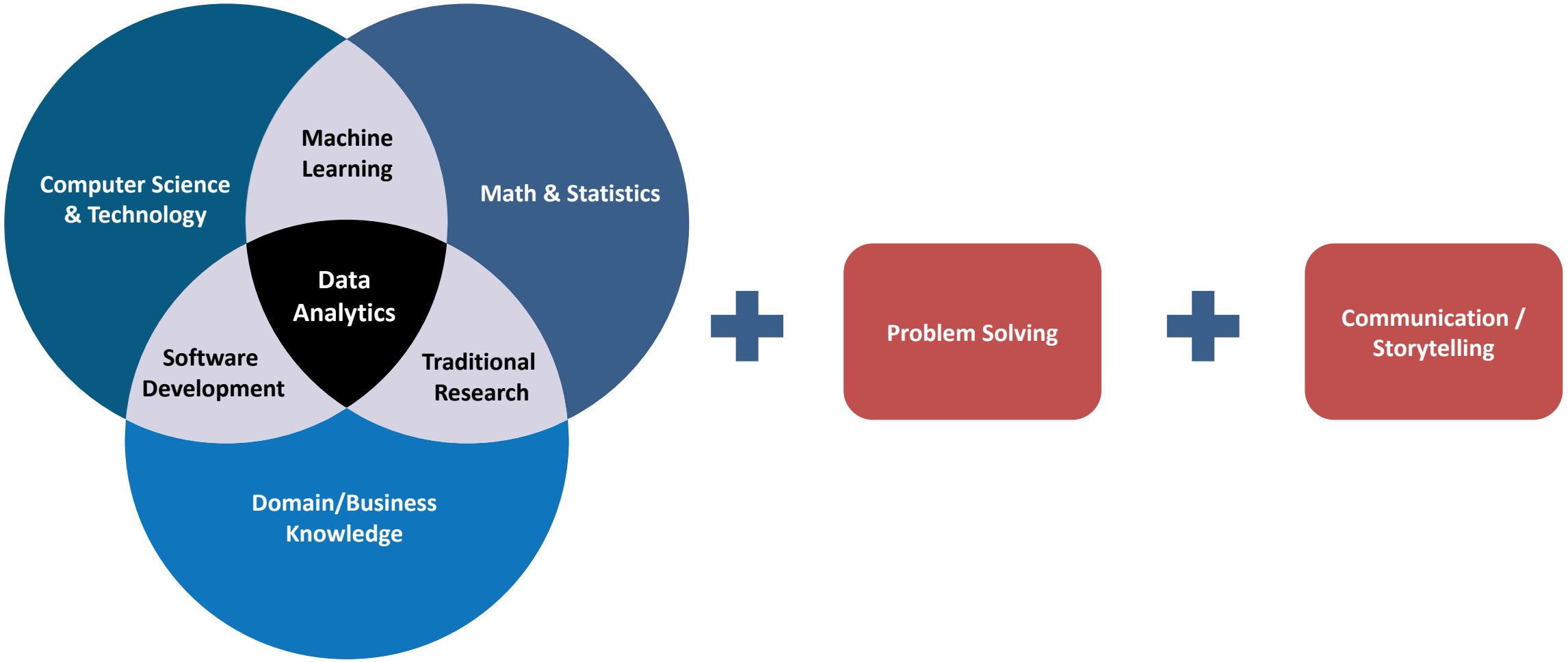
MLS-1: Analytics Lifecycle

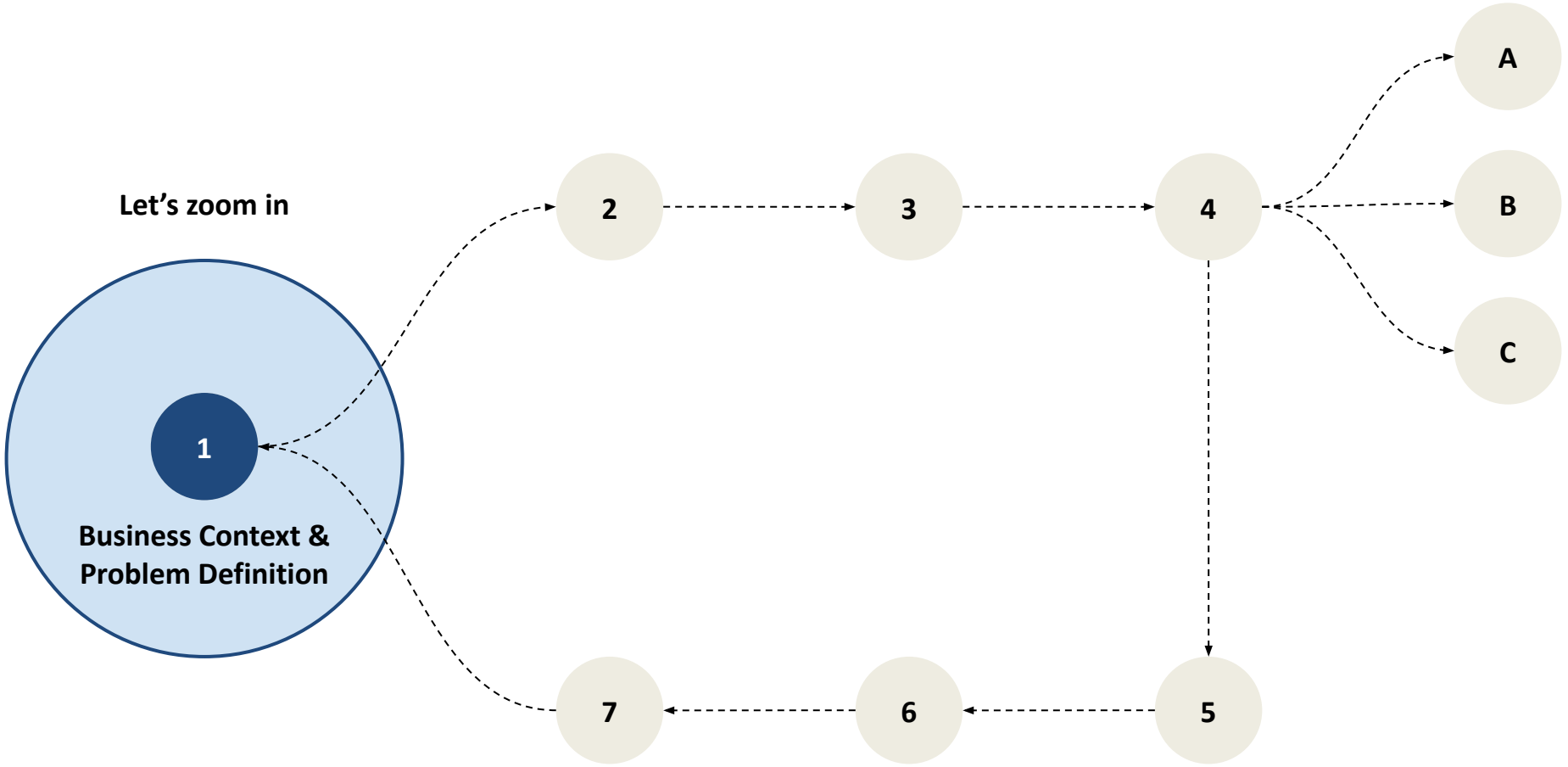
Agenda

1. Brainstorming about Analytics lifecycle
2. Explaining the Business context & Objective
3. Exploring the data in MySQL Database
4. Exploratory Data Analysis using python(Google Colab)
5. Storytelling Using Tableau Dashboard
6. Q&A
7. Summary

Introduction to Analytics



Analytics Lifecycle - How business problems are solved?



