# Customer Insights

BY ITUA ETIOBHIO



#### A Brief Background

Marketing data can describe a lot about customers. Conducting analysis into this data can give valuable insights about customer behavior and better understand the people buying a company's product.

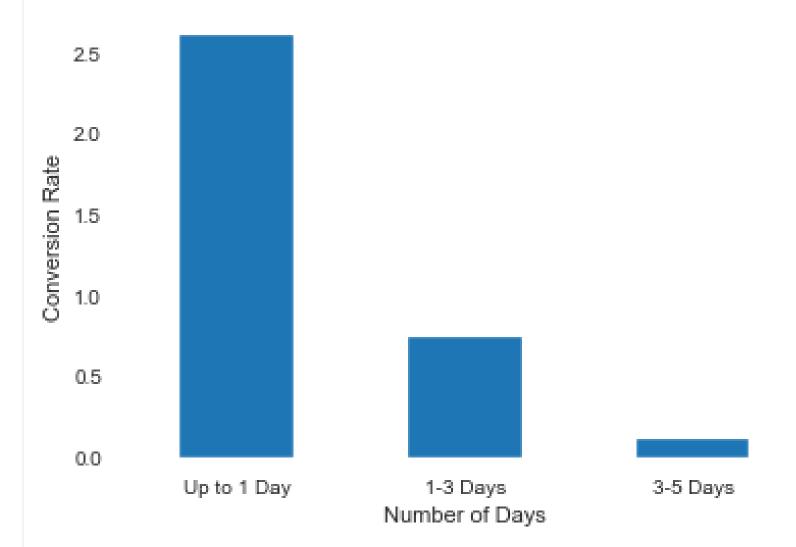
The marketing data is from a architecture company that provides architectural services to homeowners. The dataset contained information on all of the registrations received in the month of October

Insight analysis was conducted to help the company know which customers are the most valuable buyers and help the company further focus their marketing efforts

When a customer registers, they receive a sales call. The time between registration and sales call affects the conversion rate.

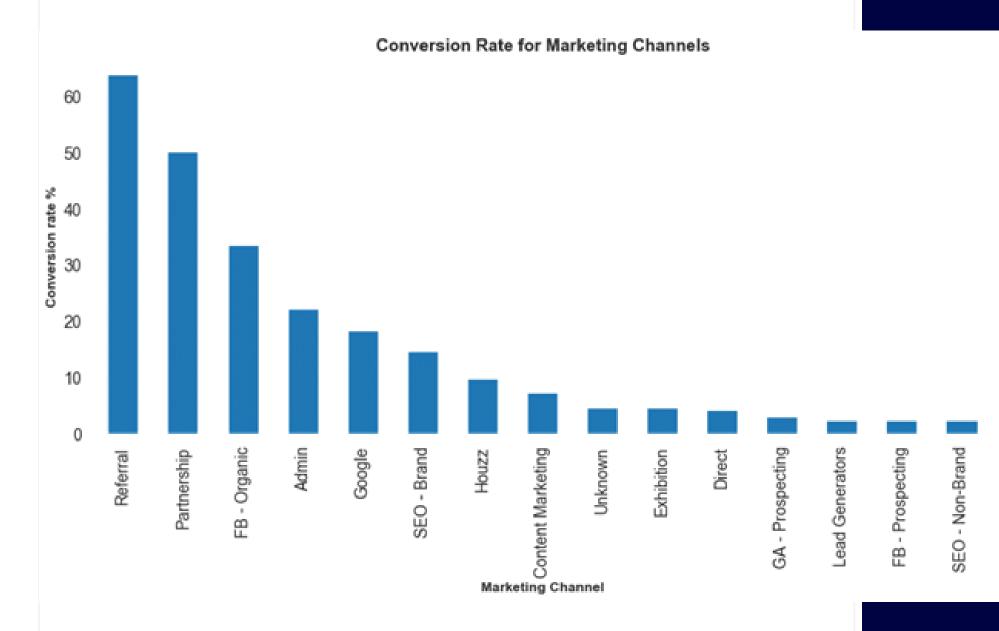
- Calls made within a day of registering, has the highest conversion rate at 2.6%.
- For customers who received a call between 1-3 days, the conversion rate drops by ~70% to 0.75%.
- Customers who receive a call between 3-5 days see a further decrease in conversion rate to 0.12%.

