



Grace Valmadrid
January 2020



→ 370,000 cats

A female **cat** and its offsprings can produce over 7 years

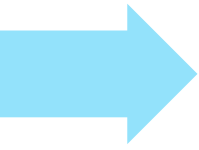
→ 67,000 dogs

A female **dog** and its offsprings can produce over 6 years

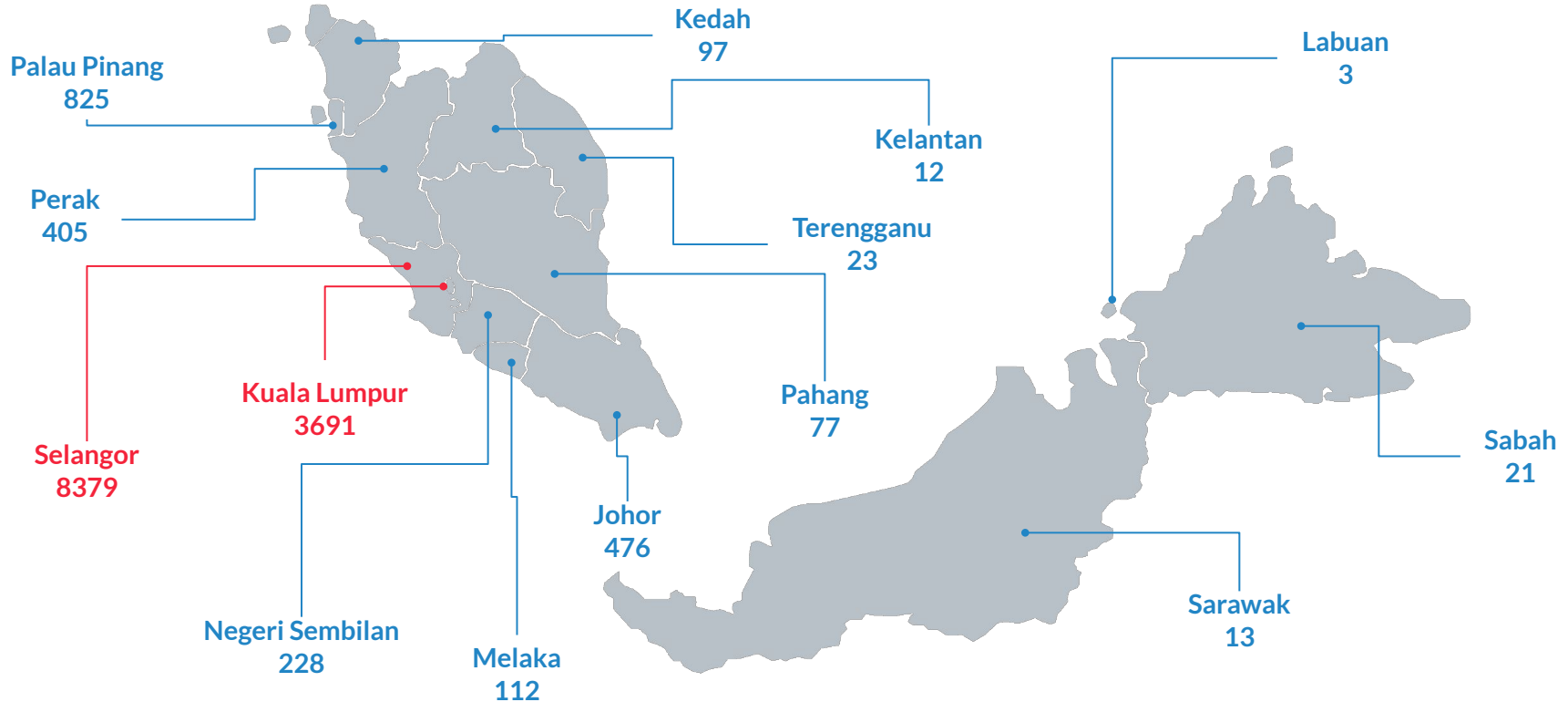




How can we help
shelters, rescuers and
owners rehome their
pets faster?



