Case Study

1. Problem Statement - An e-commerce company, ABC, offers a wide range of products and services to its customers.

Problem Definition – Company ABC being an e-commerce company is offering many services to the world. The services help them find and purchase the products they need.

Complexity - As a result of globalization and the scope concerned, the company is struggling to manage customer service operations effectively and efficiently. The company is not able to handle the high volumes of customer inquiries from mails, calls, and social media.

How to reduce complexity – The company needs to streamline their customer queries. This involves making sure the company has enough staff, with the required skills and available at the right time. Tracking performance metrics like customer satisfaction, response time, etc. can help to.

Flow charts can help with managing customer services by including steps involved in handling queries through multiple channels.

Pseudo code could be developed to determine the appropriate staffing levels based on historical inquiry volume data, seasonality, and other factors.

An algorithm can help automate decision-making and ensure that the right number of staff is available at the right time.

1. Problem statement – A small business which focuses on making customized textile products for its customers.

Problem Definition - An Instagram Small business manufactures and sells customized clothes for its customers. They have a catalogue of products ranging from t-shirts, to bottom wear, to wearable accessories.

Complexity – The complex part is that the company is unable to efficiently process the custom orders and their details, resulting in lower customer satisfaction rates and delayed deliveries, which in turn greatly affects their sales.

How to reduce the complexity – The company needs to ensure that they have proper inventory of the textile material needed, with enough craftsman to work and an accountable delivery system.

Flowcharts can be used to visualize the production process, to help understand the root cause of the problem.

Pseudo codes and algorithms can be used to help automate parts of the production process such as colour matching.