

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	15 November 2023
Team ID	591834
Project Name	Walmart Store Sales Forecasting
Maximum Marks	4 Marks

#### Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

#### Reference:

<https://app.mural.co/t/walmartstoresalesforecasting3497/m/walmartstoresalesforecasting3497/1700040935580/dcc4f33a483ac5e3ea8bb6c031412d176a3600bf?sender=u49155f68b915941277b92959>

## Step-1: Team Gathering, Collaboration and Select the Problem Statement



### Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 🕒 10 minutes to prepare
- 🕒 1 hour to collaborate
- 👥 2-8 people recommended



#### Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes



#### Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.



#### Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.



#### Learn how to use the facilitation tools

Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#) →



#### Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

🕒 5 minutes

PROBLEM

How might we [your problem statement]?



#### Key rules of brainstorming

To run a smooth and productive session



Stay in topic.



Encourage wild ideas.



Defer judgment.



Listen to others.



Go for volume.



If possible, be visual.

## Step-2: Brainstorm, Idea Listing and Grouping

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### Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

#### TIP

You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

#### Person 1

- Conduct a detailed analysis to understand the specific impact of each holiday on sales.
- Integrate customer feedback into the forecasting models.
- Dynamically adjust the weights assigned to holiday weeks based on historical performance

#### Person 2

- Explore additional features that might influence sales during holidays
- Combine the strengths of multiple algorithms through ensemble modeling.
- Apply seasonal decomposition techniques to break down the time series data into trend, seasonal, and residual components.

#### Person 3

- Experiment with different time-series forecasting algorithms, such as ARIMA, Random Forest, and XgBoost.
- Develop a Flask web application for users to interact with and visualize sales forecasts.
- Deploy the sales forecasting models on the IBM Cloud for scalability and accessibility

#### Person 4

- Implement a system for continuous monitoring of model performance.
- Organize and promote community events within or near Walmart stores.
- Utilize predictive analytics to optimize the timing and magnitude of promotional markdowns

#### Person 5

- Collaborate with local influencers to promote store-specific products and events.
- Integrate online and in-store sales data for a holistic view of customer behavior
- Segment customers based on their purchasing behavior during holidays

#### Person 6

- Implement interactive displays that allow customers to explore product information and promotions.
- Provide training to store managers and staff on interpreting and utilizing sales forecasts.
- Educate customers about the significance of holiday markdown events.

## Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

### TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

### Advanced Forecasting Models

- Experiment with different time-series forecasting algorithms, such as ARIMA, Random Forest, and XgBoost.

- Combine the strengths of multiple algorithms through ensemble modeling.

- Dynamically adjust the weights assigned to holiday weeks based on historical performance.

### Customer Engagement and Education

- Educate customers about the significance of holiday markdown events.

- Integrate customer feedback into the forecasting models.

- Provide training to store managers and staff on interpreting and utilizing sales forecasts.

### Data Enhancement and Analysis

- Conduct a detailed analysis to understand the specific impact of each holiday on sales.

- Explore additional features that might influence sales during holidays.

- Apply seasonal decomposition techniques to break down the time series data into trend, seasonal, and residual components.

### Integration and Deployment

- Deploy the sales forecasting models on the IBM Cloud for scalability and accessibility.

- Develop a Flask web application for users to interact with and visualize sales forecasts.

- Implement a system for continuous monitoring of model performance.

## Step-3: Idea Prioritization

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### Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

🕒 20 minutes

#### TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H** key on the keyboard.