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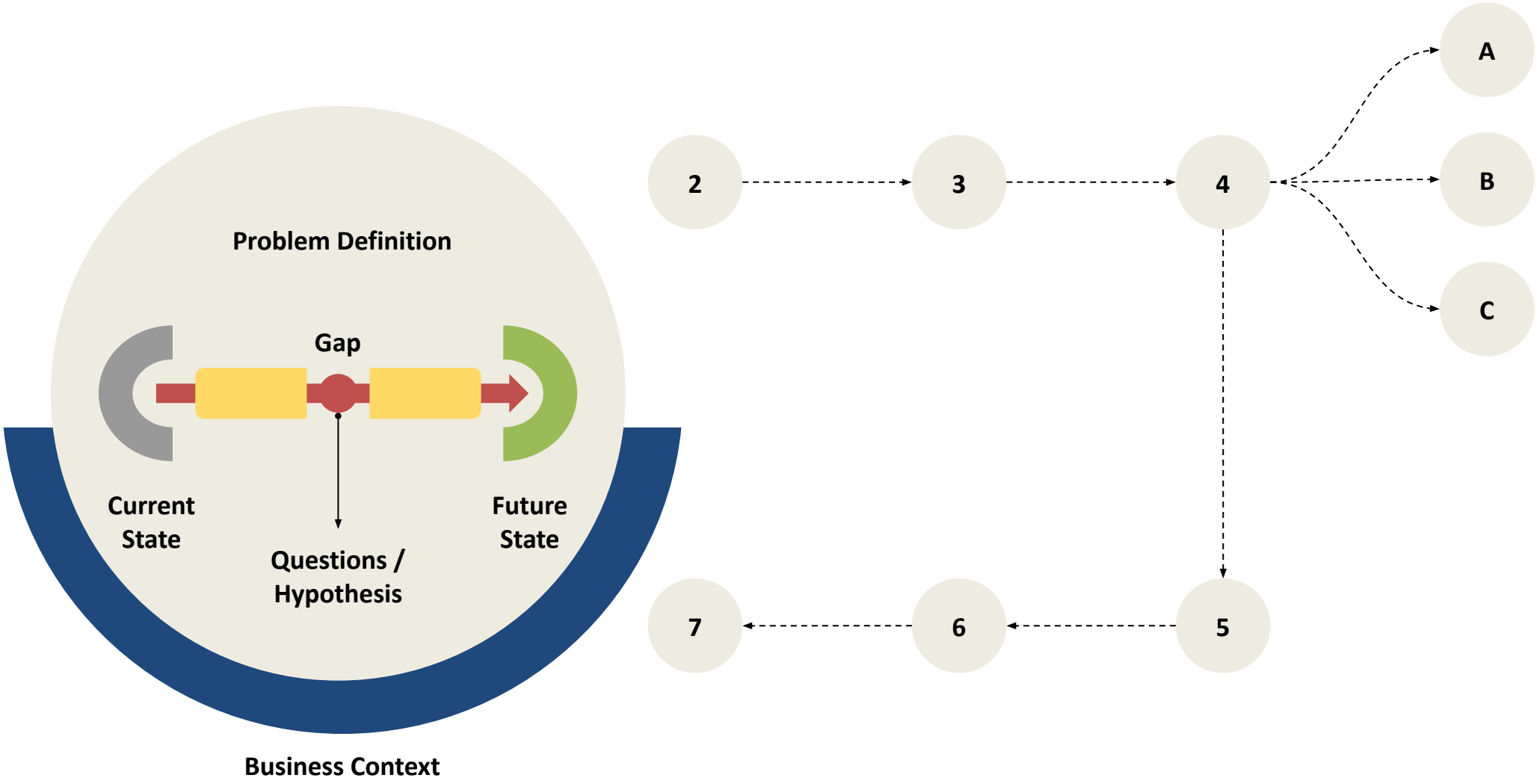
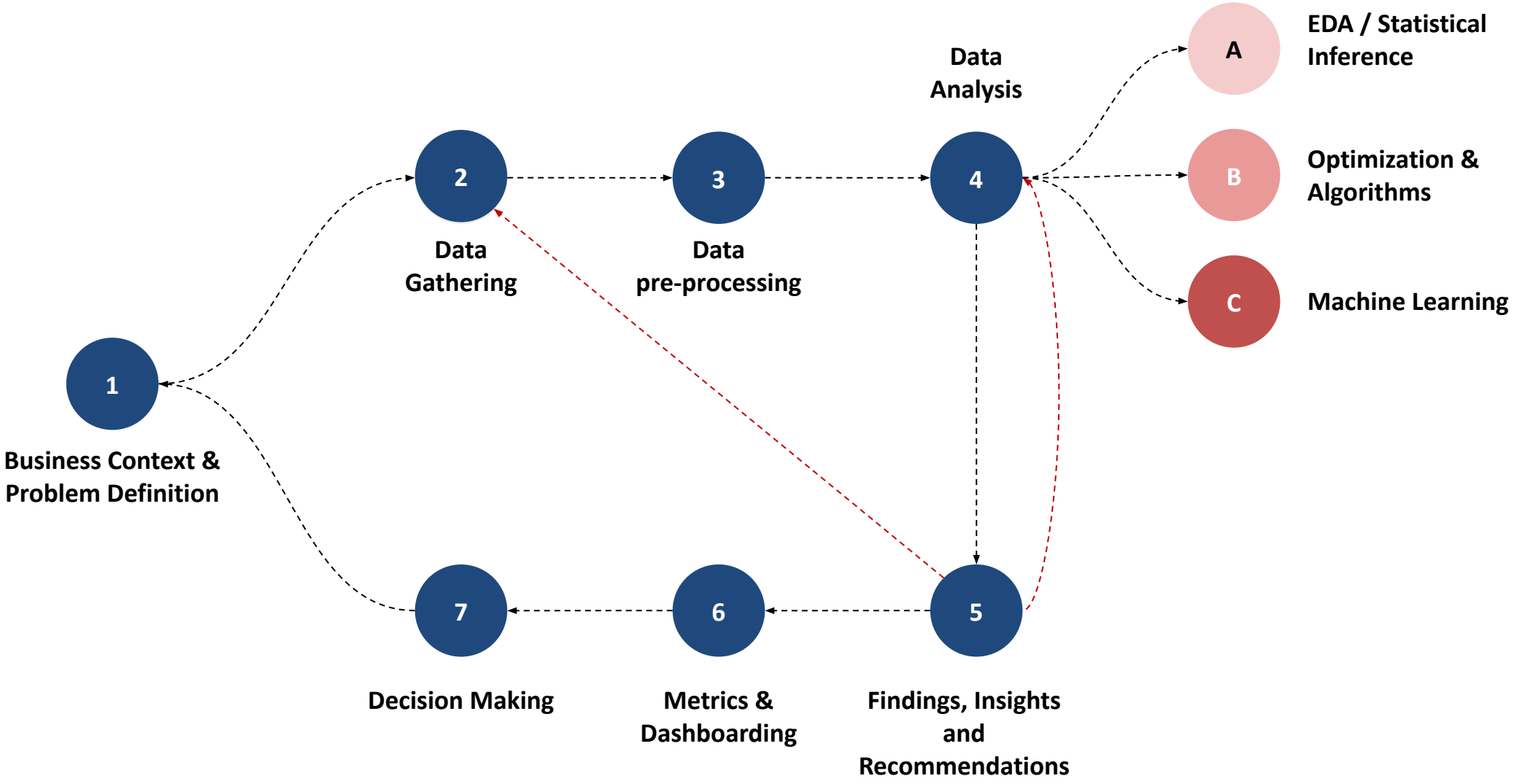


