

**Health-E Commerce** 2022

#### **Company Overview**

Health-E Commerce is a consumer health and wellness online retailer, comprised of five brands — **FSA Store, HSA Store, Well Deserved Health, Medicare OTC Store, and Caring Mill**. It offers advantages such as convenience, lower prices & discounts, a wide range of products, replacement & refund policies, reviews & feedbacks, and quality certifications



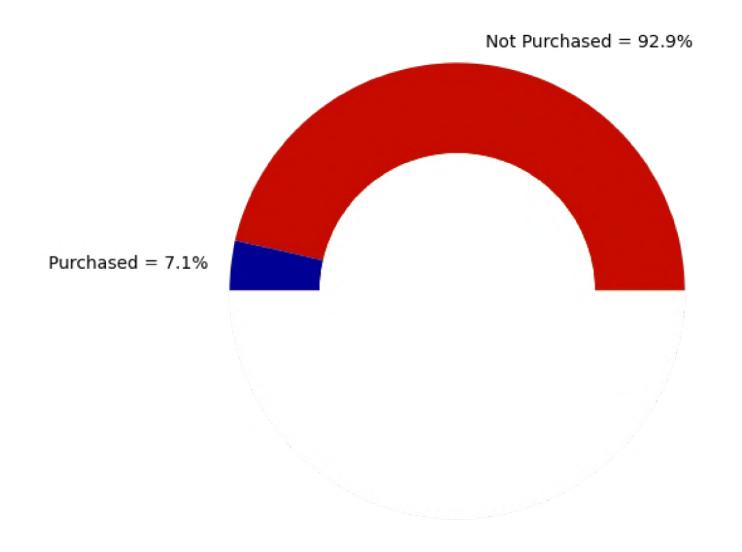












### Problem Background

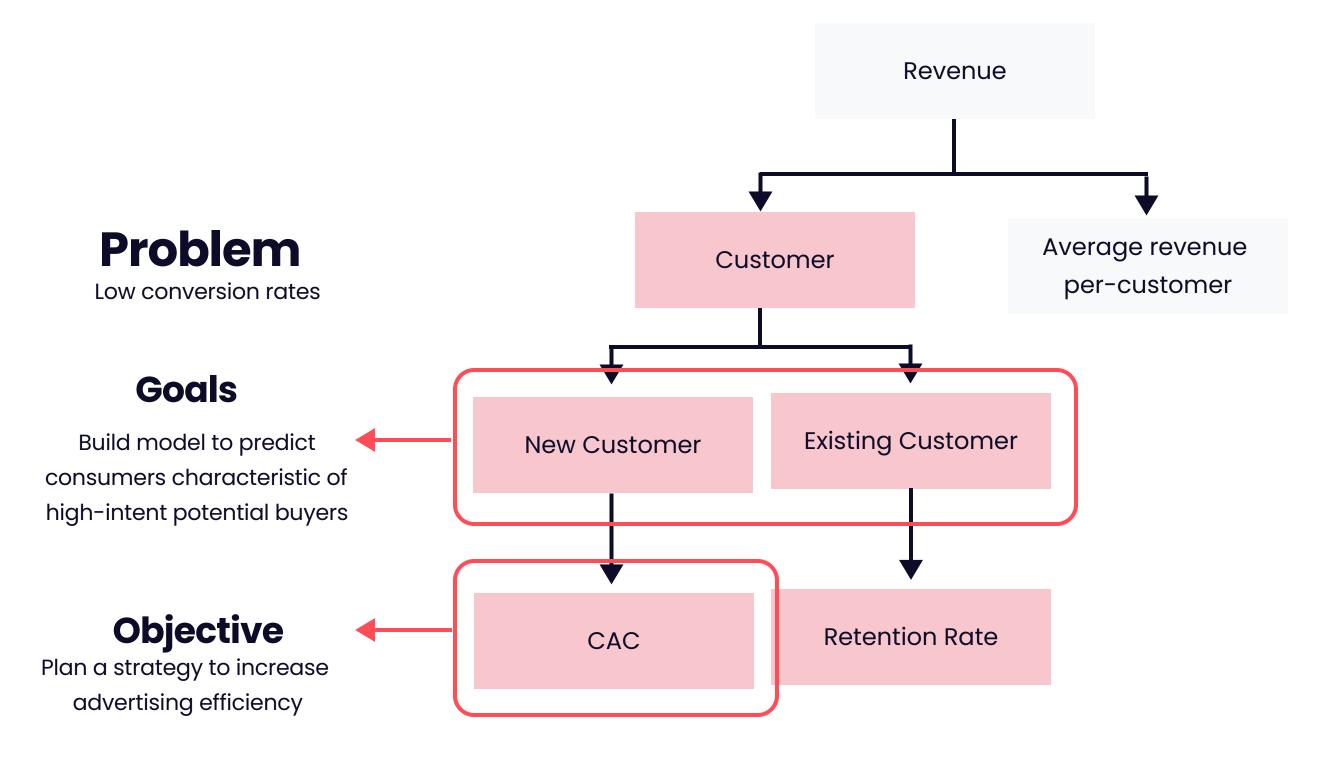
Conversion measures effectivity and efficiently a business in handling positive outcomes.

