

G2T16



Improving business efficiency in Animal Welfare Organisations

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TABLE OF CONTENTS



01



OUR CLIENT

02



BUSINESS
PROBLEMS

03



DATA

04



ANALYSES

05



INSIGHTS

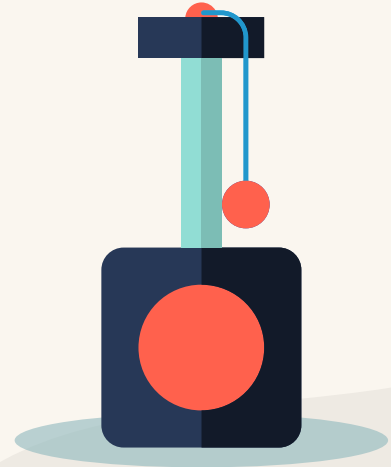
OUR CLIENT



SPCA



- Largest Non-profit animal welfare organisation in Singapore
- Registered animal welfare charity with IPC status



BUSINESS PROBLEM

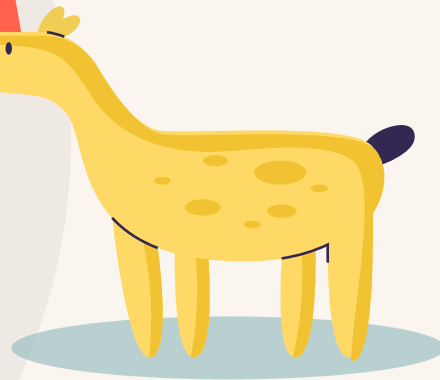


BUSINESS PROBLEMS

- Lack in adoption of lost animals at SPCA
- Low social media presence
- Difficulty in pinpointing locations of stray/lost animal sightings resulting in SPCA taking a more reactive approach in locating them
- Lack of understanding in public sentiments about SPCA as an animal welfare organisation



DATA



DATA



Hashtags

Tweets

Favourites

Retweets



Hashtags

Captions



ANALYSES



ANALYSES

TOPIC MODELLING

TEXT ANALYSIS

Understand and sort keywords
regarding our topic.
When and What to post on Social
Media.



SENTIMENT ANALYSIS

Determine if posts are
generally positive/negative

NETWORK ANALYSIS

Gather related #hashtags
SPCA uses



LOCATION ANALYSIS

Identify clusters/areas in SG
that consist of lost animals

INSIGHTS



TEXT ANALYSIS

- Tweets that received the most likes and retweets are tweets with:
 - Local celebrities being mentioned like Rui En
 - Companies such as Grab

tweet	favourites	retweet_count
GRAB A RIDE WITH YOUR PET		
If you had always wanted to bring your pet out but do not have access to your own... https://t.co/EsQuhjEzip	10	5
Good on MediaCorp artiste, actress RUI EN, for adopting BINGO the kitty (who was rescued from a glue trap), very recently!	71	74

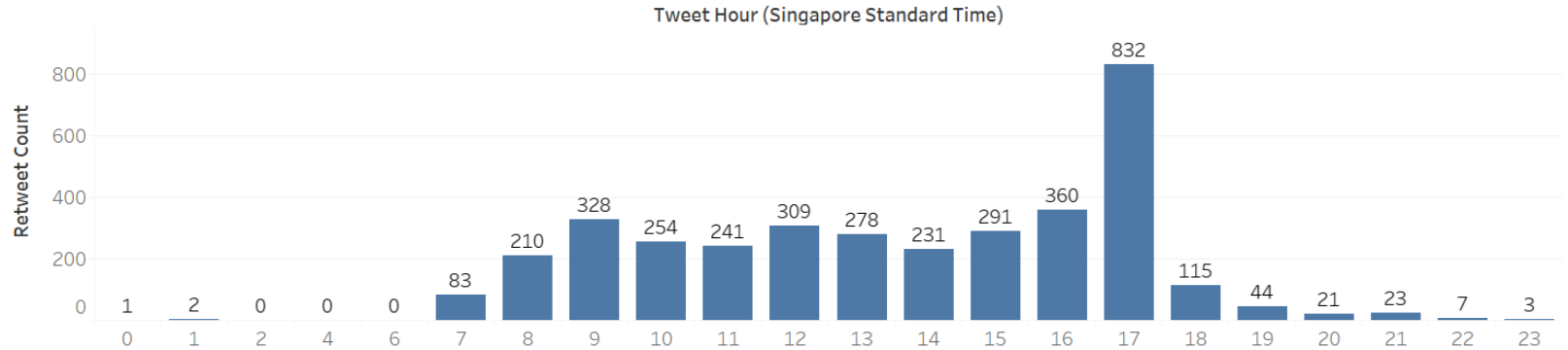
TEXT ANALYSIS

- Tweets with the following words received favourites and retweets:
 - Pet
 - Adopt
 - Found
 - Rescue
 - Shelter

