**[Story 1]**

**## Introduction**

Introduction: Hello My name is Wilson Lum, and today I will present my Findings and business recommendations and smart goal for our client Dognition (<https://www.dognition.com/>) to help them to increase the numbers of users to complete test on their website

**Problem Statement:**

Dognition is facing varying degree of users subscription and participation levels and a consistent trend of drop off test rates

**Objectives:**

Our ultimate Smart Goal is to help Dognition Company (https://www.dognition.com/) increase the numbers of users complete test on their website by 10% over the next 6 months.

The Recommendations proposed are intended to increase user game completion rates. To get a better picture of this phenomena.

**[Story 2]**

**## Agenda**

For the agenda, I will cover on the demographic of Dogs and Dognition customer geographic spread in order for us to understand in depth of their dog’s profile and which market we can focus on. Then follow by the next 3 sections where we go into deeper depth to understand the dog profile completion and drop off rates and the last 2 section to look into the User participation rate and insights into User behaviour dynamics.

* Demographics of the Dogs
* Geographical spread of Dognition Customer worldwide
* Breed Type & Group Completion Rate
* Drop off rate of Test Names and sub-category Games
* Dog-Fix and DNA-Test Completion Rate
* User Active participation time frame
* Drop off rates insights User Behaviour covering the Free Start User and Membership Completion Rate.

**[Story 3]**

------------------------------------------------------------------------------------------------------------------------------------

We start into analysing dog demographics and customer geographical spread in order to get a better picture of what their client dog profile and customer base looks like.

------------------------------------------------------------------------------------------------------------------------------------

**## Dog Demograhpics**

First we can take a look at the demographics of Dognition Clients dogs to understand more of their client profile. We can see that the dogs are evenly distributed in terms of gender, and most not DNA tested and fixed. 52% are pure breed. The Subscription type of membership chosen by the user seems to be at a very low subset and also most users prefer to be in the “Initial 20 Games” membership follow by annual subscriptions based.

**[Story 4]**

**## Geographical Spread of the Customer**

Second, we begin by looking at the Geographical Spread of the customer base so we may have a better idea of where to focus sales and marketing efforts.

1. The US by far has the highest amount of Dognition customers in the world.
2. Rest of the world which include EU and Australia has higher users compare to the rest. This is probably may due to these countries are having dog loving culture.
3. California is the state with the highest population of Dognition users.

Therefore: Based on this data, we can develop a strategy that will focus on marketing and sales efforts in the regions with highest population of users : CA, NC, NY, TX, FL.

**[Story 5]**

------------------------------------------------------------------------------------------------------------------------------------

Now we move into analysing completion rates in order to get a better picture of what dog profile, Game Activities, User activity and membership looks like.

------------------------------------------------------------------------------------------------------------------------------------

**## Breed Type & Group Completion Rate**

Looking at the Breed Type, Pure Breed together with the sporting group achieve the most completion rate. This may due to the nature of the active games that motivates this group and breed type where users find useful from the games played.

We can implement new Test Game profile with respect to different Dog Breed and group characteristic to increase their interest and motivation of continuation of following up test games.

**[Story 6]**

**## Dog Fix & DNA Test Completion Rate**

Looking at the Dig Fix chart showing there are more Dog fixed sign-in and completion rate than the non-fixed type and more non tested DNA completion rate than DNA tested ones.

From these charts we will like to advise Dognition to focus probably take a survey on those dogs owner whose dogs are not fixed and DNA tested to see what are obstacles and preferences they are facing for taking up the test.

**[Story 7]**

**## TestName & SubCategory Completion Rate**

For users subscribe Dognition’s service, they and their dogs can play 20 interactive games by sequence and then get an in-depth analysis report about your dogs’ characteristics. But according to the analysis of Dognition data, many dog owners and dogs don’t complete each test but quit the games after the fourth test – Eye Contact Game as shown in the top bar chart.

In the bottom bar chart, most users only finish the Empathy category of total tests and stop playing the game. The main problem may be the game design; the Communication subcategory games may be a little difficult for the dogs so that they cannot finish the tasks.

In general, there is a decrease when going from one subcategory to another subcategory. This overall trend reveals that users generally drop after completing a subcategory this might suggest that it's challenging for dog owners to keep their pets engaged to complete another subcategory, so the owner becomes discouraged from continuing on with the test. Also perhaps dogs have low attention spans, therefore, they might need a break before moving on to a new subcategory.

