Example of market research for Nespresso

Executive Summary

Nestlé Nespresso S.A. aims to maintain its leadership in the premium coffee market through innovation, customer satisfaction, and sustainability.

Understand Customer Preferences: Gather insights into preferences for new coffee blends, brewing technologies, and features.

- **Identify Pain Points:** Analyse customer feedback to improve product quality, packaging, and service.
- **Evaluate Sustainability Initiatives:** Assess customer perceptions and find opportunities to enhance sustainability efforts.
- **Competitive Insights:** Compare Nespresso with competitor brands

Methodology

- **Fieldwork:** Conduct an online survey with 5,000 Nespresso customers and 2,500 competitor customers globally. Supplement with focus groups in key markets.
- **Sampling:** Use stratified random sampling to represent diverse customer segments.
- **Data Integration:** Combine survey data with customer and operational data for comprehensive analysis.

Analysis Techniques

- **Multivariate Analysis:** Employ ANOVA, regression, factor, and cluster analyses for in-depth insights.
- **Sample Size:** Ensure robust sample size with a 95% confidence level and 5% margin of error.

Questionnaire Design

The questionnaire will capture customer demographics, preferences, satisfaction, packaging concerns, service experiences, sustainability perceptions, and competitive insights

Further Research

Future research suggestions include longitudinal studies, experimental research, ethnographic studies, sustainability impact assessments, predictive analytics, and

competitive analysis to support continuous innovation, customer retention, and market adaptation.

Summary of the Research Brief and Aims

Objective

The main goal of this research is to thoroughly understand customer preferences, challenges, and perceptions regarding Nespresso's products and services. Specifically, the research seeks to:

- Identify what customers prefer in new coffee blends and brewing technologies.
- Understand the issues customers face to improve product quality, packaging, and customer service.
- Assess the effectiveness of Nespresso’s sustainability initiatives and find areas for further enhancement.
- Gain insights into the competitive landscape by including feedback from customers of competing brands.

Scope

This research will involve a global sample of both Nespresso and competitor customers, utilising online surveys to collect quantitative data. The study will encompass individual and corporate customers, ensuring a robust sample size for reliable insights.

Expected Outcomes

The research is expected to provide detailed insights into customer preferences, highlight areas for improvement in Nespresso’s products and services, and offer actionable recommendations to boost customer satisfaction and sustainability efforts. The findings will support Nespresso in maintaining its market leadership and driving innovation.

Research

Market Context

Nespresso operates within the fiercely competitive premium coffee market, which has experienced significant growth and diversification in recent years. Key trends influencing this market include:

- **Consumer Demand for Premium Coffee:** There is a rising preference among consumers for high-quality, premium coffee, driven by a desire for superior taste and unique coffee experiences.
- **Innovation in Coffee Products:** Continuous innovation in coffee blends, brewing technologies, and sustainable packaging is essential for maintaining competitiveness.
- **Sustainability Concerns:** Growing consumer awareness of environmental issues has increased the demand for sustainable products and practices.

Nespresso's dedication to innovation and sustainability positions it well to leverage these market trends and cater to evolving consumer preferences.

Existing Research

Several studies have examined consumer behaviour and preferences in the coffee market, providing valuable insights:

- **Consumer Preferences:** Research shows that consumers prioritise taste, convenience, and quality when selecting coffee products. Seasonal varieties and unique blends are particularly attractive to premium coffee consumers.
- **Sustainability:** Studies indicate that consumers are increasingly concerned about the environmental impact of their purchases, with many willing to pay more for sustainable products.
- **Customer Experience:** Customer satisfaction is closely tied to product quality, ease of use, and customer service. Common pain points include issues with product consistency, packaging, and post-purchase support.

These insights underscore the importance of focusing on product innovation, quality improvement, and sustainability to meet consumer expectations and enhance market position.

Data Collection

Customer Preferences:

- **New Coffee Blends:** Preferences for seasonal varieties, flavour profiles, and types of coffee (e.g., espresso, lungo).
- **Brewing Technologies:** Interest in new brewing systems, ease of use, and desired features.