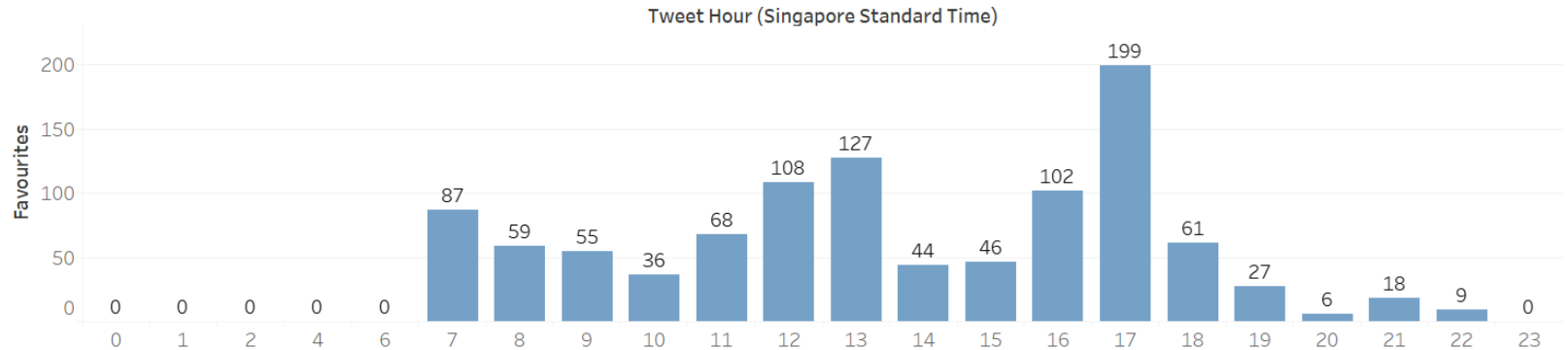


TEXT ANALYSIS

Retweets

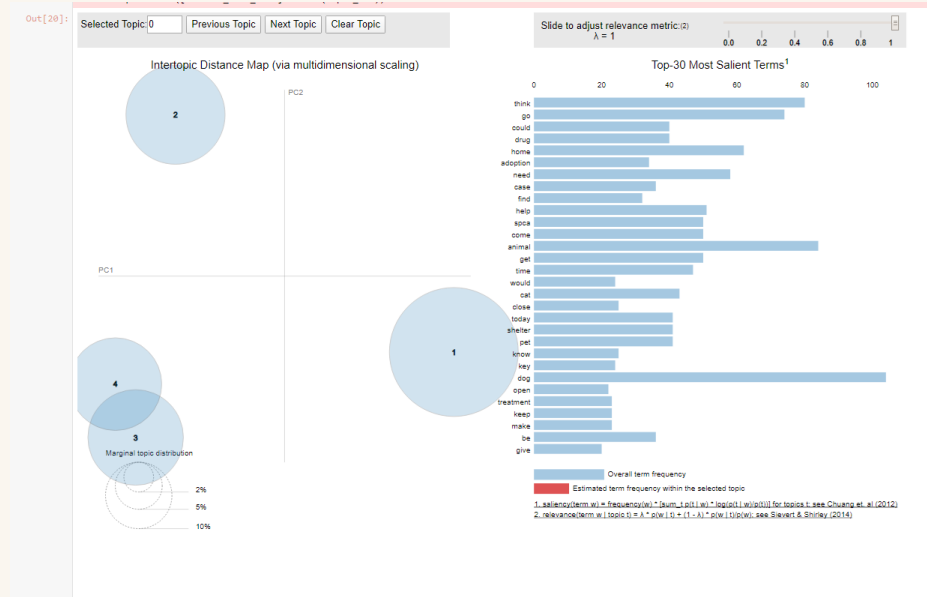


Favourites



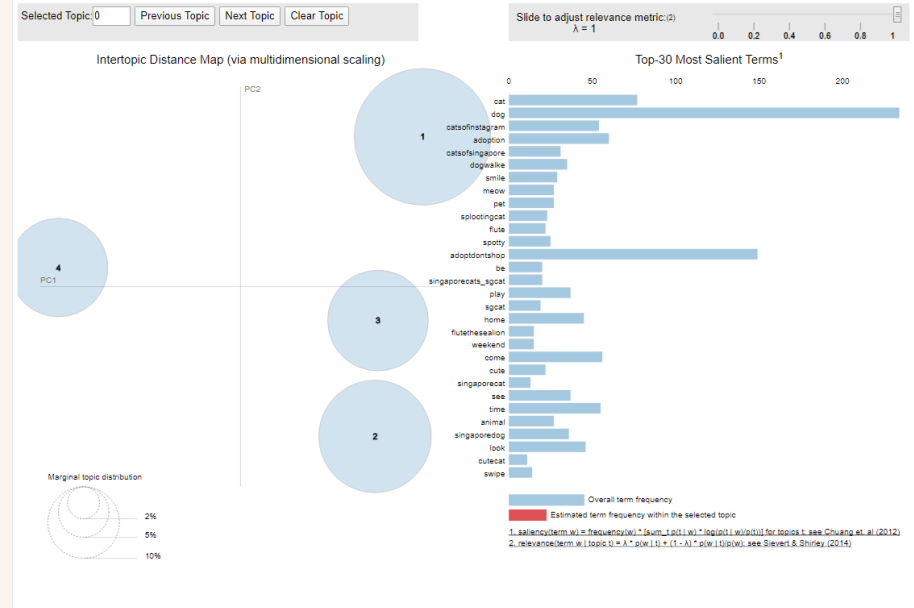
TOPIC MODELLING

- Twitter:
 - Topic 1 : Animals looking to get adopted with words such as “home”, “adopt” and “foster”
 - Topic 2 : Medical aspect of animal welfare with words such as “case”, “drug” and “treatment”



