

BENCHMARKING AND MARKET MIX MODELLING



Report For The
Healthcare
Professionals (HCP)
And Facilities (HCF)

By: Mohit Bansal



Objectives and Scope of Study

Primary Business Objectives

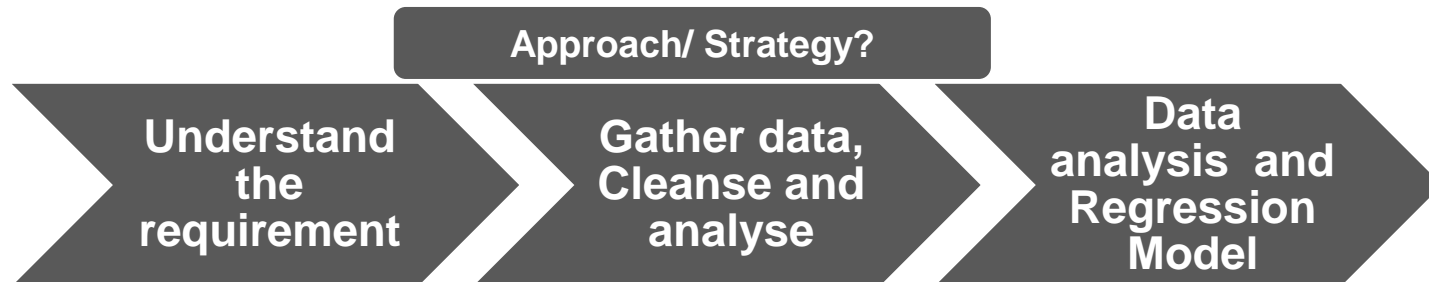
- **Company XYZ** is a staffing **marketplace platform for HCPs and HCFs**. The HC Professionals looking for shifts and facilities that needs staffing. Business has grown 15% month over month the last 12 months. The Sales and marketing through online ads, however the business faces some challenges:
- **A new competitor is being encountered in an increasing number of deals & each of the deals have been lost. The competitor is gaining popularity in 2 of the prominent MSAs.**

Scope of Study

- **Benchmark the product and services on 4 P's** (Product, Price, Place and promotion) to understand the impact for further improvement for services.
- **Market comparison** to analyse the competitor services/products.
- **Develop a market mix model to explore and predict the ROI** for the different promotional channels compared to the online sales.

Assumptions for the Data

- **Data Period : 2 years of data for HCP and HCF services/requirements.**
- **Third party vendors** for competitor's product/service information or conduct an **online market survey** to collect the information.
- Monthly financial data for **campaign/promotion channels** for similar services in the market



MARKET MIX MODEL (Solution for Aim 1) ³

Outcome Result: TVGRPs and Emails to be used as Sales Promotion Channels to counter the competitor products

Promotion

| Sampling | Iteration 1 | Multiple Iterations | Final Model and Model Prediction* |
|--|--|---|--|
| <ol style="list-style-type: none"> 1. Sample the data set with a 75-25 ratio as train and test sample 2. Train sample of 75% is used to develop the model. 3. Test Sample is used to test and predict the fit of the model. | <ol style="list-style-type: none"> 1. All the independent variables are considered in order of factor importance to fit the model. 2. Formula="BrandTRx~ A1TRx + Competitor (1-4) + TVGRPs + PaidSearchClicks + RepCalls + Emails + Conferences" | <ol style="list-style-type: none"> 1. Iteration 2: Since the P value is higher than the threshold of 5%, we remove channel "Paidsearchclicks" 2. Iteration 3: As the P value is higher than the threshold of 5%, we remove channel "Conferences". | <ol style="list-style-type: none"> 1. All the P Values are within the threshold and Adjusted R-Squared is 0.98 2. Formula="A1TRx + Comp2 + Comp1 + Comp3 + TVGRPs + Emails" 3. Actual Vs Predicted on test data to validate the model |

* -Results based on assumption from the data received/collected

Benchmarking and Market Mix Modeling

10 Oct 2021



NEW FEATURES/BUSINESS IMPROVEMENT

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Data Collection:

- Conduct online market survey in 2 MSA's and gather data on prices, services, discounts/offers from the competitors.
- Arrange data from third party vendors on the competitor information.
- Feedback collection data from the services

Data Analysis:

- Perform a comparison/analysis and present insights for the below:
 - Customer requirements – Understand the patterns for customer requirements from the feedback.
 - Prices/Discounts –
 - Products or services – Different types of services selling in the market.
 - Supply/Demand – Plans to predict demand and manage supply for the demand.
 - Time Periods – identify Seasonality/trends from the data (if available).
 - Locations – Identify locations based different requirements.

Identify top predictors for the model:

- Customer requirements, Prices/Discounts and Products/services.



NEW FEATURES/BUSINESS IMPROVEMENT (Solution for Aim 2)

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Addressing the challenges from the user experience will improve the customer satisfaction and increase the no. of business users

Price

- Establish Brand trust and reputation among HCPs
 - Make changes to the algorithm to achieve transparency for the pay rates for Nurses based on their experience, location and shift hours.
- Reduce the wait period to receive the pay
 - Reduce the wait period to receive the pay for the job.

Product

- Sync Application to with emails similar to Google calendar
 - Enable the app to read emails for booking new jobs reduce manual intervention required to post them online in app.
- Identify reasons and reduce the cancellations
 - Analyse the data to understand the reasons for cancellations. For ex. – Offered Pay, Timing, Proximity Location, higher pay offer, personal reasons etc.

Place

- Within 81 MSAs - Identify key MSAs to grow the business
 - Identify the main areas for business and grow further to increase the market share for the services.
- Focus on MSAs with low requirements and try to engage in business growth
 - Identify low sales areas for business to grow further.