

A background graphic of a network sphere, composed of numerous blue dots connected by thin lines, forming a complex web that curves across the right side of the image.

olist

Segmentation
commerciale

SITE DE E-COMMERCE « OLIST »

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MODÉLISATION /
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FINALE



CONCLUSION

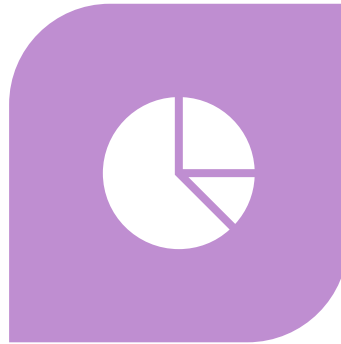
Contexte



Contexte



SITE DE E-
COMMERCE

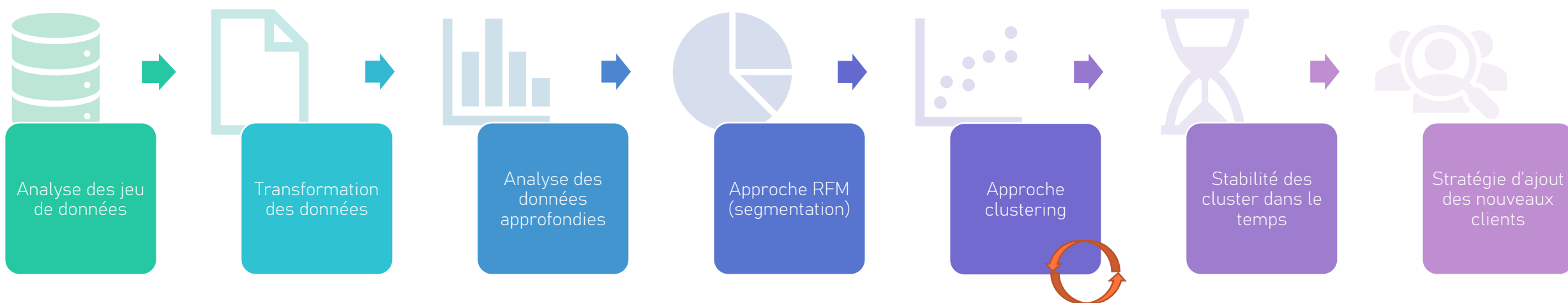



SEGMENTATION
COMMERCIALE



CAMPAGNE DE
COMMUNICATION

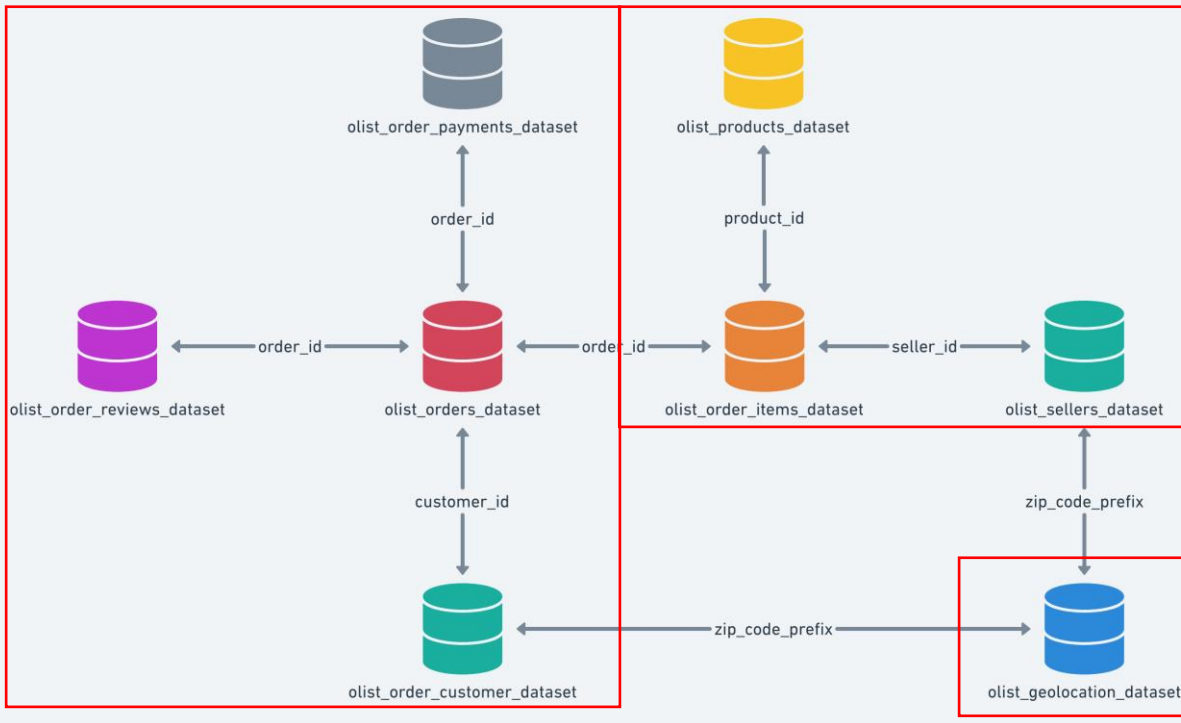
Approche effectuée



The background features a dark blue gradient with a faint, stylized line graph. The graph has several data points connected by lines, with some points highlighted in white and others in blue. A specific data point is labeled with the value '289.33'.

