Data Analytics Process

1. Cooking:

One of the examples of a real-world activity that can be connected to the data analytics process is cooking. Like data analytics, every cooking stage requires planning, preparing, analyzing, and acting. This is how it works:

i. Plan:

- Before cooking, we need to decide what we want to cook. For example, meal, curry, biryani, dessert, or light snacks.
- Next, we need to make a list of all the ingredients required to prepare the dish. Also, check if the ingredients are already at home or if we need to buy them.

ii. Prepare:

- Once we have a plan, gather everything that needs to begin cooking.
- Make sure we have the right utensils and equipment. For example, knives, pans, spoons, and mixers.
- Prepare all the ingredients, wash the vegetables, chop them, and measure out the other ingredients so that everything is ready to cook.

iii. Process:

- This is where the actual cooking happens. We can start cooking by following the recipe instructions step by step whether boiling the vegetables or frying lightly in the pan.
- Observe how long each step takes to cook. It is important to keep track of time so the food cooks properly and does not get overcooked or undercooked.
- Add ingredients in the correct order and keep everything organized while cooking.

iv. Analyze:

- Throughout the cooking process, we need to evaluate how things are going. We need to check the taste of the dish at different stages for seasoning, texture, and flavor balance.
- Based on our analysis, we might need to add more salt, adjust the spice level, or increase the cooking time to ensure the dish turns out well.

v. Share:

- Once the dish is ready. We can share with others and ask for their feedback.

vi. Act:

- Finally, the last steps to complete the cooking process. We might make some final adjustments based on the feedback or our own taste test.
- Enjoy the dish with friends and family.

2. Exam Preparation Planning:

Exam preparation planning is crucial for achieving academic success. Without a clear strategy, it is easy to get poor time management, leading to ineffective study, and unnecessary stress. A study is more effective when it follows proper data analysis procedures.

i. Plan:

- For the exam we need to cover a lot of subjects. First, we need to determine How much time we have before the exam.
- How much time will each subject take?
- Should we start with the easiest subject or the toughest one?
- Which topics should be covered from the subject?

ii. Prepare:

- Collect the necessary materials such as textbooks, notes, previous year question papers, etc.
- Create a proper timetable and a list of subjects or topics that need more focus.

iii. Process:

- Prioritize subjects that require more attention or are less familiar with, so we can improve in those areas.
- Divide the syllabus into smaller sections. This helps us focus on one part at a time.
- Allocate sufficient time to each subject based on its importance and level of difficulty.

iv. Analyze:

- Evaluate progress after each study session by taking practice tests or quizzes.
- Identify which areas still need improvement or which topics are already well-understood.
- Use this analysis to adjust the study schedule, giving more time to weak areas and less time to strong areas.

v. Share:

- Discuss the topics or subjects with classmates, teachers, or mentors. Get their feedback on any areas you might have missed and ask for tips on how to study better.
- For group studies, share your progress and ideas with your peers to ensure everyone is on the same page.

vi. Act:

- Act on your revised study schedule. Keep studying with the new insights you have gained, focusing on the areas where you need to improve.
- Your study approach will have been optimized based on feedback and analysis by the time you take the final exam.

3. Project Planning:

Another procedure that closely relates to the data analytics framework is project planning. The project planning process can be mapped to the following stages using the data analytics process:

i. Plan:

- Identifying the project's purpose, goals, and objectives is the first step in any project.
- Next, it is important to clearly define the scope of the project, outlining what is included and what is not.
- Then, we need to set a specific and measurable goal, including deadlines for when each goal needs to be achieved.
- Finally, we need to identify the tools and resources required to successfully complete the project.

ii. Prepare:

- In this stage, we need to gather all the necessary resources and information to start the project.
- First, we need to break down the project into smaller, manageable tasks, such as research, design, development, testing, and documentation. This makes the project easier to handle.
- Then, we need to assign specific tasks to each team member based on their skills and strengths, ensuring that everyone knows their responsibilities and can work efficiently towards the project's goals.

iii. Process:

- This stage focuses on organizing and scheduling tasks. We need to make a clear project schedule, setting deadlines for each task
- Next, we need to arrange tasks based on their importance and the order in which they need to be done.

iv. Analyze:

- Throughout the project, we need to monitor progress and performance. We should check whether tasks are being completed on time or not.
- Based on that, we must adjust the timeline. If any necessary changes are needed, we must modify the plan accordingly.

v. Share:

- Communication is essential throughout the project. We must update team members on progress, challenges, and changes.
- We must get feedback from the team, guide, and project coordinator to ensure everything is on track.

vi. Act:

- At the end, we must ensure that tasks are completed on time and that the final product is delivered as scheduled.
- After that, review the project’s overall performance. Determine any issues or areas for improvement.
- Finally, complete all necessary paperwork, hand over the final product, and officially close the project.