

BDM Capstone Project Document for Term 3- September 2023 students

This document has been prepared jointly by **Dr. Aaditya Chandel, Dr. Ashwin J. Baliga** and **Dr. Hariharan T.S.** All have contributed equally towards the preparation of this document.

This document has been created in addition to the Rubrics, FAQs, Document sent on 7th of Nov (What is a Capstone project? Why do we do it?), the live sessions and the reference books, to facilitate better understanding.

Any report submitted without name and or roll number is desk rejected!

Every submission should strictly adhere to the rubrics. If it doesn't adhere to, you end up losing marks. Format and structure your reports, the way we have done here.

We would prefer Times New Roman 12, 1.5 spacing and left/ right justification of fonts. Also, you need to ensure that the report is written well and do not mix active/ passive voice. Project is not just showing data set and graphs. A good report should explain all the elements in a very neat manner. Using commas and full stops wherever possible. Also, ensure you connect one section with the next. There has to be a connect when you move from one paragraph to the next.

Every project should have a title and it should look professional and at the same time communicate what it intends to.

Sample Titles:

1. Optimizing the Customer Support Workflow of an E-Learning Programme
2. Price Prediction and Demand Forecasting for an Industrial Scrap Trading Company

The titles are extremely important because this catches reader's interest. Do not write calculating the profits for a Idli Vada Shop, Increasing performance of ABC company etc! This would really look weird at first glance.

Now once this is done, the second step is to write an **executive summary**

An executive summary tells the reader what the key points in the report are. It includes the following: purpose of the report, major points, brief descriptions of the results/ conclusions/ recommendations. So essentially, you write an executive summary of the business for which you are doing this project.

Never say I will find loopholes and help increase the firm sale! You can never solve all the problems. Remember the solution you give is always a small drop in the ocean. You can always mention that this project will enable the organization to identify the bottlenecks and the solutions provided would help them tackle few of the issue(s).

The next thing is to provide information on the **background of the company**

Mention about the company and its inception, the founders, net worth, more about the organization structure, what are the offerings (products/ services), number of employees, locations they are into, the mission and the vision statement (if available) etc.

The third step is to **clearly define the problem statement**

You will uncover this upon discussion with the owner(s). Do not directly ask them, as to what their problem is. It's a step-by-step process.

Be polite (give a firm shake hand, request for permission to speak/ sit/ make notes). Be empathetic (Introduce yourself) and then be professional (set the agenda as to why you are meeting them). Ask more about their offerings and then about the situation of the industry, followed by the problem. Check as to what they have done to resolve the same and if unresolved the reasons for it. As you follow this process and ask good open ended probing questions, you are likely to arrive at your problem statement.

Mention the objectives. This should be in line with the problem statement.

Sample Objectives

1. To improve the efficiency of the existing system in closing customer requests.
2. To determine the important strategies that contribute to relationship building in business markets.

In objectives, never state as to how you will resolve the problem. It is the objectives that determine the methodology and not the other way round.

Once this is done provide information on how you plan to collect the data. This is referred to as **Data collection process.**

What kind of data you would collect?

Essentially the data collected should be in line with the problem statement/ objectives.

Let us say, the firm is facing constant stockouts. In this case, you will require details on the following: Opening stock, closing stock, Buying Price, Selling Price, Demand, Forecast, EOQ, Lead time and many other variables.

Once you get sufficient variables, you decide what to do/ plot, in line with the problem statement/ objectives. Don't draw Pareto charts. Generally owners are aware of 20% issues → 80% problems.

