

Using machine learning, identify potential societies for marketing the proactive healthcare product.

GUIDED BY
Dr. Varsha Tanu
Associate Professor
IIHMR University, Jaipur

PRESENTED BY
Shivam Singh Teotia
Roll No:1199
Hospital Management(2020-2022)



Introduction

Machine learning is not a new concept; it has been evolving for decades, responding to much more complex and difficult tasks. This proposes the ability to solve problems that are either infeasible or impractical to solve using physical coding, and it notes the presence in modern life, from weather reports to claims that have the potential to significantly affect people's lives, as in the case of healthcare.

Machine Learning to segment the customer's type

An algorithm examines hundreds of data points about each customer using machine learning. It looks for patterns in what they do and buy as individuals. The algorithm then identifies potentially important "features" about each customer based on all those individual data points (for example, "clicked on an email on a Wednesday"). Finally, using a clustering algorithm, you can use those features to automatically group customers into segments.



Introduction

Proactive Healthcare

Proactive care refers to the ongoing patient-provider conversation and active monitoring of conditions to help prevent life-threatening emergencies. When care teams communicate regularly with at-risk patients (as well as each other) about conditions, diagnostics, and treatment protocols, they are practicing proactive care.

Proactive care is individualized healthcare that encourages patients to take greater control of their own care and sensitive data by making problem prevention second nature to care teams. Patients who aren't sick may forget to check their vital signs, take their medications or supplements, exercise, eat nutrient-rich foods, and make follow-up appointments.

Seva Prime - Small Subscription, Big Benefits

Seva prime is a health and wellness subscription package that includes a dedicated medical advisory team with unlimited consultations and 24/7 access to teleconsultation doctors in seven (7) different languages, making it a holistic healthcare solution for families.



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**NUTRITIONIST
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Personalised diet plans & advice
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FAMILY MEMBERS**
One subscription for
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TELUGU, GUJARATI, TAMIL AND KANNADA
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Health Assessments



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TELECONSULTS WITH EMPANELLED SPECIALISTS	2	6	20
TELECONSULTS WITH NUTRITIONISTS	3	9	30
TELECONSULTS WITH PSYCHOLOGISTS	3	9	30
HEALTH RECORDS	☒	☒	☒
EVENT INVITES FOR HEALTH INFORMATION	☒	☒	☒
DEDICATED HEALTH & WELLNESS ADVISOR	☒	☒	☒
UPTO 6 FAMILY MEMBERS COVERED	☒	☒	☒
SPECIAL OFFERS EXCLUSIVELY FOR YOUR SOCIETY			
DISCOUNTS AT SELECT DIAGNOSTIC CENTRES	UPTO 20%	UPTO 20%	UPTO 20%
DISCOUNTS AT SELECT HOSPITALS ON OPD/IPD	5-10%	5-10%	5-10%
COMPLIMENTARY MEDICINE VOUCHERS	WORTH INR 500	WORTH INR 1,000	WORTH INR 3,000
COMPLIMENTARY AT HOME HEALTH CHECKUP FOR 2 MEMBERS	☐	☐	☒
NURSING CARE AT HOME POST HOSPITALISATION FOR 10 DAYS (WORTH INR 20,000)	☐	☐	☒
CARE ATTENDANT AT HOME FOR 10 DAYS (WORTH INR 10,000)	☐	☐	☒
HOME HEALTH KIT (BP MONITORING MACHINE, GLUCOMETER, PULSE OXIMETER)	☐	☐	☒
PRICE (LIMITED TIME DEAL)	INR 1299	INR 2599	INR 6599

Objectives

- Collect the data of societies like number of units, rental cost, property cost, type of amenities
- With the help of machine learning algorithms (Unsupervised learning) to make the cluster of societies on the basis of collected information and clusters them on strata basis.
- Find out the potential societies in which we can promote our Seva Prime.
- Organised the camps in the selected societies.
- Address the health-related issues as many as we can and at the same time making the services pocket friendly.
- Collect the data on feedback of societies' residents and make the analysis.