Customer Pain Points:

- **Product Quality:** Issues related to taste consistency, durability of machines, and overall satisfaction.
- **Packaging:** Preferences and concerns regarding packaging design, usability, and environmental impact.
- **Customer Service:** Feedback on customer service experiences, response times, and problem resolution.

Sustainability Initiatives:

- **Perception of Sustainability:** Customer views on the sustainability of Nespresso's pods and packaging.
- **Improvement Areas:** Suggestions for enhancing sustainability efforts and willingness to participate in recycling programs.

Competitor Insights:

- **Comparative Preferences:** Differences in preferences between Nespresso customers and competitor customers.
- **Brand Perception:** How competitor customers perceive their current brands versus Nespresso.
- **Switching Factors:** Factors that could influence competitor customers to switch to Nespresso.

Relevance

Collecting this information will allow Nespresso to:

- **Enhance Product Development:** Align new coffee blends and brewing technologies with customer preferences.
- **Improve Customer Experience:** Address pain points to improve product quality, packaging, and customer service.
- **Strengthen Sustainability Initiatives:** Understand customer perceptions and identify actionable improvements in sustainability efforts.
- **Gain Competitive Insights:** Benchmark against competitors and identify opportunities to attract competitor customers.

Use of Customer or Operational Data

Data Integration

Customer Data:

- **Usage Patterns:** Analysing purchase history and usage patterns to understand preferences and identify high-value customers.
- **Demographic Information:** Using demographic data to segment the sample and tailor marketing strategies.

Operational Data:

- **Sales Data:** Integrating sales data to correlate survey findings with actual purchase behaviour.
- **Customer Service Records:** Analysing customer service interactions to identify common issues and areas for improvement.

Analysis

Comprehensive Insights:

- **Combined Analysis:** Integrating survey data with customer and operational data to provide a holistic view of customer behaviour and preferences.
- **Segmentation:** Creating detailed customer segments based on demographic and behavioural data to tailor strategies effectively.
- **Trend Identification:** Identifying trends and patterns in customer feedback and operational performance to guide strategic decisions.

Multivariate Analysis Techniques

Proposed Techniques

Analysis of Variance (ANOVA)

Purpose: Compare means across different groups to determine if there are significant differences.

Application:

- **Example:** Comparing customer satisfaction levels across different regions.
- **Quantitative Measures:**
    - **Null Hypothesis (H0):** No significant difference in satisfaction levels across regions.
    - **Alternative Hypothesis (H1):** Significant difference in satisfaction levels across regions.

Using a sample of 5,000 Nespresso customers, divided into five regions with 1,000 respondents each:

- Region A: Mean = 4.2, SD = 0.5
- Region B: Mean = 4.0, SD = 0.6
- Region C: Mean = 4.1, SD = 0.5
- Region D: Mean = 3.9, SD = 0.7
- Region E: Mean = 4.3, SD = 0.4

Steps:

1. Calculate the F-statistic using between-group and within-group variances.
2. Compare the F-statistic to the critical value at a 95% confidence level.
3. Reject the null hypothesis if the F-statistic is greater than the critical value, indicating significant differences in satisfaction levels across regions.

Regression Analysis

Purpose: Identify relationships between dependent and independent variables.

Application:

- **Example:** Identifying key drivers of customer satisfaction.

- **Quantitative Measures:**
    - **Dependent Variable:** Customer satisfaction score.
    - **Independent Variables:** Product quality, packaging, customer service, price, sustainability perceptions.

Using a sample of 5,000 Nespresso customers:

- **Regression Model:** $Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\epsilon$

  Where:

    - Y = Customer satisfaction
    - X_1 = Product quality
    - X_2 = Packaging
    - X_3 = Customer service
    - X_4 = Price
    - X_5 = Sustainability perceptions
    - $\beta_0,\beta_1,\beta_2,\beta_3,\beta_4,\beta_5$= Coefficients
    - ϵ = Error term

Steps:

1. Estimate the regression coefficients.
2. Interpret the coefficients to understand the strength and direction of relationships.
3. Perform significance tests (p-values) to determine the statistical significance of relationships.