Based on Marketing Sherpa, benchmark for convertion rate in Healthcare industry is 8%. Meanwhile, Health Ecommerce only have 7.11% of conversion rate.

Therefore, a strategy is needed to increase this number. One of which is by increasing the effectivity of advertising strategy by targeting and attracting high-intent potential buyers



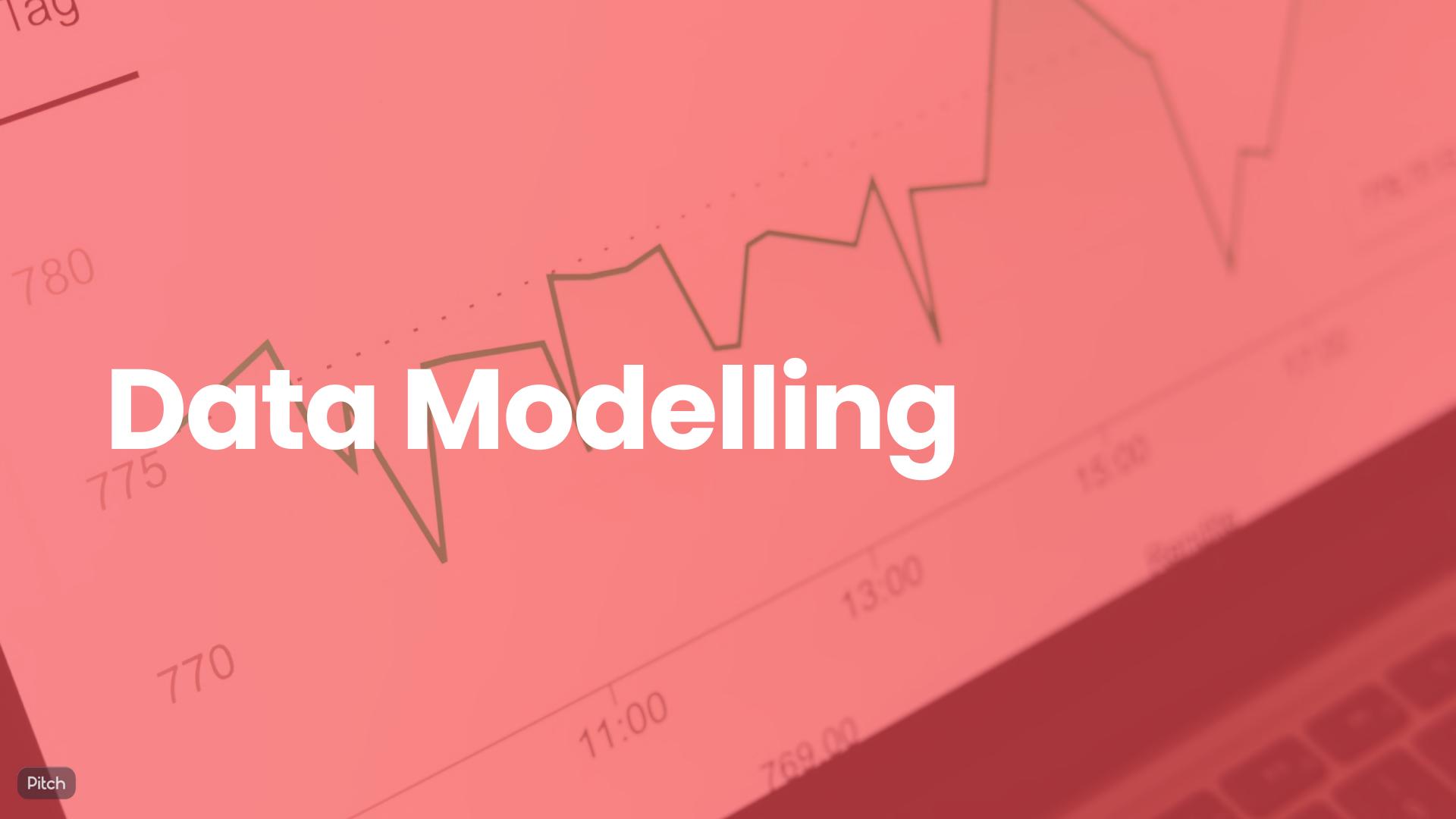
### **Problem Identification**



### **Business Metric**

Checkout completion





### **Dataset Information**

Dataset contained 1592 rows with no missing value

<b>(3)</b>	Target Variable
------------	-----------------

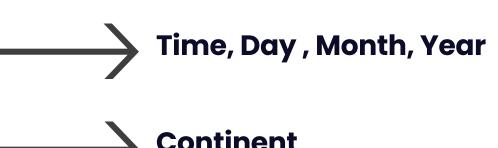


Variable	Data Type
Purchased	Categorical
Datetime	Datetime
Country	Categorical
Profile	Categorical
Age	Categorical
Gender	Categorical
Referral	Categorical
Pageviews	Numerical
Purchased Amount	Numerical

### Data Pre-Processing



Variable	Data Type
Purchased	Categorical
Datetime	Datetime
Country	Categorical
Profile	Categorical
Age	Categorical
Gender	Categorical
Referral	Categorical
Pageviews	Numerical
Purchased Amount	Numerical



Change into categorical variable





Health E-commerce 2022

## Modelling

Model	Accuracy	AUC	Recall	Prec.	Fl	Kappa	MCC	Purchased	TT (Sec)
Random Forest Classifier	0.9176	0.7265	0.0536	0.2833	0.0872	0.0591	0.0878	-9.1	0.750
CatBoost Classifier	0.9148	0.7088	0.1089	0.2950	0.1543	0.1177	0.1373	-11.2	8.218
Gradient Boosting Classifier	0.9119	0.7317	0.1482	0.2786	0.1875	0.1472	0.1575	-13.3	0.510
Light Gradient Boosting Machine	0.9119	0.7163	0.1214	0.2933	0.1682	0.1283	0.1450	-13.3	0.195
Extra Trees Classifier	0.9110	0.6983	0.0786	0.2200	0.1083	0.0710	0.0851	-14.0	0.577