Methodology

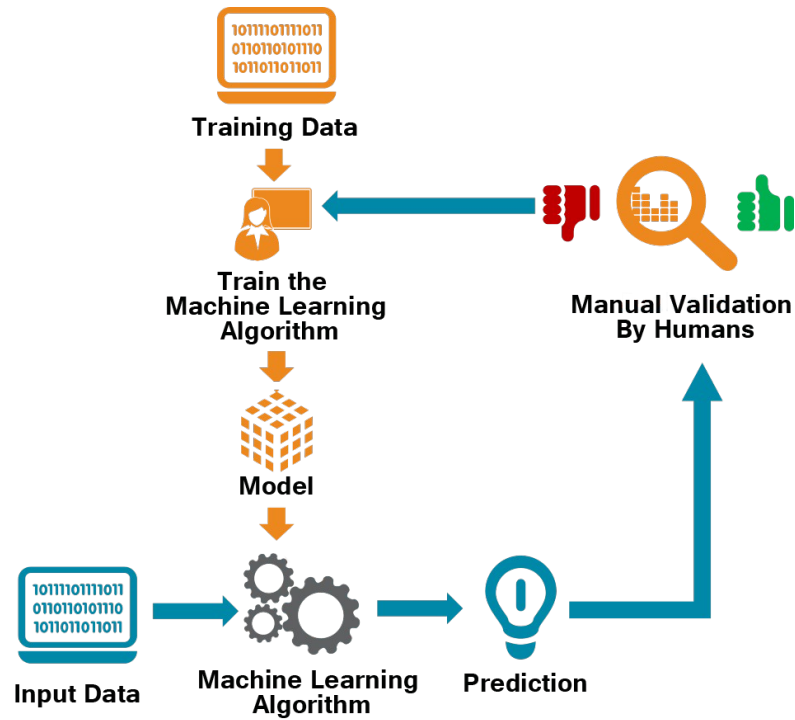
Data Collection

To build a machine learning model, we need many data sets, which we obtained from various sources. Our goal was to collect data from societies recommended by our third-party vendor. Our vendor only provides us with three data attributes: the name of the society, the city of the society, and the number of units in that society.

Data Preprocessing

This is the second step in any ML algorithm; after gathering the data, it is time to preprocess it. This step entails cleaning the data, performing feature engineering on the data set, and dividing the data into training and testing data sets.

Flow Process



We get the clustering of societies on the basis of mentioned features.

We promoted our Proactive health-care product in the selected societies by organizing Health camps

RESULTS

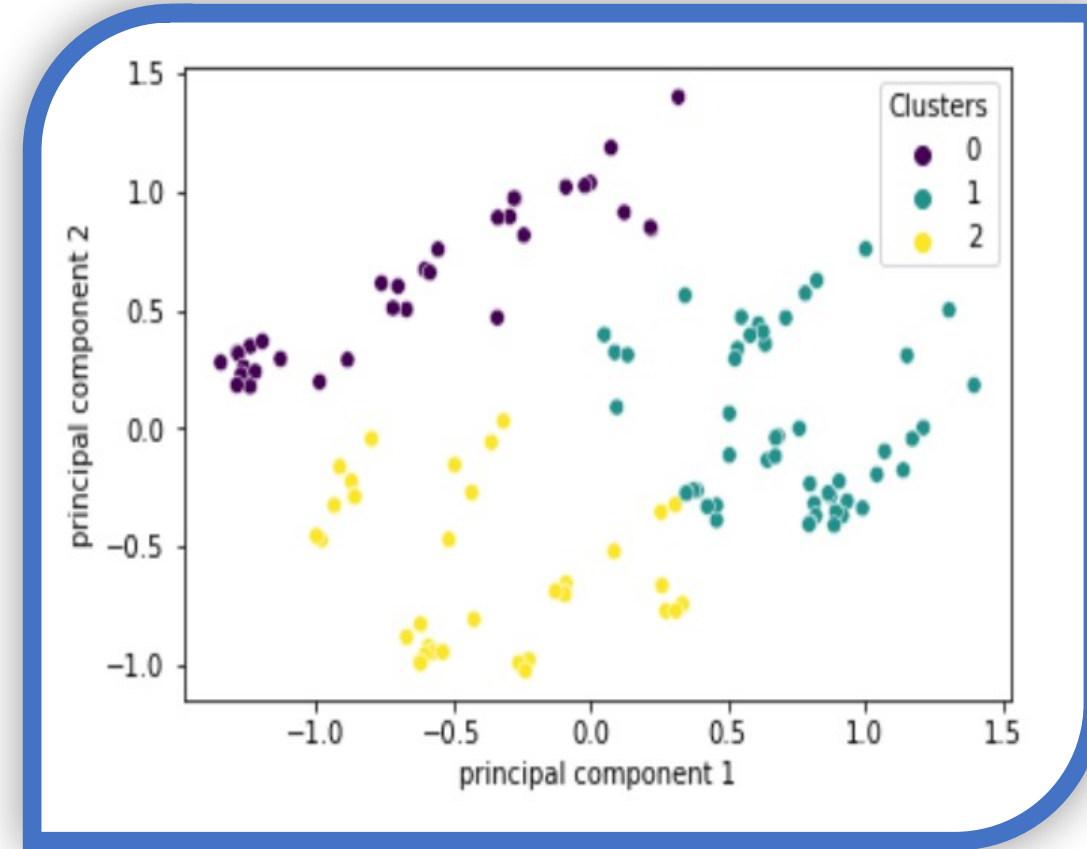
Result of machine learning algorithms

Our model created three different clusters, and all of them represent different strata of societies.

