- Now we'll focus on formulating

of any data science project.

By following the explained set of steps,

you can formulate better questions to solve

using analytical skills

and link them to scientific and business value.

a well stated data science problem.

After this video

you will be able to describe the ingredients

to formulate a science problem,

list some questions others ask

to get value out of their data,

and formulate the right questions

to guide your data science process.

The first step in any process

is to define what it is you're trying to tackle.

What is the problem that needs to be addressed

or the opportunity that needs to be asserted?

Without this,

you won't have a clear goal in mind

or know when you've solved your problem.

An example question is

how can sales figures in call center logs

become viable to evaluate any product?

Or in a manufacturing process,

how can data from multiple sensors on an equipment

be used to detect equipment failure?

How can we understand our customers

and market better to achieve effective targeted marketing?

Next,

you need to assess the situation

with respect to the problem or opportunity

you have defined.

This is a step where you need to exercise caution,

analyzing risks, costs, benefits,

contingencies, regulations,

resources and requirements of the situation.

What are the requirements of the problem?

What are the assumptions and constraints?

What resources are available to you?

This is terms of both personnel and capital

such as computer systems, equipment etc.

What are the main costs associated with this project?

What are the potential benefits?

What risks are there in pursuing a project?

What are the contingencies to potential risks?

Answers to these questions

will help you get a better overview

of the situation and better understanding

of what the project involves

and how you will guide your programming to solve the project

with all these in mind.

Then, you need to define your goals and objectives.

Defining success criteria

is also very important.

What do you hope to achieve by the end of this project?

Having clear goals and success criteria

will help you to assess the project

throughout its lifecycle.

Once you know the problem you want to address

and understand the constraints and goals,

then you can formulate the plan

to come up with the answer

that is the solution to your business problem

or the analytics you are trying to achieve.

As a summary,

defining the questions you're looking to find answers for

is a huge factor contributing to the success