

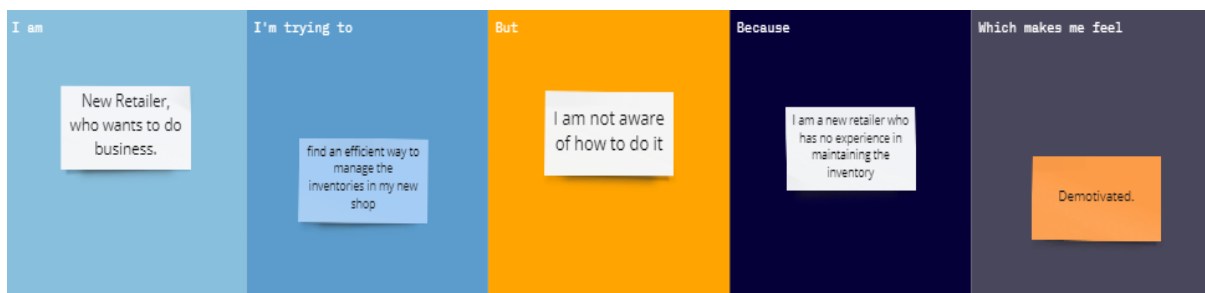
**IDEATION PHASE  
PROBLEM STATEMENT**

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|---------------|--|
| DATE          | 19 September 2022                            |
| TEAM ID       | PNT2022TMID27847                             |
| TEAM LEADER   | SHRIAKILANDESWARI R                          |
| TEAM MEMBERS  | DHARSHINI K<br>HARIPRIYA G<br>KARPAGAVALLI S |
| DOMAIN NAME   | RETAIL AND E-COMMERCE                        |
| PROJECT NAME  | RETAIL STORE STOCK INVENTORY ANALYTICS       |
| MAXIMUM MARKS | 2 Marks                                      |

**PROBLEM STATEMENT:**

Inventories are necessary for sales, which generate profits and poor management of inventories results in excess inventory, resulting in a lower return on capital invested, affecting the cash conversion cycle. The approximate cost to hold inventory is very high, so maintaining excessive levels of inventories can ruin the business, as they have to reduce prices and absorb losses, and if missing could reduce sales, now maintain inventory levels according to sales forecasts. Good planning and sales forecast before setting optimal inventory levels, appropriate inventory management requires close coordination between the areas of sales, purchasing and finance. It is very important to take into account in managing inventory items that deserve more attention according to sales performance. Taking into account maintenance costs, order costs, shipment costs incurred inventory shortages and deterioration caused by their mismanagement. The problem faced by the retailers is they do not have any systematic system to record and keep their inventory data. It is difficult for the owner to record the inventory data quickly and safely because they only keep it in the logbook and not properly organized.

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|---|--|
| Who does the problem affect?                  | Old/New Retailer/shop owner  |
| What are the boundaries of the problem?       | To manage the inventories and forecast the sales   |
| What is the issue?                            | It is done manually and it requires a lot of man work, time and forecasting can be done only by the experienced. |
| When does the issue occur?                    | It occurs when the actual sales are less than the received products and vice versa.                              |
| Where does the issue occur?                   | In retail industries   |
| Why is it important that we fix the problem?  | This issue affects the turnover of the industry  |
| What solution to solve this issue?            | To develop a user-friendly application for retailers   |
| What methodology was used to solve the issue? | Python with Data Analytics   |



| <b>Problem Statement (PS)</b> | <b>I am (Customer)</b>                                    | <b>I'm trying to</b>   | <b>But</b>  | <b>Because</b>   | <b>Which makes me feel</b> |
|-------------------------------|---|--|---|--|----------------------------|
| PS-1                          | Old Retailer, who has been doing business for many years. | Manage the inventories efficiently in my shop                  | It is very difficult for me to manage the inventories | I am doing it manually, which is a tedious process                     | frustrated and tired.      |
| PS-2                          | New Retailer, who wants to do business.                   | find an efficient way to manage the inventories in my new shop | I am not aware of how to do it                        | I am a new retailer who has no experience in maintaining the inventory | Demotivated.               |