# Characteristic of high potential buyers

**Profile** 

Behaviour

**Parent** 

**Customer Profile** 

Unbranded search

Consumer refferal

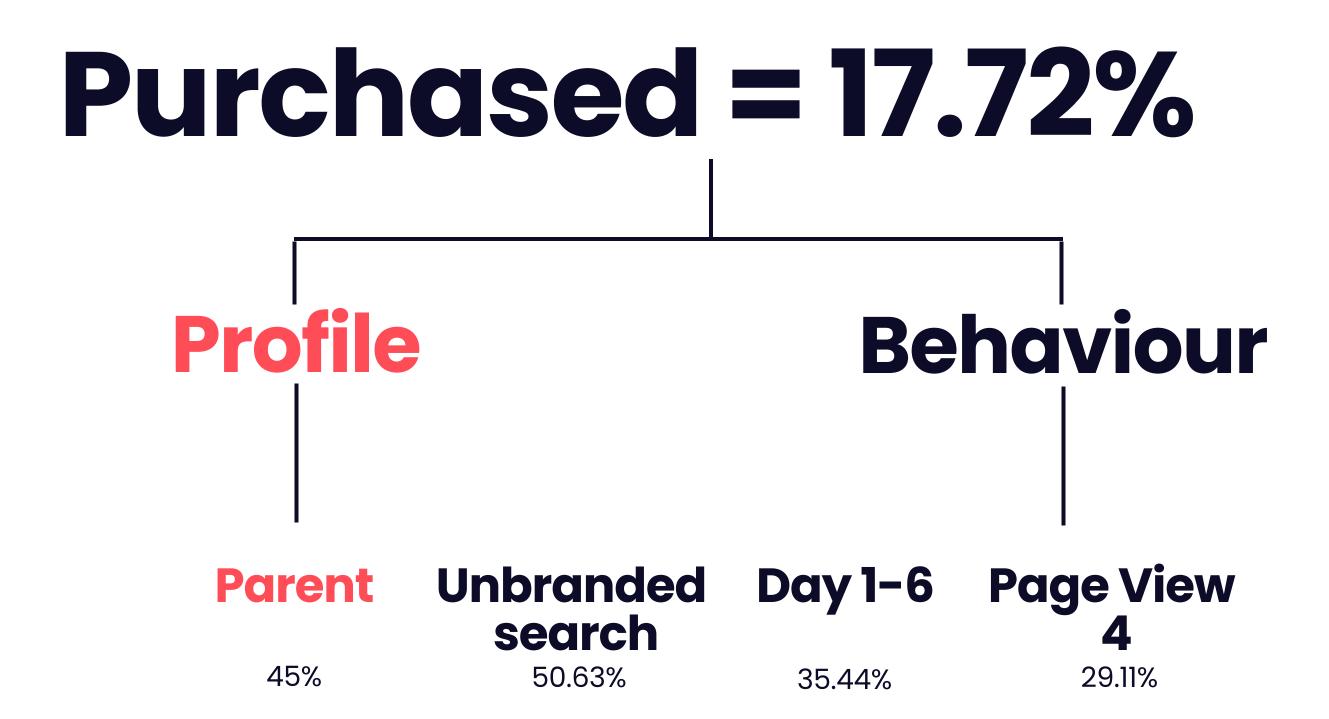
**Day 1-6** 

Consumers is buying in the first six day in a month

Page View 4

Consumers see several pages before make a purchase



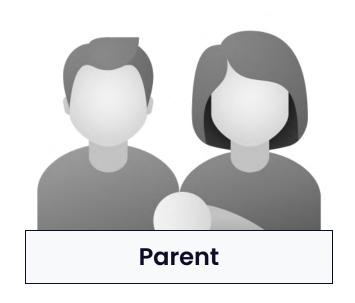




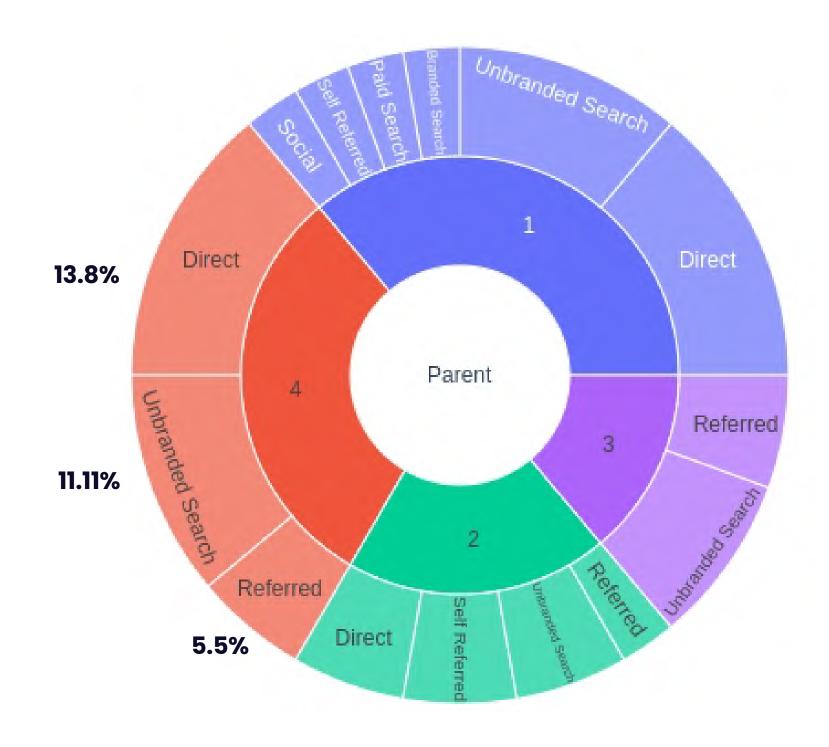
### Strategy to Increase Advertising Efficiency