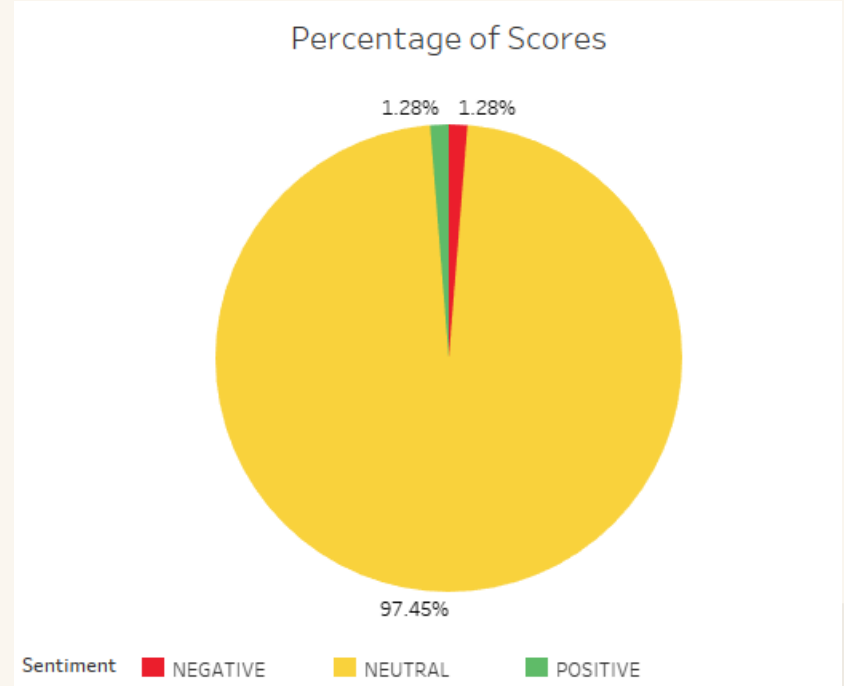
TOPIC MODELLING

- Instagram:
 - Topic 1: Having dogs as pets with words like “dog”, “friend” and “support”.
 - Topic 2 and Topic 3: Adoptions of shelter animals with words like “adoptdontshop” and “adoption”
 - Topic 4: About cats with words such as “cat”, “catsofinstagram” and “catsofsingapore”



