Animal Crossing
Villager Recommender

By Xiaoyun Gong

MSiA423 Analytics Value Chain | Project Presentation

"
Find your next
favorite villager
"

Motivation

1

Once upon a time…

2

Your favorite villager want to explore the world and left your island…

3

You found a cutie on a deserted island…

Q/ Invite or not?

A/ Villager Recommender!

[Demo](#)

Data Used & RDS usage

Name	Species	Gender	Personality	Hobby	Birthday	Catch-phrase	Favorite_Song	Style_1	Style_2	Color_1	Color_2	Wallpaper	Flooring	Furniture_List	Filename	Unique_Entry_ID
Admiral	Bird	Male	Cranky	Nature	27-Jan	aye aye	Steep Hill	Cool	Cool	Black	Blue	dirt-clod wall	tatami	717...	brd06	xxx...
Agent S	Squirrel	Female	Peppy	Fitness	2-Jul	sidekick	Go K.K. Rider	Active	Simple	Blue	Black	concrete wall	colorful tile flooring	7854...	squ05	...

Features altered

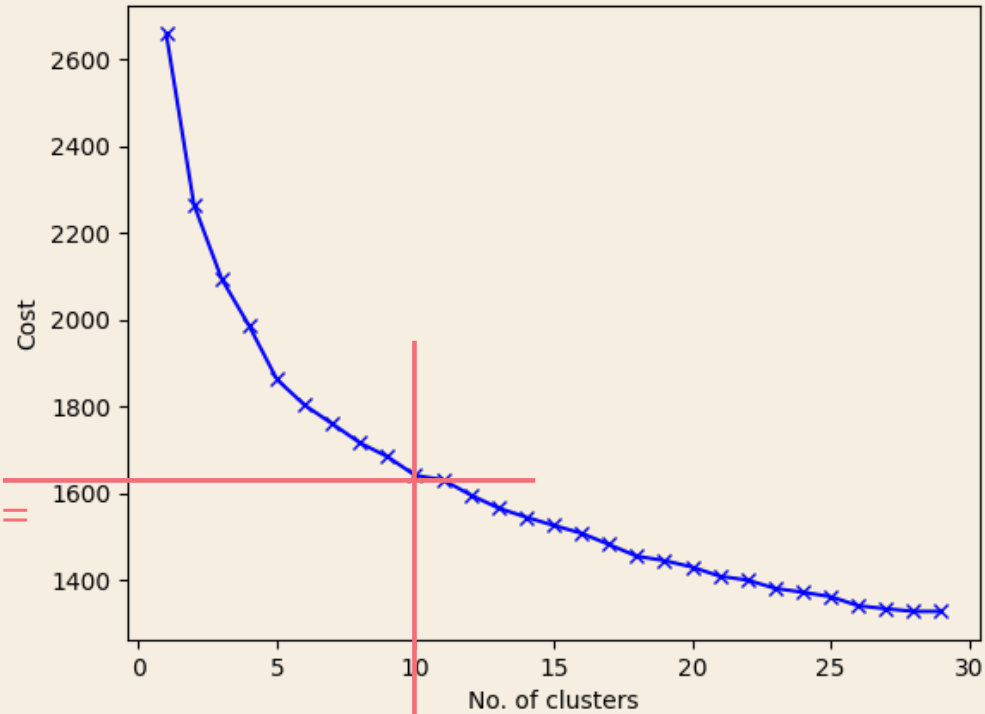Features used

>>> Kmodes + create recommendations + store in RDS

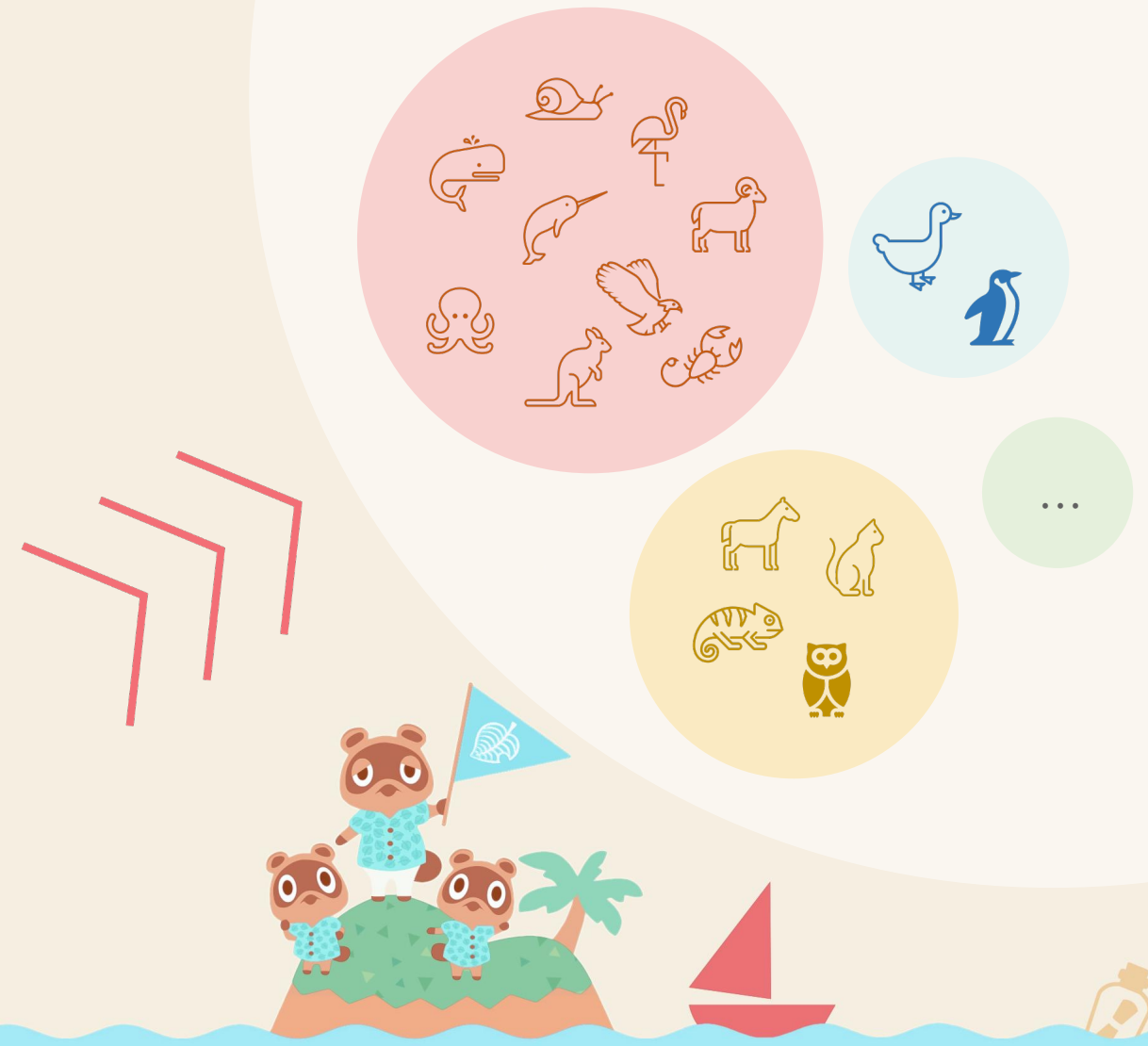| Input_name	Rec_name	Species	Gender	Personality	Hobby	Birthday	#1 style	#2 style	#1 color	#2 Color
Admiral	Agent	Squirrel	Female	Peppy	Fitness	2-Jul	Active	Simple	Blue	Black