Therefore Sales & Marketing teams should focus on calling customers within 24 hours of registering as this is likely to result in more potential customers converting into paying users.



"Conversion Rate for Marketing channels" graph displays how the different marketing channels against the conversion rate.

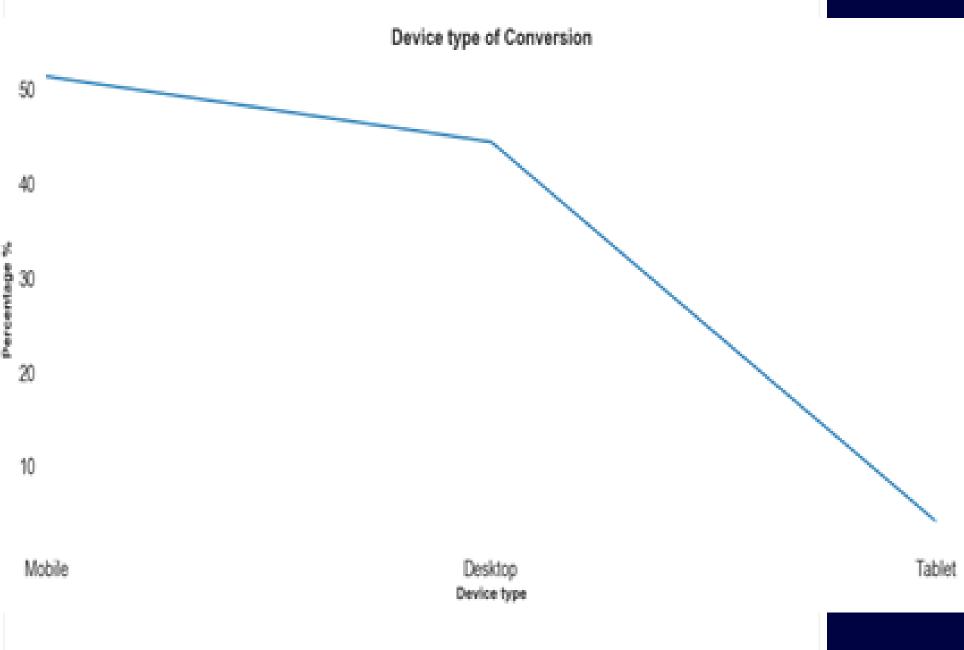
- Referral, partnerships and FB Organic have the highest conversion rate
- There should be an increased focus on the top 3 marketing channels to improve the overall conversion rate.
- Actions should include increasing the number of posts and content on Facebook, building more partnerships with builders and suppliers to find new leads and creating a referral scheme that incentivizes previous customers to refer the company to friends and family



"Device type of Conversion" shows which devices converted customers used.

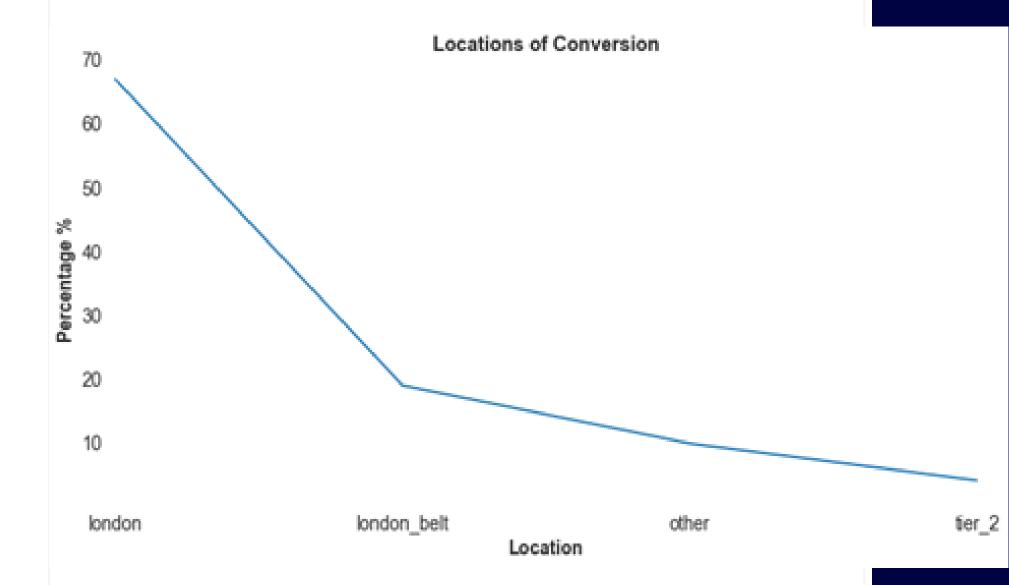
Mobiles is the highest device used with 51% and tablets being the lowest with 4%. Recommendation would be to focus their marketing on mobile devices.