14,372 pet listings across Malaysia





Pet information

« Back To Listing

Happy-FIFI



For Adoption

Dog	Mixed Breed
Profile	Male, 29 Years 3 Months
Vaccinated	Not Sure
Dewormed	Not Sure
Neutered	Not Sure
Condition	Healthy
Body	Medium Size, Medium Fur
Color	Brown, White
Location	Ipoh, Perak
Posted	9 Feb 2012
Adoption Fee	FREE

Google Cloud Natural Language API

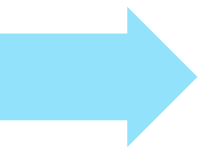
	Score	Magnitude
Entire Document	0.6	1.8
very suitable to be a guard.	0.1	0.1
easy handle. :)	0.8	0.8
cute and fierce to strangers	0.7	0.7

Score Range

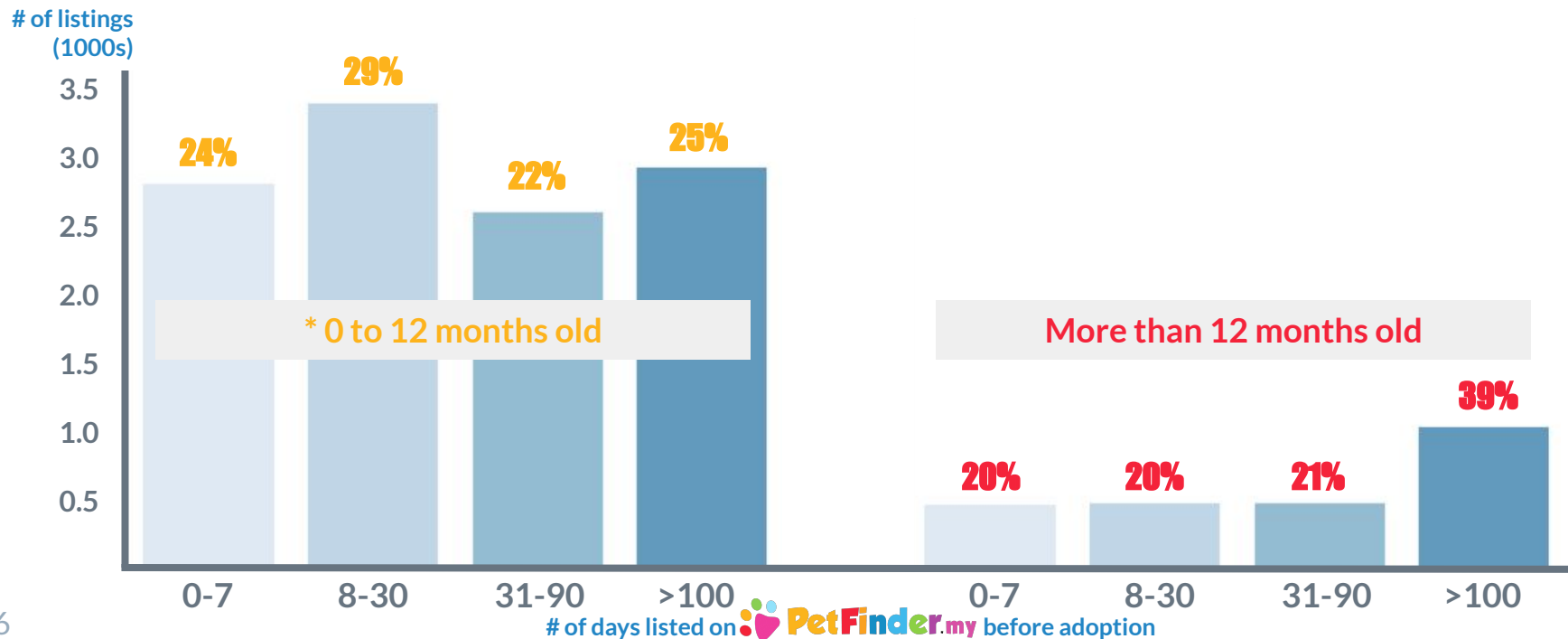
0.25 - 1.0	-0.25 - 0.25	-1.0 - -0.25
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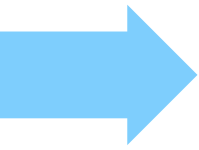
This pet has been listed for over 90 days and may already have been adopted. Kindly **notify us** if it is no longer available, to help us maintain an accurate database of pets.