Factor Analysis

Purpose: Reduce data dimensionality by identifying underlying factors that explain variance.

Application:

- **Example:** Identifying latent variables that influence customer preferences.
- **Quantitative Measures:**
    - Using a sample of 5,000 Nespresso customers, perform factor analysis on variables related to customer preferences (e.g., taste, aroma, packaging design, machine usability).

Steps:

1. Conduct exploratory factor analysis (EFA) to identify the number of factors.
2. Rotate the factor matrix for a simpler structure (e.g., Varimax rotation).

Example:

- Identified Factors:
    - **Factor 1:** Taste and aroma
    - **Factor 2:** Packaging design and usability
    - **Factor 3:** Machine usability and features

Cluster Analysis

Purpose: Group similar customers based on their survey responses.

Application:

- **Example:** Segmenting customers into distinct groups for targeted marketing.
- **Quantitative Measures:**
    - Using a sample of 5,000 Nespresso customers, perform cluster analysis on variables such as purchase frequency, preferred coffee blends, and satisfaction levels.

Steps:

1. Standardise the variables for comparability.
2. Apply a clustering algorithm (e.g., K-means clustering) to partition customers into clusters.

Example:

- Identified Clusters:
    - **Cluster 1:** Frequent buyers, high satisfaction, prefer espresso.
    - **Cluster 2:** Occasional buyers, moderate satisfaction, prefer flavoured blends.
    - **Cluster 3:** Corporate customers, high satisfaction, prefer large quantities.
    - **Cluster 4:** New customers, low satisfaction, exploring different blends.

Summary

Applying these multivariate analysis techniques allows Nespresso to gain deep insights into customer preferences, satisfaction drivers, and market segmentation. The quantitative measures derived from these analyses will guide strategic decisions, helping Nespresso maintain its leadership in the premium coffee market.

Justification

Meeting Research Aims:

- **Targeted Insights:** Multivariate techniques provide deeper insights into customer preferences and behaviours, beyond simple descriptive statistics.
- **Actionable Recommendations:** The analysis helps identify specific areas for improvement and innovation, aligning with Nespresso's business objectives.

Sample Size and Confidence Intervals

Sample Size Calculation

Nespresso Customers:

- **Proposed Size:** At least 5,000 globally.
- **Rationale:** Ensures robust statistical power and reliable estimates across different segments (e.g., regions, customer types).

Competitor Customers:

- **Proposed Size:** Approximately 2,500.
- **Rationale:** Provides a sufficient sample for comparative analysis while maintaining manageable survey costs and logistics.

Confidence Intervals

Statistical Concepts:

- **Confidence Level:** Typically set at 95%, meaning that the results are expected to be accurate within the confidence interval 95% of the time.
- **Margin of Error:** Dependent on the sample size and variability of responses; a larger sample size results in a smaller margin of error.

Importance:

- **Reliability:** Ensures that the survey estimates are reliable and can be generalised to the broader population.
- **Decision-Making:** Provides Nespresso with confidence in the data, supporting informed decision-making.

Sample Size and Confidence Intervals

Sample Size Determination To determine the appropriate sample size, we need to consider several factors, including the desired confidence level, margin of error, population size, and the estimated variability in the population.

Key Parameters for Sample Size Calculation:

- **Confidence Level (Z):** Typically set at 95%, which corresponds to a Z-value of 1.96.
- **Margin of Error (E):** The maximum acceptable difference between the sample statistic and the population parameter. Commonly set at 5% (0.05) for general studies.
- **Population Proportion (P):** The estimated proportion of the population exhibiting a particular attribute. If unknown, 50% (0.5) is used as it maximises the required sample size.
- **Population Size (N):** The total number of individuals in the population. For Nespresso customers, we assume a large population given their global reach.

The sample size (n) can be calculated using the formula for a finite population:

$$n = \frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2}$$

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384.16$$

Thus, approximately 385 respondents are required to estimate the population proportion with 95% confidence and a 5% margin of error.

