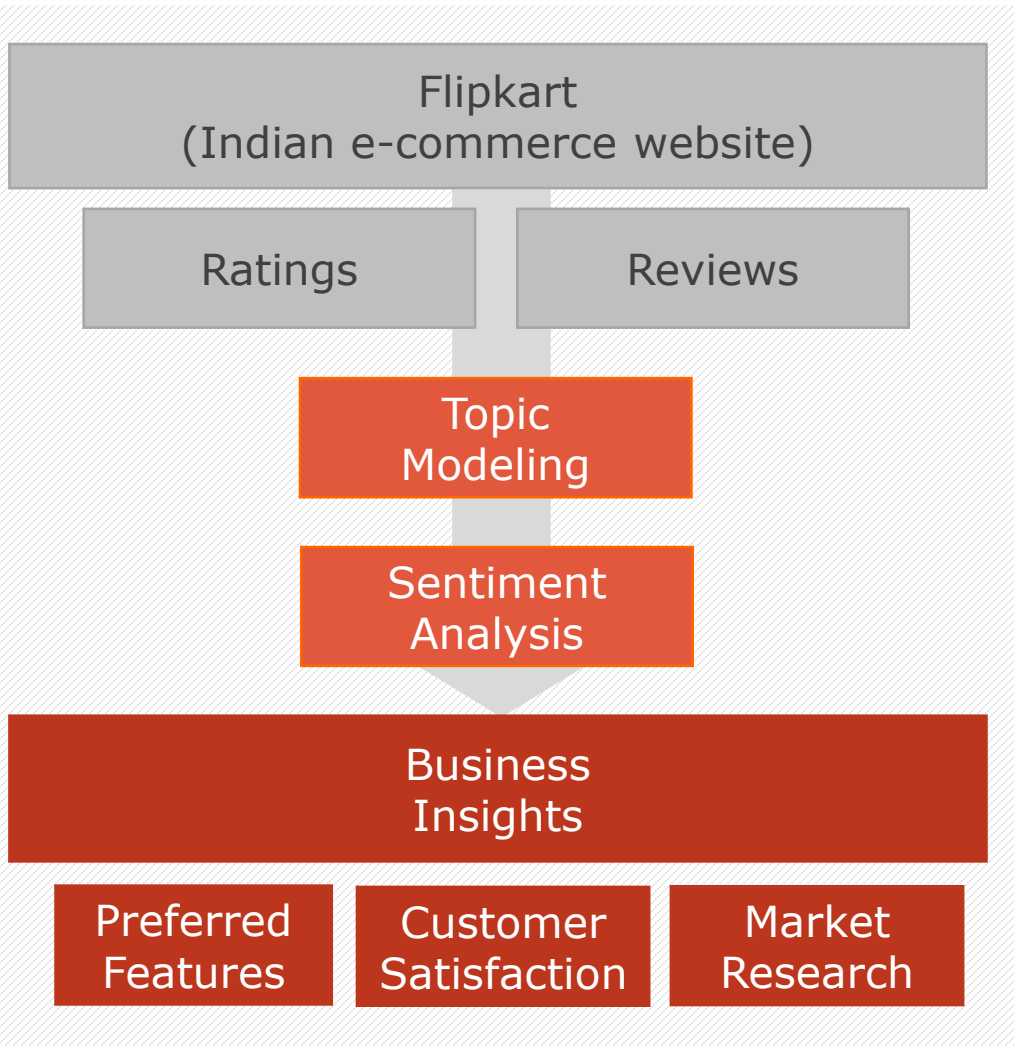# Extracting Customer Perception of iPhone SE from e-commerce Website Reviews to Propose Future Development Strategies

Team 2:Section 30
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Let's gain business insights about the selling points Of the iPhone SE in India by analyzing ratings & reviews

Flipkart
(Indian e-commerce website)