very suitable to be a guard.
easy handle. :)
cute and fierce to strangers

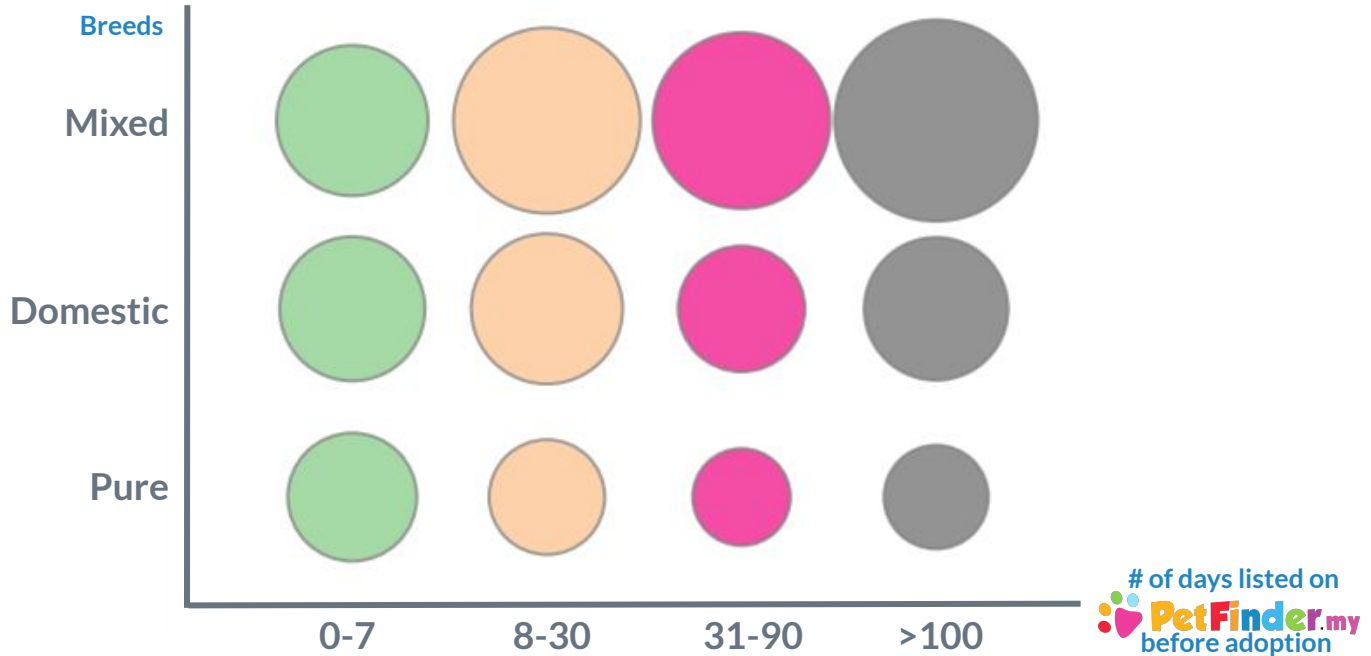


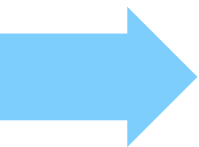
Do **younger*** pets get adopted faster?