App Input

App output

Kmodes Model

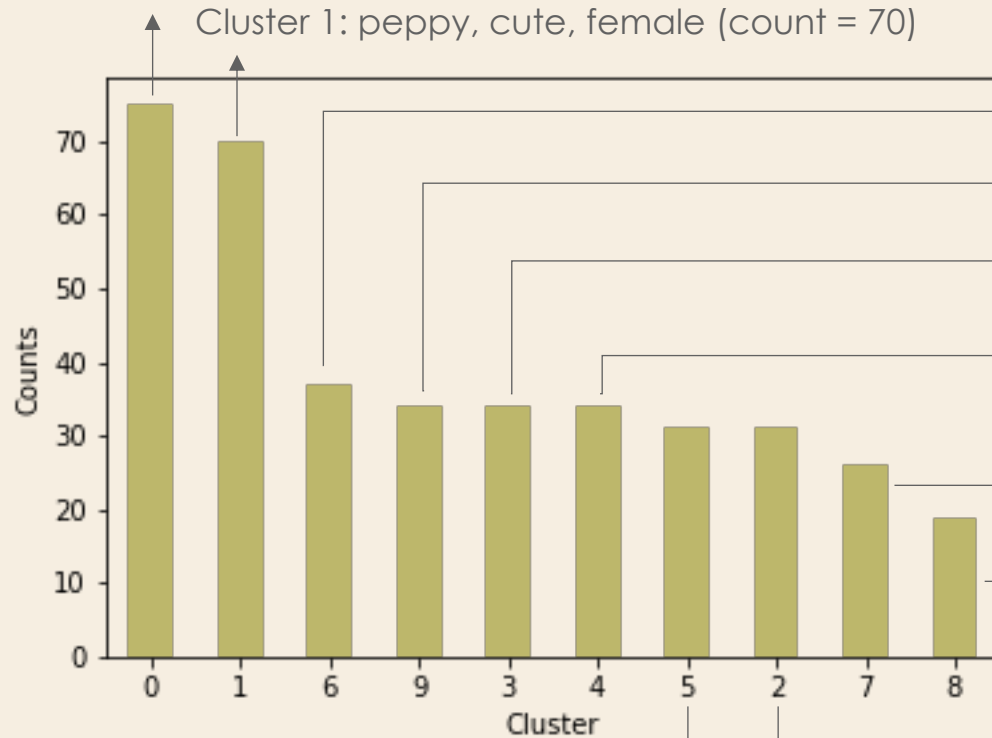Elbow Method For Optimal k

Cost = 1642

Pick # of clusters = 10

Kmodes Model Insight

Cluster 0: Lazy, simple, loves playing (count = 75)

Cluster 1: peppy, cute, female (count = 70)

Cluster 6: fitness, jock, male (count = 37)

Cluster 9: cranky, male, likes to be cool (count = 34)

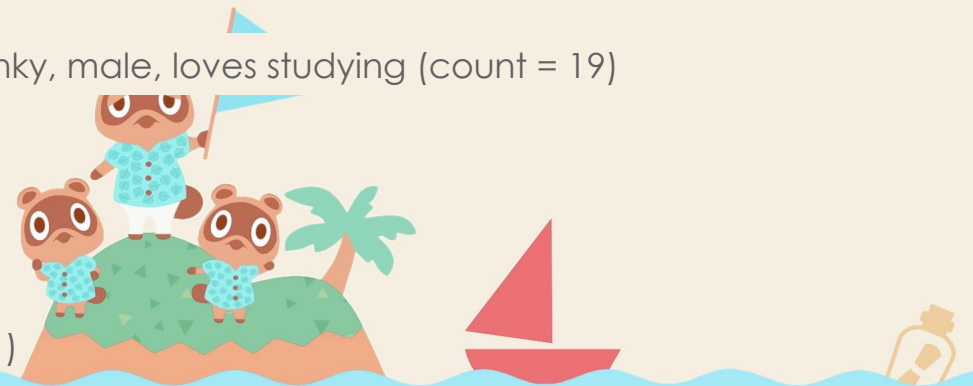Cluster 3: Snooty, small, female, likes to be gorgeous and elegant (count = 34)

Cluster 4: Snooty, large, female, likes to be gorgeous and elegant (count = 34)

Cluster 7: jock, simple, male (count = 26)

Cluster 8: cranky, male, loves studying (count = 19)

Cluster 2: smug, male (count = 31)

Cluster 5: simple, normal, female (count = 31)

Thank you!

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Welcome to
Animal Crossing