SENTIMENT ANALYSIS

- Overall sentiment: Neutral
- Low percentage of: Positive & Negative



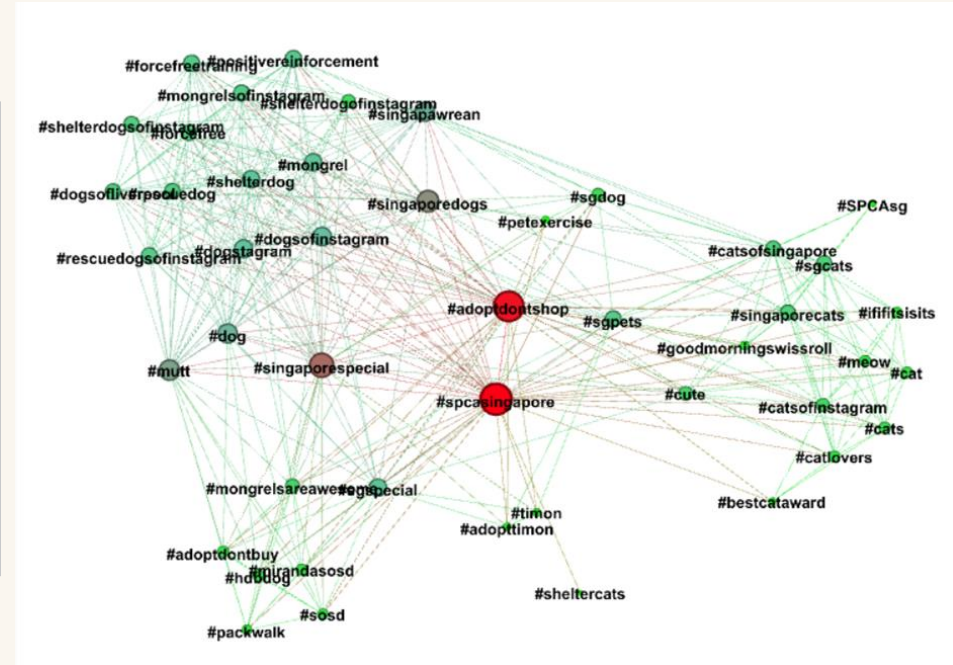
SENTIMENT ANALYSIS

- Positive tweets: “rescue”
- Negative tweets: “abuse”

Tweets		
Original Au...	Clean Text	
nrulnatasy..	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
nrzzatii	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
nsyahirahml	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
nurainnuyen	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
nurinakamil..	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
NurZainatu..	hugobrown cesc_wafiq Nesoruler SPCA_SG nparksbuzz 🙏..	POSITIVE
	hugobrown SPCA_SG nparksbuzz Just let cat free find new ..	NEUTRAL
nximir	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
NyamiSyahi..	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
ochabchn	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
OpuntiaPot..	shoaib100mph Thank speaking peta SPCA_SG ASPCA " Ho..	POSITIVE
	Where ASPCA SPCA_SG china continues horrific abuse ani..	NEGATIVE
pakshuk_	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
peachasinpi..	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
peachydells	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
Pikah98	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
pinkpikach..	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL
poohmoncet	cesc_wafiq Nesoruler I hope SPCA_SG acts fast secure res..	NEUTRAL