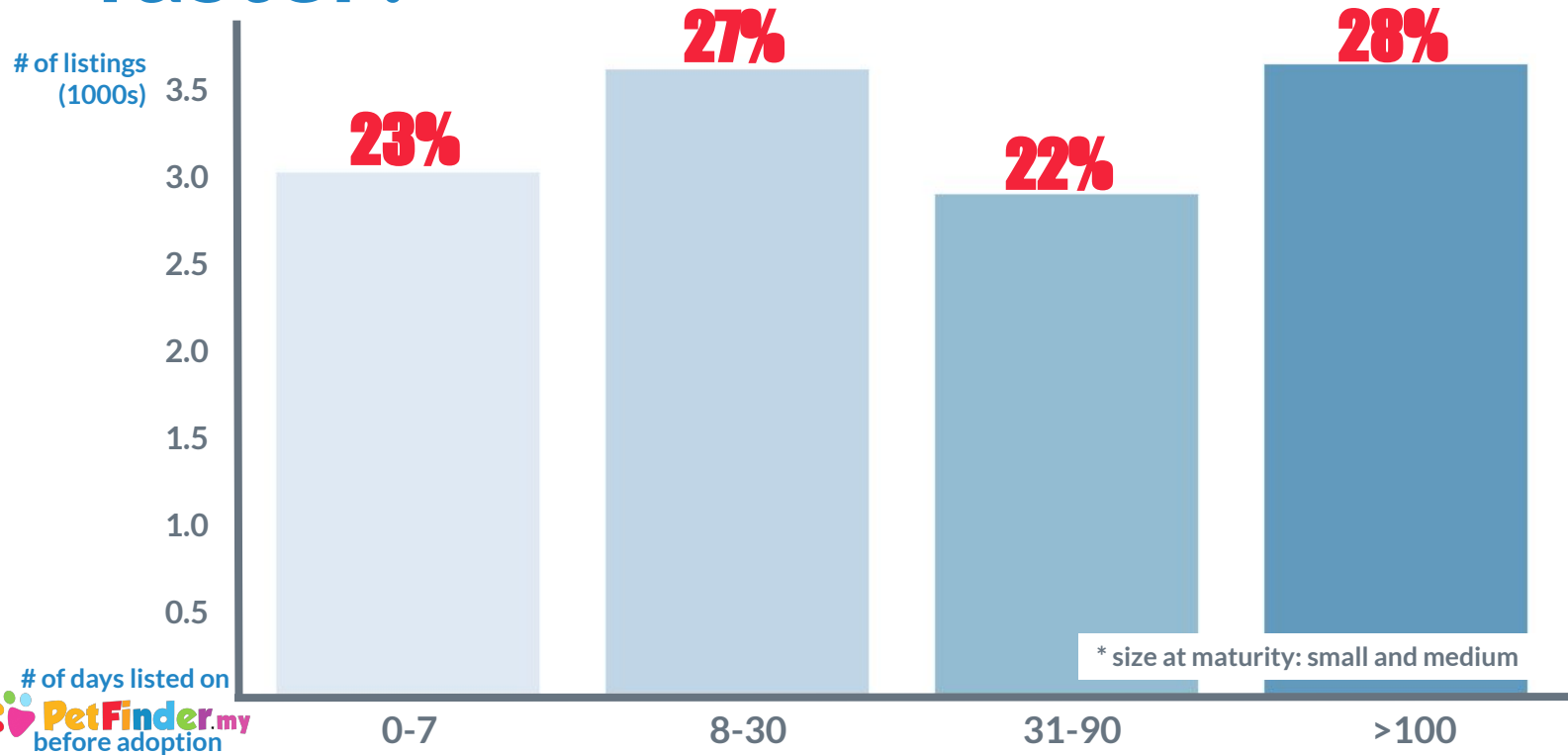


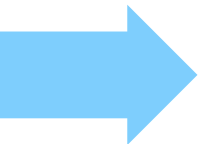
Do pure and mixed breeds get adopted faster?