Some sample graphs (Always name them, since its for illustration I haven't named it)

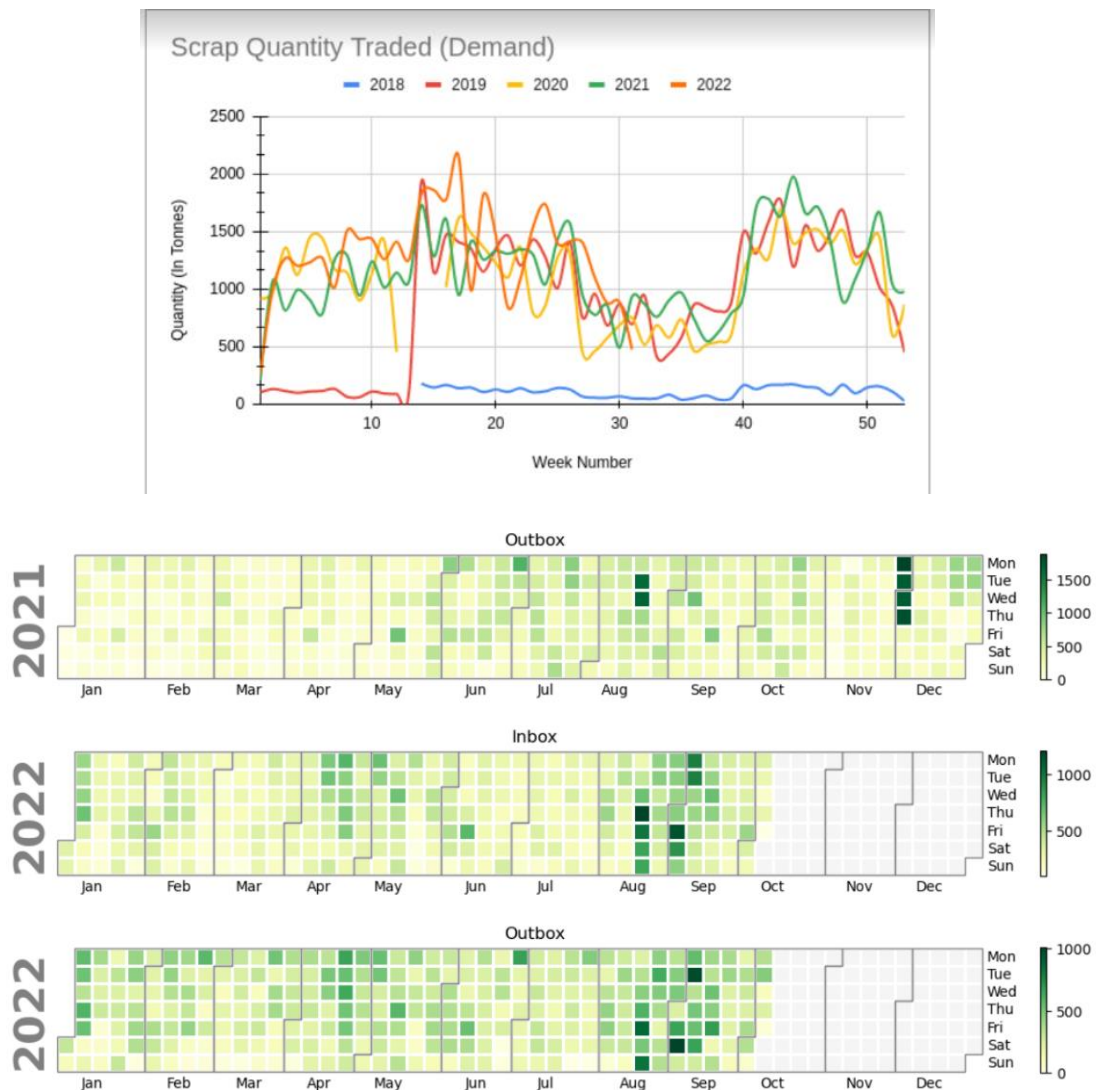


Figure 1. Daily email activity from 2020 to 2022

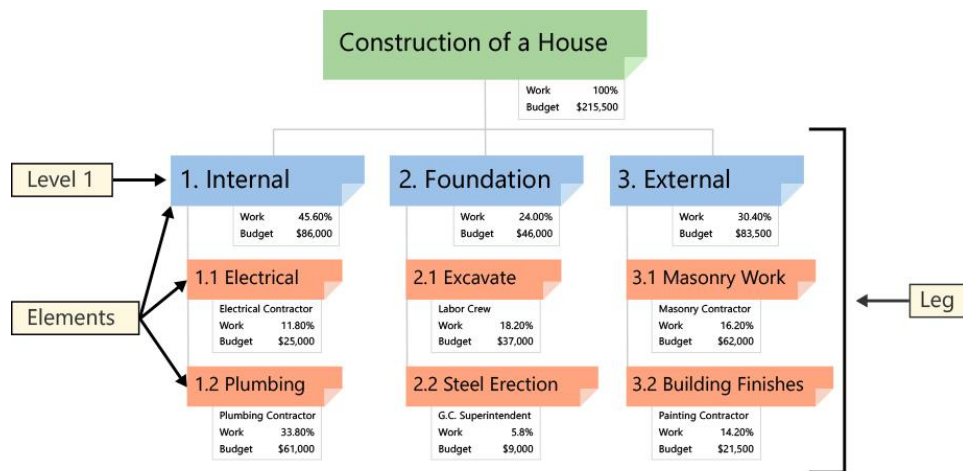
Graph Source: Student projects from Term 2, Cherian Varghese and Jaidev Deshpande

Expected timelines

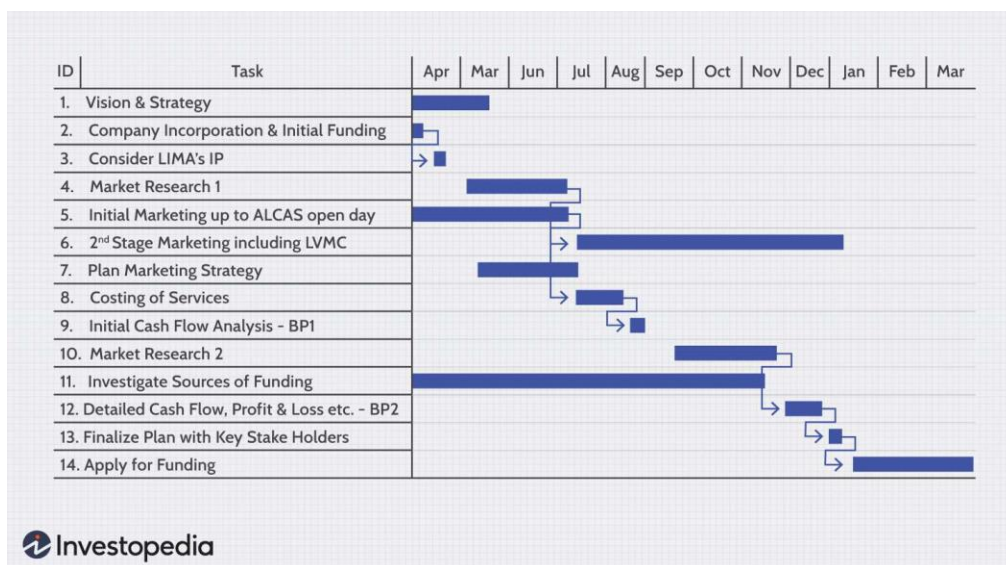
It is always advised that you use a Work Breakdown structure (WBS) and a Gantt Chart, to explain this.

A simple search online will help you understand this. Typically, in this section you breakdown your jobs and tell the reader, what and when you will accomplish the tasks. In this case your project. For instance, data collection- 2months (mention dates), final submission (3 months) and give a breakup of work you intend to do.

Sample WBS, Source: Internet



Sample Gantt Chart, Source: Internet



Expected outcomes

Here you mention what are the deliverables that would be provided. The likely implications/ insights you expect from the project.

Remember that these insights should come from the graphs, which you have done based on analyzing data and not by intuition.

Am sure this will help you in your submissions. Projects we expect you to go back and have a look at all resources we have shared and then attempt.

Merely drawing graphs, pareto and poor writing doesn't serve the purpose. We wish you all the best.

-----End of the report-----

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