Adjustments for Segment Analysis:

Given the need to analyse different segments (e.g., regions, customer types), we increase the sample size to ensure sufficient respondents within each segment. Nespresso aims to survey at least 5,000 customers globally, segmented appropriately.

Segment Size Calculation: If we want to analyse five major regions (e.g., North America, Europe, Asia, South America, Africa), each region should have approximately 1,000 respondents:

$$n_{region}=5,000/5=1,000$$

This segmentation ensures robust statistical power for regional analysis.

Competitor Customers: For competitor customers, a similar approach applies. Assuming a more focused comparative analysis:

$$n=385$$

To achieve robust comparisons and accommodate multiple segments (e.g., different competitor brands or regions), we propose sampling approximately 2,500 competitor customers.

Confidence Intervals

Calculating Confidence Intervals: The confidence interval (CI) for a proportion is calculated as:

$$CI = \hat{p} \pm z \times \sqrt{\frac{p(1-p)}{n}}$$

For example, if 50% of the respondents prefer a new coffee blend, the 95% confidence interval with a sample size of 5,000 is:

$$CI=0.5\pm1.96 \cdot \sqrt{0.5 \cdot (1 - 0.5)5,000}$$

$$CI= 0.5\pm 0.01386$$

So, the 95% confidence interval is approximately 48.6% to 51.4%.

Implications for Survey Results:

- When we conduct the survey with this sample size, we can expect that the proportion we find in our sample will be within ±5% of the true population proportion, 95% of the time.

- For example, if we survey 385 people and find that 50% prefer the new coffee blend, we can be 95% confident that the true proportion of all customers who prefer the new coffee blend is between 45% and 55%.

Importance of Sample Size:

- **Large Sample Size:** Reduces the margin of error and increases the precision of the estimates.
- **Segment Analysis:** Ensures sufficient data within each segment for reliable subgroup analysis.

Questionnaire Design

Questionnaire Overview

The questionnaire aims to gather extensive data pertinent to the research goals, focusing on customer preferences, pain points, sustainability perceptions, and competitive comparisons. It will feature a blend of closed-ended and open-ended questions to capture both quantitative and qualitative data.

See appendix for questionnaire.

Proposed Further Research

Ideas for Future Research

Longitudinal Studies:

- Track changes in customer preferences and satisfaction over time to evaluate the effectiveness of new products and initiatives.

Experimental Research:

- Test new coffee blends and brewing technologies in controlled environments to gauge their impact on customer satisfaction prior to market launch.

Ethnographic Studies:

- Conduct ethnographic studies to understand the context of coffee consumption across different cultures and regions, revealing deeper insights into customer behaviours and preferences.

Sustainability Impact Studies:

- Assess the environmental impact of Nespresso's sustainability initiatives through detailed life cycle assessments and customer perception surveys.

Advanced Predictive Analytics:

- Use advanced predictive analytics to forecast future trends in the premium coffee market and customer preferences, aiding Nespresso in staying competitive.

Competitive Analysis:

- Continuously analyse competitors' strategies and innovations to identify potential threats and opportunities.

Benefits of Further Research

Innovation and Product Development:

- Ongoing research supports continuous innovation and product development, ensuring Nespresso meets evolving customer needs and preferences.

Customer Retention and Acquisition:

- Understanding customer behaviour and preferences will help Nespresso improve customer retention and attract new customers from competitors.

Sustainability Leadership:

- Continued research into sustainability reinforces Nespresso's position as a leader in environmentally responsible practices, enhancing brand reputation and customer loyalty.

Market Adaptation:

- Regular market analysis enables Nespresso to quickly adapt to changing market conditions and consumer trends, maintaining its competitive edge.

Conclusion

This research proposal outlines a comprehensive plan to understand Nespresso customers' preferences, identify pain points, evaluate sustainability efforts, and gain competitive insights. By employing robust sampling methods, advanced statistical techniques, and a well-designed questionnaire, the study aims to provide actionable recommendations that will help Nespresso maintain its market leadership and drive future growth. Further research suggestions highlight the importance of continuous innovation and adaptation to evolving market dynamics.