Cluster 0: Represent societies which consist middle class families.

Cluster 1: Represent societies, which consist upper middle-class families.

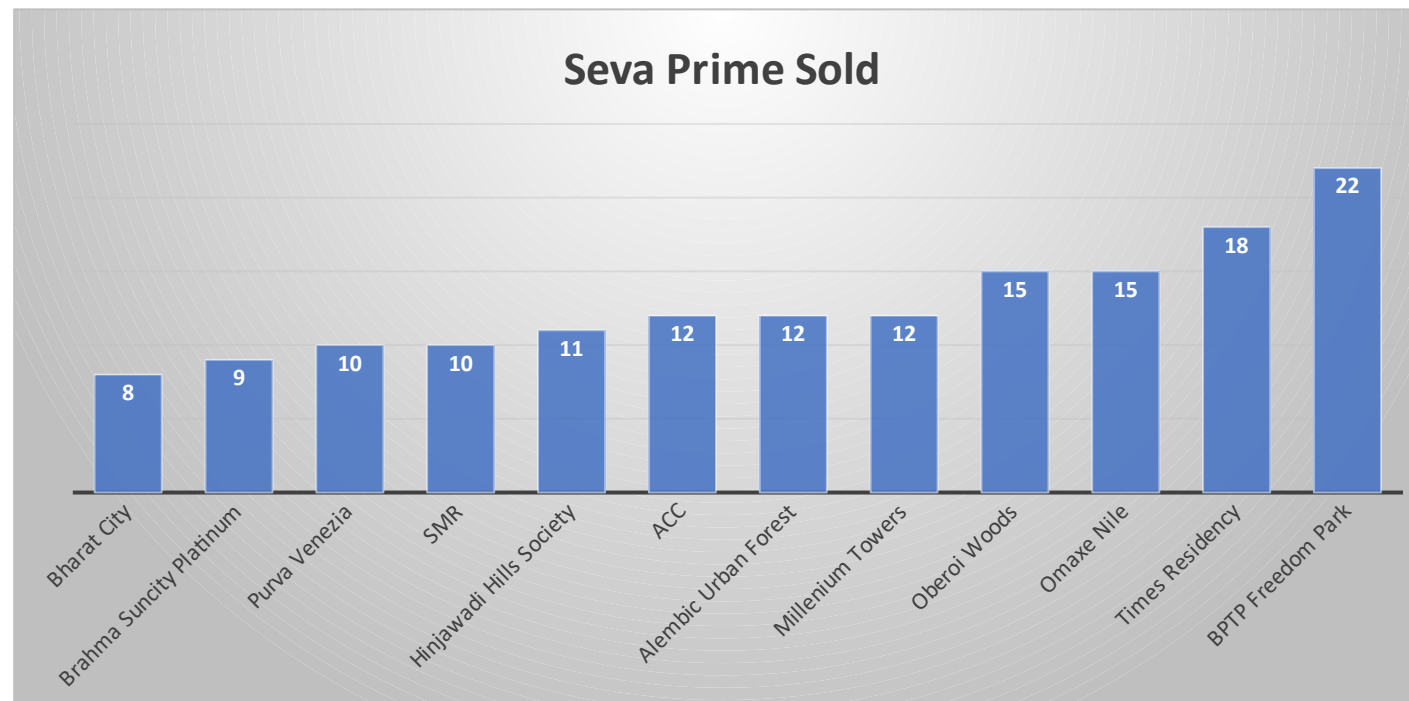
Cluster 2: Represent societies, which come under high class families.



RESULTS

Result of Healthcare camps in societies

We organized healthcare camps in various cities based on the recommendations of our machine learning algorithm prediction, and these camps were a huge success. In the healthcare camps, we checked the basic vitals of the society's residents and used our CRM teams to market our seva prime product in the community.



Conclusion

The dissertation took an experimental study approach, with the goal of investigating machine learning's application in the healthcare domain through its deployment in the field of marketing a proactive product. The application of machine learning considers it as a modern healthcare technique that can be used to solve peculiar, applied issues.

We organized health camps in various cities with similar societies, and we received a very positive response from these societies. We also collected some testimonials from residents about our health camp and product, and we are overwhelmed by them. In the first phase of the campaign, we sold our product in these societies, and the conversion rate was around 8%. After placing prior banners in the society and forwarding WhatsApp messages in the societies, we received a large number of participants in the second phase, and the conversion rate increased to 12%.

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Thank You