Analytics Lifecycle - How business problems are solved?



Business Context & Objective

E-kart is one of the e-commerce platforms that have multiple products listed on its website. Currently, “E-kart” is doing well and they have achieved their target from the previous financial year. In order to achieve the target for the next financial year one of the objectives is to target the current active customer behavior on the platform so that the company can strategize on generating revenue through selling the product & advertising well. On the uber level, CXO wants to generate revenue via two methods.

1. Understand my customer base - who are my customers, get RFM - Recency, Frequency, Monetary - what are the distinct segments of customers & what is their lifetime value
2. Depending on the customer's behavior - (1) schedule notifications at the right time w/ popular product categories and (2) control personalized discounts based on customers' value and purchasing patterns

Note: ***The objective of this week is to experience how businesses use Data Analytics tools & technologies to solve problems. Rather that going deep into the code & syntax, focus on the process and results as we will be covering those concepts in the upcoming weeks***

You will learn HOW to do things in the upcoming weeks in the learning journey

Solution Approach

Data Understanding and Pre-processing

- The data related to E-kart is stored SQL dump file. Load the data into the database
- Do the data cleaning, Data preprocessing in MySQL and export the final Data for EDA.

Exploratory Data Analysis & Insight Generation

- Exported Data from the Database should be used here in order to answer the business questions
- Get the Statistical inference, Univariate analysis and finally answer business questions

Storytelling & Dashboarding

- Use the data from EDA to create interactive dashboard in order to measure the business KPI & understand the customer behaviour and track the same

Tableau Dashboard - Description for the chart title

1. #Customer : Total number of customer
2. #Active users : Total number customer based on average days between the purchase (Considering active only till 14 days)
3. #In-active customers : Total number of customers since last purchase (Considering customer who haven't purchased for more than 56 days)
4. Average Order Value : From the total purchase made what is the average value of the product order by all customers.
5. Occupation_X_Customer: Distribution of customer across occupation
6. Age_X_Customer : Distribution of customer across age
7. Customer Frequency : Distribution of frequent customers bucket to the revenue contribution for those customer frequency
8. Customer_X_revenue : Customers who contributed a high, medium, or low percentage of the revenue

Power Ahead!