Milestone 1 - Proposal

Topic:

Evaluating the Impact of Social Media Marketing on Sales Growth for EcoGlow Candles

Business Problem:

Eco Glow Candles aims to refine its social media marketing strategies to drive more sales efficiently. Given limited resources, the company must identify which social media activities yield the highest return on investment (ROI) to ensure cost-effective marketing. This project will analyze social media engagement metrics, seasonal promotions, and customer behavior data to provide actionable insights.

Datasets:

1. **Social Media Metrics Dataset** – Monthly social media engagement data from Instagram, Facebook, and Twitter, including follower growth, engagement rates, and ad spend.
2. **Sales and Seasonal Data** – Monthly sales records and seasonal promotions or events (e.g., holiday sales, new product launches).
3. **Customer Behavior Data** – Website traffic insights, such as average time on site, cart abandonment rates, and referral sources (e.g., organic search, social media).

Methods:

Correlation and regression analyses will identify relationships between social media engagement and sales. Time series analysis will reveal seasonal trends, while clustering will categorize campaigns to help pinpoint the highest ROI strategies.

Ethical Considerations:

All customer behavior data will be anonymized and aggregated to ensure data privacy. Sales and social media engagement data will remain confidential and used only for internal analysis.

Challenges/Issues:

Key challenges include:
- Achieving consistent data across social media platforms.
- Accurately isolating the impact of social media from other variables.
- Managing seasonal sales fluctuations.

Proper data preparation will mitigate these issues.

References

(Operational Reports):
1. **Monthly Social Media Engagement Report** – Prepared by the Marketing Department, detailing engagement metrics for each social platform.

2. **Monthly Sales Performance Report** – Provided by the Sales Department, documenting sales figures, promotional events, and campaign success.
3. **Website Traffic Analytics Report** – Produced by the IT and Analytics Team, offering insights into customer behavior on the website, including traffic sources, average session duration, and cart abandonment.