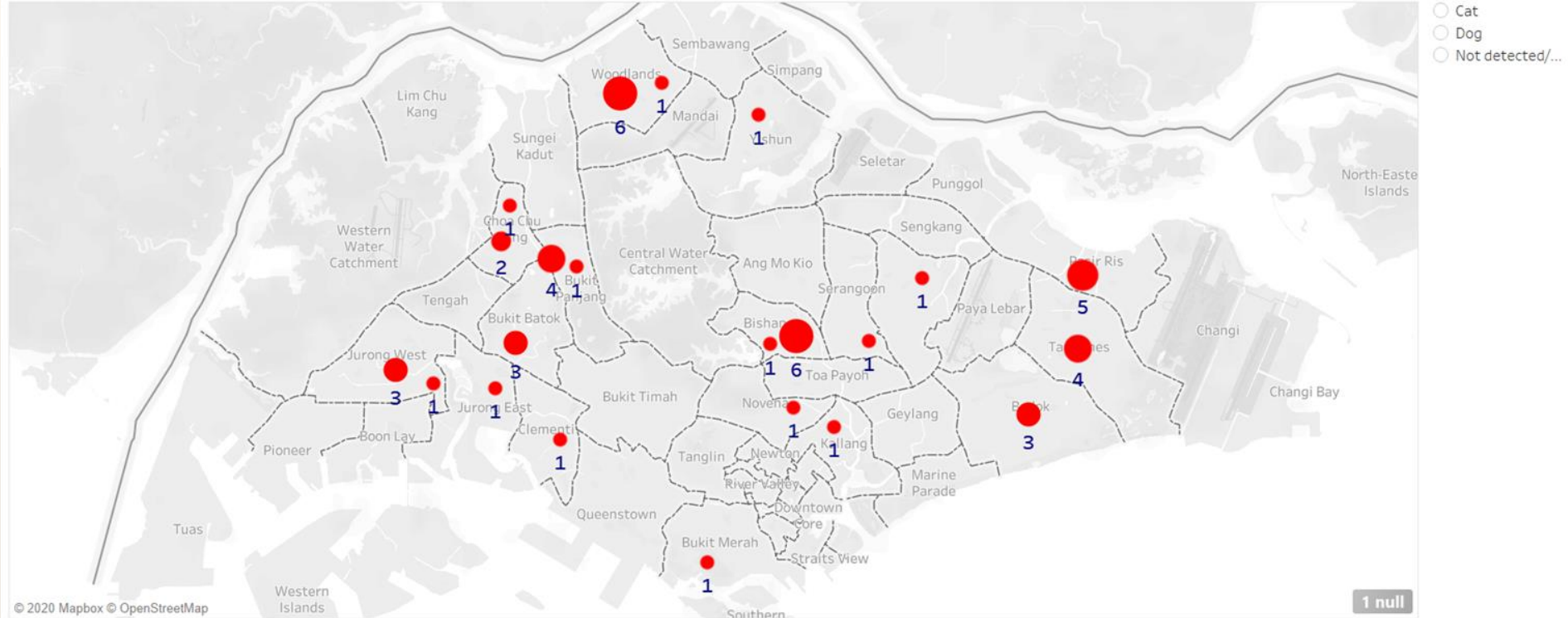
NETWORK ANALYSIS

- Network graph of hashtags related to SPCA singapore
- Top ranked hashtags in terms of degree centrality:
 - #spcasingsapore
 - #adoptdontshop
- #adoptdontshop has high betweenness centrality
 - Broker for cat and dog communities



LOCATION ANALYSIS

Location Analysis of Lost Animal: **All**



LOCATION ANALYSIS

- Most of the lost animals are found in the extreme east side of Singapore (Pasir Ris, Tampines, and Bedok).
 - East side is a popular and convenient place for people to hold pet owner meetups.
- Smaller cluster of lost animals in Bishan and Woodlands.

RECOMMENDATIONS



TEXT ANALYSIS

- SPCA should collaborate with celebrities and well-known companies to increase their social media presence
- SPCA should use words like "Pet", "Adopt", "Found", "Rescue", "Shelter" when posting tweets
- Based on the most number of likes and retweets, 5pm is the most optimal time to tweet

TOPIC MODELING

- Twitter
- SPCA can publicise their actions towards cases of sick shelter animals or stray animals in order to improve their image on social media.
- SPCA could also try to assist those in need of financial assistance to bring their pet to the vet.

TOPIC MODELING

- Instagram
- Cat community in singapore is more active on instagram
- SPCA should post more cat related posts on Instagram rather on other platforms as it appeals to the cat community who are mostly on this platform

SENTIMENT ANALYSIS

- To increase SPCA's overall sentiment to "Positive":
 - Focus on rescuing animals
 - Share more posts on their rescued animals
 - Track negative tweets and act on it

NETWORK ANALYSIS

- Currently, SPCA only uses their own “#spcasingsapore” or post with no hashtag at all.
- SPCA can include “#adoptdontshop” in their posts to :
 - Increase the number of views that it would get when the public search for animal welfare related posts on Instagram.
 - Reach out to both cat and dog communities in Singapore.

LOCATION ANALYSIS

- Focus their patrolling efforts on areas with cluster of lost animals.
- Create posts reminding owners who live in areas with high number of lost animal reports that they should be more careful and look out for their pets.
- Start a campaign that encourages people to tweet about their lost animals using a certain hashtag.
- Implement a platform where owners of lost pets can fill in an online form on details of their pets and SPCA will send out these information as tweets

THANK YOU