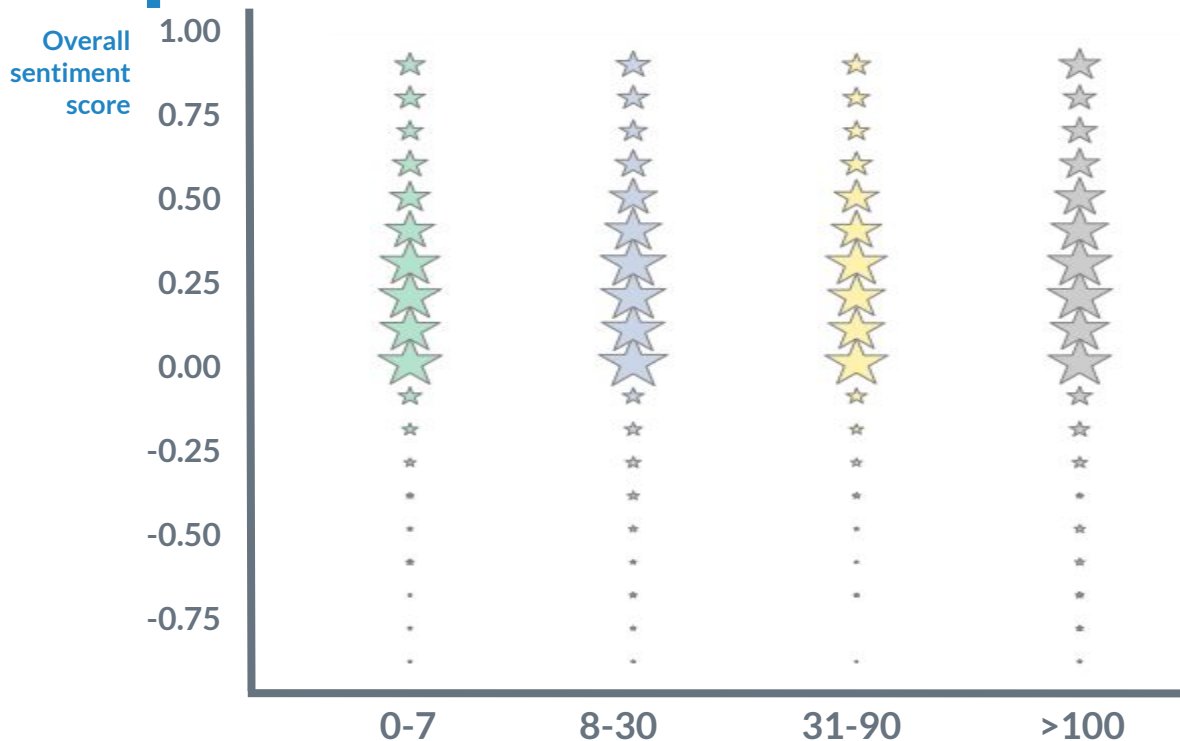


Do smaller* breeds get adopted faster?





Does a well-written description help?