Utilising social media platforms (Facebook, Instagram, Twitter, YouTube) and making sure the mobile version of the website is quick and easy to use will increase brand awareness and attract more customers.



This graph shows the highest number of converted customers are coming from London (67%) whilst the lowest is tier 2 (4%).

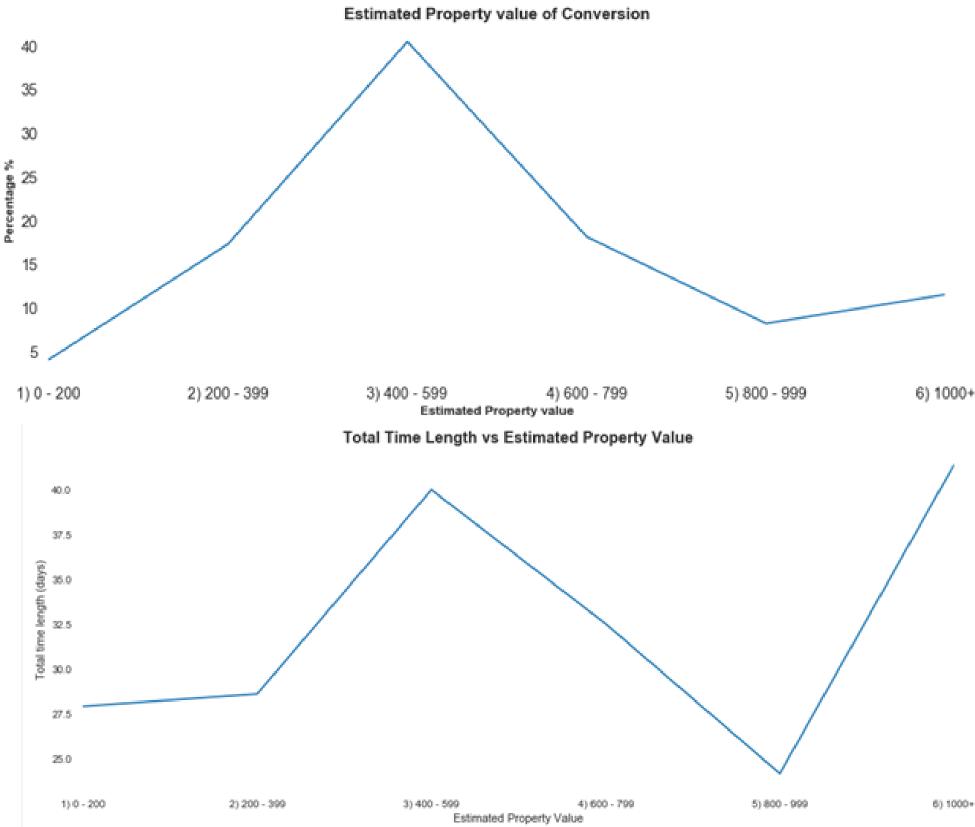
It may be best to focus marketing resources to potential customers in and around London as they make up the majority of converted customers.



"Estimates Property Values of Conversion
Rate" graph shows the majority of property value
for converted customers is 400-599k and the least
is 0-200k

"Total Time Length vs Estimated Property Value", shows the average total time from a customer registering to making a first payment plotted against property value. Customers with a property valued between 800-99 have the shortest time length (24 days)

Analysing both graphs suggest more marketing and sales resources should be targeted at customers with medium-high value properties as they are more likely to lead to quick turnaround and generate more revenue in shorter periods.



# Using Predictive Conversion Probabilities

#### **Machine Learning**

Machine learning algorithms can be used to see which customers who registered are more likely to convert and make a first payment.

#### Sales Team Using ML Model

ML models could be used by the sales team. Sales team would be shown a predicted probability of converting potential customers based on their information. They would be able to target the high-probability leads first, helping customers get all the help they needed in order for them to convert

#### **Adaboost Model**

I used ML models to predict which customers who registered would convert and make a first payment. My Adaboost model had a 0.58 AUC score