* Dognition should re-design the tests because the difficulty and sequence of the games may not be comfortable and interesting for current users
* Introduce competition and information to user on how their dogs are performing compares to others and a channel for their users to share how they make improvements for their own dogs
* Introduce training session after each test to help them to improve their dog.

**[Story 8]**

**## User Active Time**

We still need to explore drop off rates. To have a complete picture of user behavior we need data that tells us the story behind low participation levels.

In the Sign-in by Hour Graph it shows that at 7pm Dognition customers play the most amount of games and these probabl due to most of the client has knock from work. In the sign-in By day chart exhibit that weekend especially on Sunday has the most active users.

In Sign-in By month bar chart shows the most tests completed: October 2014.

What Happened in October 2014?

Dognition was featured on "60 minutes" in Oct 2014. This reveals Publicity did have an effect on increasing user participation levels even after Oct 2014 average volumes is more than those before Oct 2014.

From this data, we can begin to create a strategy to use targeted reminders. Since we know when customers tend to play the games

**[Story 9]**

**## Drop-Off Rate Insight User Behaviour**

Dognition periodically tries offering a “Free Start” promotion to customers that gives the customers the first four tests for free. The hypothesis (or hope) would be that once potential customers get a chance to experience the product first-hand, they will be more likely to buy a subscription. But from the below chart we can see that Free Start users dropped more after the fourth game than No Free Start users. So this promotion strategy is not so effective.

One way to is to use the newly created Dog profile to fit the respective client Dog profile games and have game selection that are much easier to start with and probably reduce it to first 2 game instead of 4.

In the bottom chart Membership completion rate shows that annual subscription has the highest active sign in and test completion rate. Create promotion incentives for monthly subscriptions to annual for customer retainability since user psychologies will encourage them to have more participation when they are paying for the services whereas for those short term or free users may not have the motivation to do so.

**[Story 10]**

**## Conclusion**

Now that we acquired a better understanding in the Dog Profile and behind user participation and drop off rates. So how exactly can we increase user participation levels and improve the user experience during tests?

Let's look at Recommendation summary:

1. Implement new features:
   1. Introduce competition to compete for who has the most talented dog and who has the best personality relationship with his owner.
   2. Create a channel for user to share their experiences
   3. Introduce training help for those who want to improve their dogs test score
   4. Create Dog profiles in terms of breed type and group that can match their respective game preference. Dognition can do more research from the data on the different breed type and group to which game they are more motivated to play, meaning create a different game profile for different breed type and group of dogs and hence when given their user’s dog profile, Dognition can recommend respective game profile.
2. We will like to advise Dognition to focus probably take a survey on those dogs owner whose dogs are not fixed and DNA tested to see what are obstacles and preferences they are facing for taking up the test.
3. Send out targeted Reminders
   1. For reminders to be effect it's critical to send out during times where engagement drops the most especially. (Eye Contact game which is the fourth game). Also during times where users are most active such as after-work periods, and on Sunday sat 7pm.
4. For free Start User, one way to is to use the newly created Dog profile to fit the respective client Dog profile games and have game selection that are much easier to start with and probably reduce it to first 2 game instead of 4
5. Use Social media as an alternative to the free start promotion and online advertisement as alternative promotion strategies
6. Offer the paying customers a small incentive, gift certificates to Petco, or set up a point program that acumulates as you complete tests and accessments to later cash in and claim gifts
7. Create promotion incentives for monthly and “Initial 20 Games” subscriptions to annual for customer retainability since user psychologies will encourage them to have more participation when they are paying for the services whereas for those short term or free users may not have the motivation to do so.
8. Machine learning model prediction
   1. With existing and more Dognition data, we can help to develop a machine learning or deep learning model to predict users behaviour and send recommendations to user based on the predictions.
   2. Dognition could get more User profile data such as the gender, age and address so that for eg location may be a factor for inconvenience for certain game type and the demographic profile of users may be giving some hints to certain preference.

This concludes my recommendations for dognition. Thank you for watching.

Links:

Public Tableau Link:

<https://public.tableau.com/views/Dognition-FInalProjectv0_2/DognitionFinalProject?:language=en&:display_count=y&publish=yes&:origin=viz_share_link>

Screen cast link:

https://www.screencast.com/t/RZyPnnX1UivU