### 1. Prioritize Appropriate Audiences



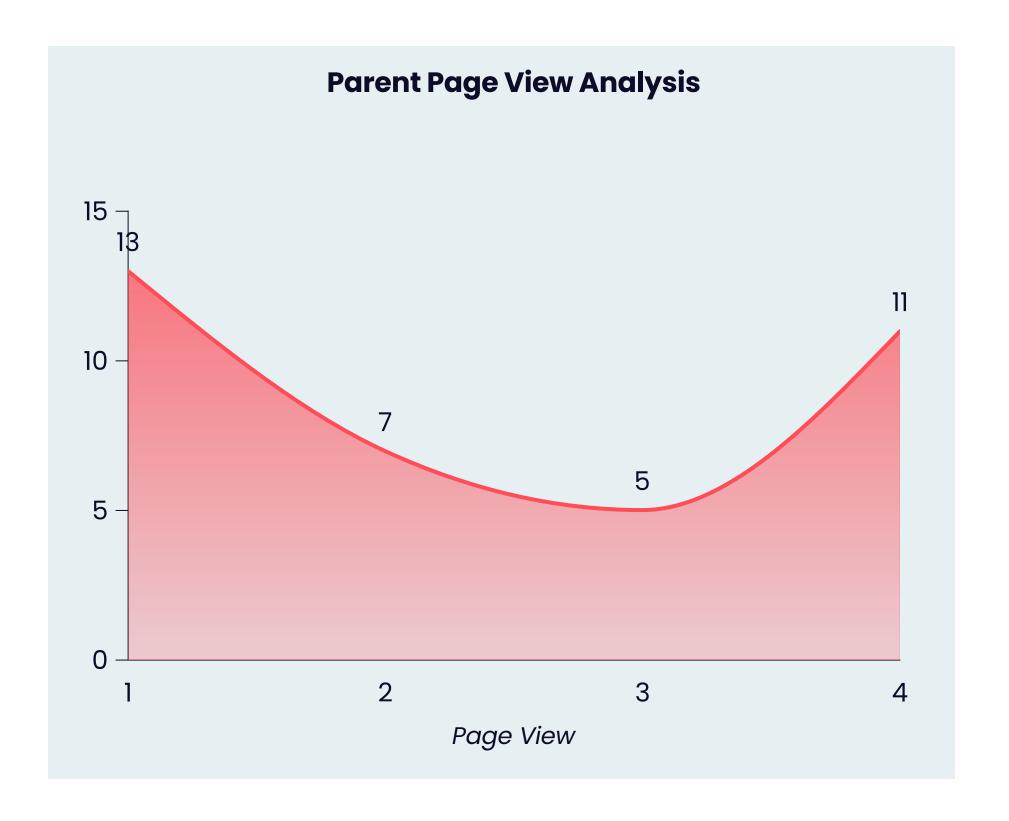
Based on the analysis, parents who view Pageview 4 have referral from direct, unbranded search, and referred. Therefore, we need to maximize our performance in these channel.





### 2. Improve the Sales Funnel

Effective sales funnel will helps a company to manage a customer's buying process and provides information about an insight into the thoughts of its potential customers. Based on the analysis, most of parent stop to explore further and stop in pageview 1. It needs to tackle by analyzing homepage and content of company website.





## THANK YOU