Classifier Model

Accuracy score: **0.41**

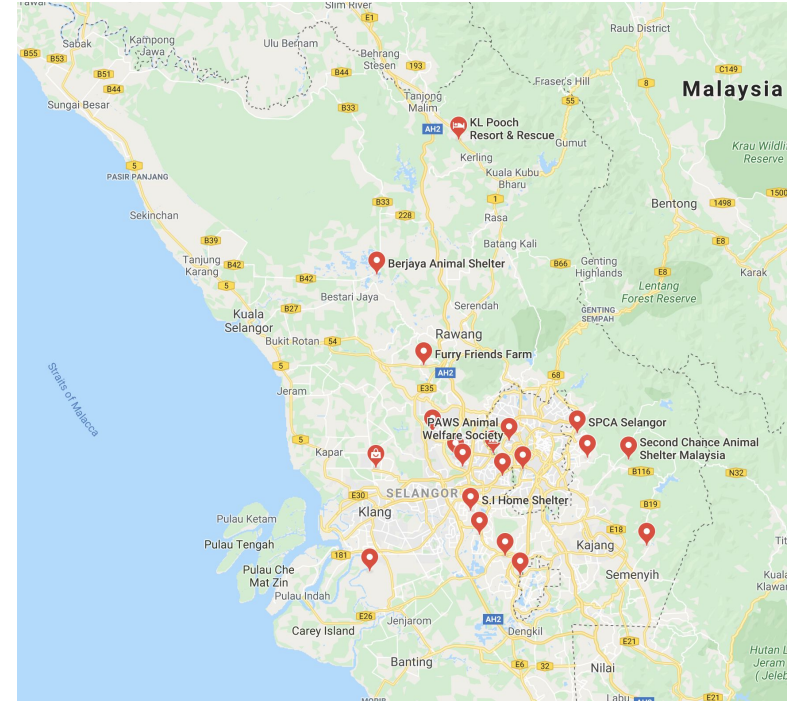
Cohen-Kappa score: **0.36**

Actual	Prediction			
	0-7	8-30	31-90	>100
0-7	41	30	6	23
8-30	25	35	15	25
31-90	15	33	19	33
>100	11	16	8	65



So what does the model say?

- ▶ There is very low chance that pets located in **Kuala Lumpur** will be rehomed within 3 months.
- ▶ Surrounding state, **Selangor**, has a higher success rate of pets getting adopted faster.



Courtesy of Google Maps



Thank you for listening!



Appendix



Use image classification to verify breed

Build a model that verifies the breed based on the photo/s uploaded. It will compare the result with the breed/s selected then prompt the user.

Upload Pet Pictures: We strongly recommend uploading at least 1 photo of the pet. Attractive photos will provide a good impression and generate more interested enquiries. More photos and videos can be uploaded once the pet profile is created.

Photo #1: No file chosen
Caption #1:

Photo #2: No file chosen
Caption #2:

Photo #3: No file chosen
Caption #3:

Photo #4: No file chosen
Caption #4:

Photo #5: No file chosen
Caption #5:

Have videos of your pet in action? You can upload them after creating this profile.

Create Pet Profile



Enhance the listing form

- ▶ Ask if the age is unknown
- ▶ Require reason for relinquishment
- ▶ Split color section into 2: dominant and other colors
- ▶ Size at maturity should be based on breed

Do you know the age of the pet? *

☐ Yes

☐ No

Age in Months *

Please provide an estimate if unknown

Your answer _____

Reason for listing *

☐ Lack of resources

☐ Moving houses

☐ Due to allergies

☐ Other: _____

Dominant Colour *

☐ White

☐ Black

☐ Brown

☐ Other: _____

Other Colors

☐ White

☐ Black

☐ Brown

☐ Other: _____




Recommender system based on images and other features*

<https://www.petfinder.my/pets/76753/>

[Back To Listing](#)

Ted




For Adoption


Cat	Domestic Short Hair
Profile	Female, 7 Years 7 Months
Vaccinated	Yes
Dewormed	Yes
Spayed	Yes
Condition	Healthy
Body	Large Size, Short Fur
Color	Black, Gray, White
Location	Kota Damansara, Selangor
Posted	13 Jun 2016
Adoption Fee	FREE

[f](#) [t](#)

Pets For Adoption



Buttercup, 5 Mths



Kiroshi, 1 Yr

This pet has been listed for over 90 days and may already have been adopted. Kindly **notify us** if it is no longer available, to help us maintain an accurate database of pets.

Teddy is an indoor n outdoor. She just lies all the time, feeling relaxed watching the world passes by. I'm looking for a loving home, someone who she can get attached to.

[Pet already adopted? Let us know](#) [Report Abuse](#)

Gallery

Click on photo to view photo gallery, or mouse over for preview



Meet:
Name: Ted



Please check out these listings as well:

Name: Yuri



Note: Cosine Similarity = 99.9992 %

Name: Leo



Note: Cosine Similarity = 99.9991 %



Credits

- ▷ Presentation template by SlidesCarnival
- ▷ Photographs by Unsplash