| Ratings | Reviews |

Topic Modeling

Sentiment Analysis

Business Insights

| Preferred Features | Customer Satisfaction | Market Research |

Objectives

01 Identify the most interesting topics among iPhone SE users in India.

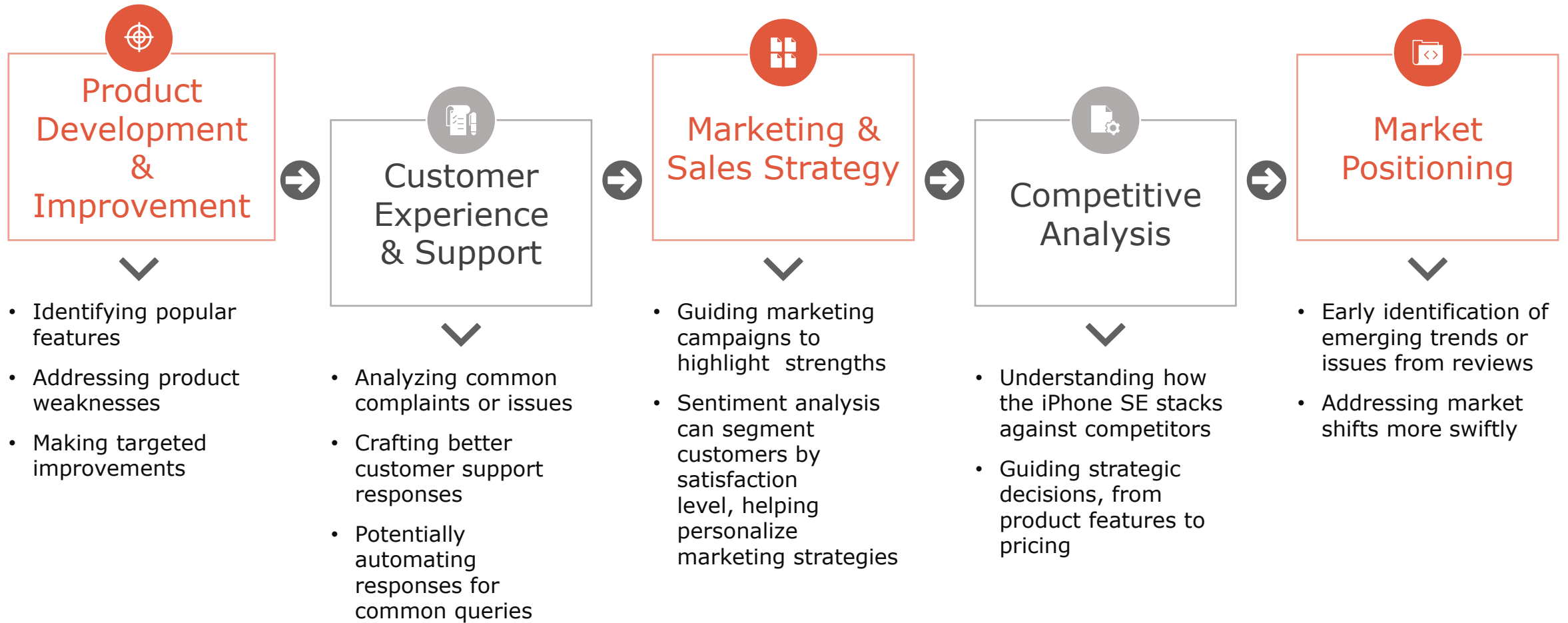**02** Discern the sentiments articulated within the reviews.

**03** Identify topics relevant to positive or negative sentiments.

04 Investigate whether ratings serve as an excellent indicator for sentiment classification compared to reviews.

How can we help improve business outcomes?

Product Development & Improvement
- Identifying popular features
- Addressing product weaknesses
- Making targeted improvements

Customer Experience & Support
- Analyzing common complaints or issues
- Crafting better customer support responses
- Potentially automating responses for common queries

Marketing & Sales Strategy
- Guiding marketing campaigns to highlight strengths
- Sentiment analysis can segment customers by satisfaction level, helping personalize marketing strategies

Competitive Analysis
- Understanding how the iPhone SE stacks against competitors
- Guiding strategic decisions, from product features to pricing

Market Positioning
- Early identification of emerging trends or issues from reviews
- Addressing market shifts more swiftly

iPhone SE Feature Identification and Emotional Response through **Topic Modeling** and **Sentiment Analysis**

Data Preprocessing

Topic Modeling

Sentiment Analysis
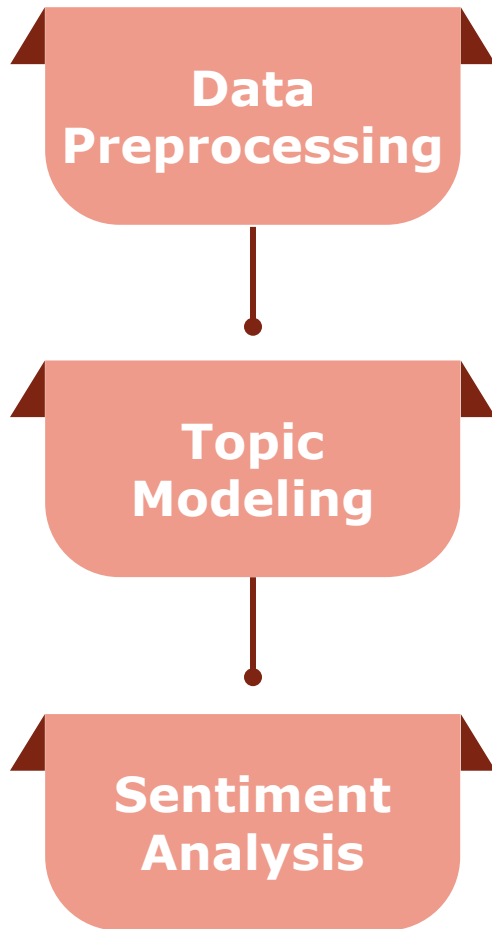
Topic Modeling

Why Topic Modeling?

- Efficiency Improvement
- Target Identification
- Data Organization

Disadvantages

- Overlapping of the Same Word
- Necessitate Manual Tuning and Topic Label

Process: LDA

1. Feature Extraction: "Bag-of-Words"
2. Set # of Topics
3. Create Label
4. Model Evaluation

Sentiment Analysis

Why Sentiment Analysis?

- Emotional Insight
- Market Feedback
- Marketing Strategy

Disadvantages

- Contextual Limitations
- Absence of Fine-grained Sentiment Expressions

Process: VADAR

1. Lexicon-Based Sentiment Analysis: VADER Lexicon

THANK YOU