals & Processes.

- A data scientist looks for new opportunities. Focus is on:
  - Knowledge
  - Exploration
  - Delivering Insights
- Your projects involve learning by looking, learning by exploring, learning by getting your hands dirty.

**X** If you stick to a Rigid Process

↳ you discover what you **ALREADY KNOW!**

- You are going to run many experiments on the data & most of the experiments will be **failure** or **dead ends**.
- Start getting comfortable with the fact that not every experiment will lead you to an **insight**.
- Data Science is **EMPIRICAL**, you don't always know what you will find! You might not even know what you are looking for.

→ You have to focus on Interesting Questions



Create a feedback loop to make sure those questions are tied to business value.

→ Sometimes you will feel like ...

"what is it we are trying to accomplish with our work?"

This Don't think in terms of milestones or deliverables but in terms of Goals. Define your boundaries & goals and have freedom to wander within those boundaries with questions & experiment with possible answers to your questions.

In short,

Data Science is ambiguous, you're not gonna know what you are up against until you start getting your hands dirty.

Give yourself a certain amount of time to perform.