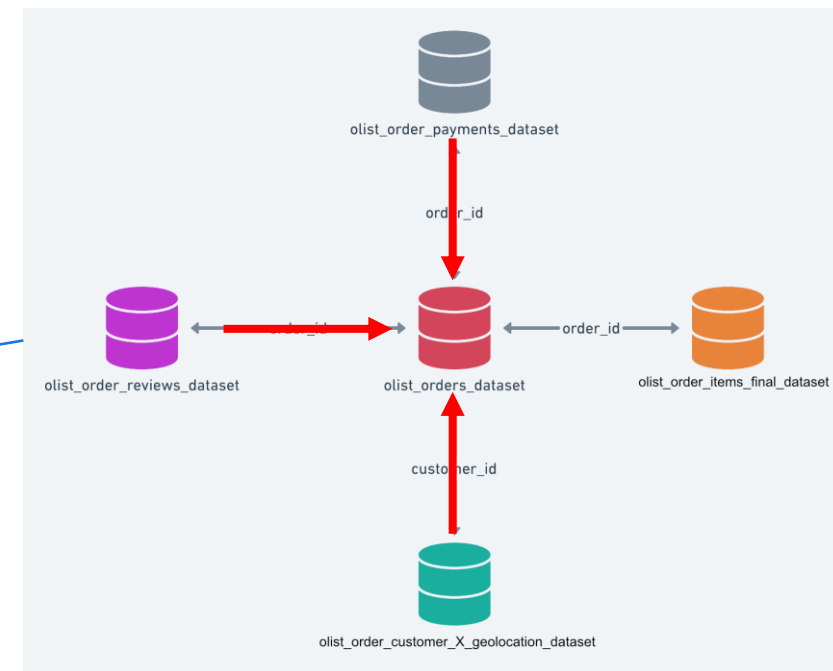
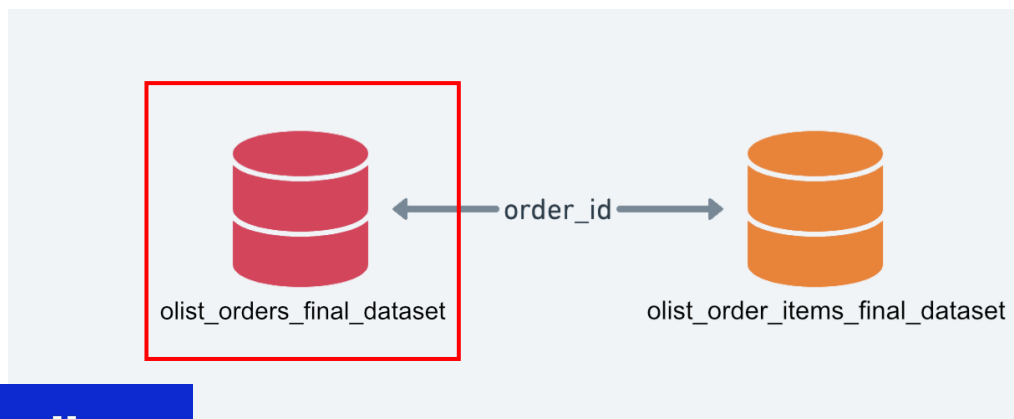
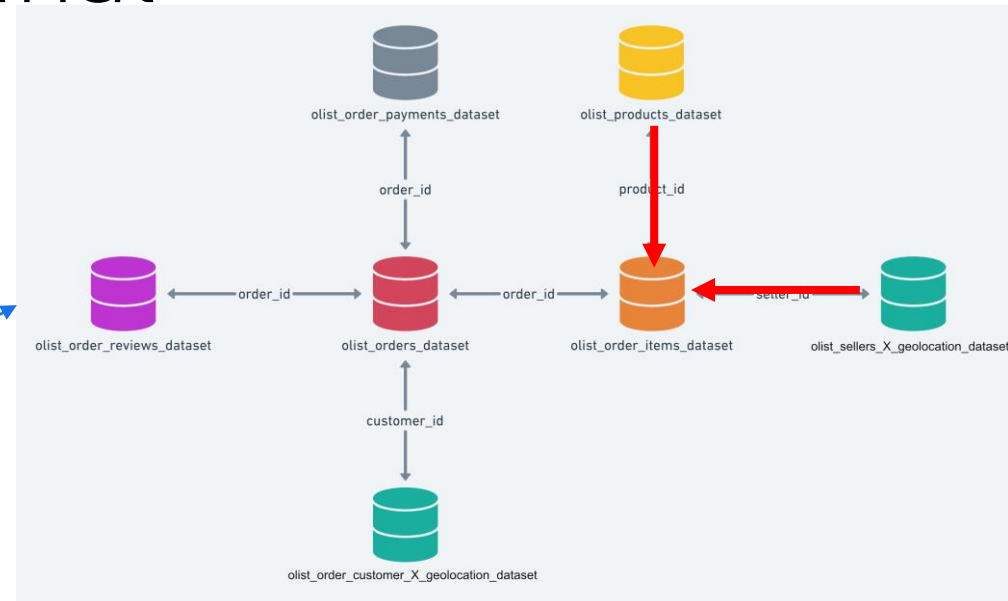
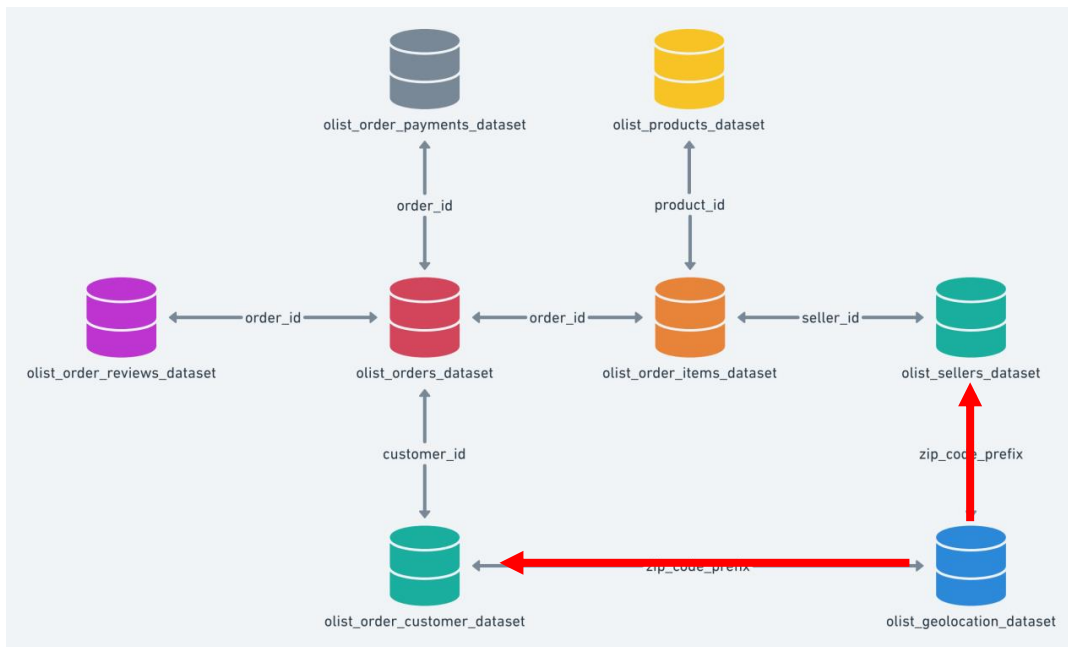
Présentation / préparation des jeux de données

Présentation des jeux de données



- Produit / Revendeur
- Commande / Client
- Géolocalisation

Préparation du fichier final



Analyse du jeu de données

```
for object to mirror_mod.mirror_object
operation == "MIRROR_X":
    mirror_mod.use_x = True
    mirror_mod.use_y = False
    mirror_mod.use_z = False
operation == "MIRROR_Y":
    mirror_mod.use_x = False
    mirror_mod.use_y = True
    mirror_mod.use_z = False
operation == "MIRROR_Z":
    mirror_mod.use_x = False
    mirror_mod.use_y = False
    mirror_mod.use_z = True

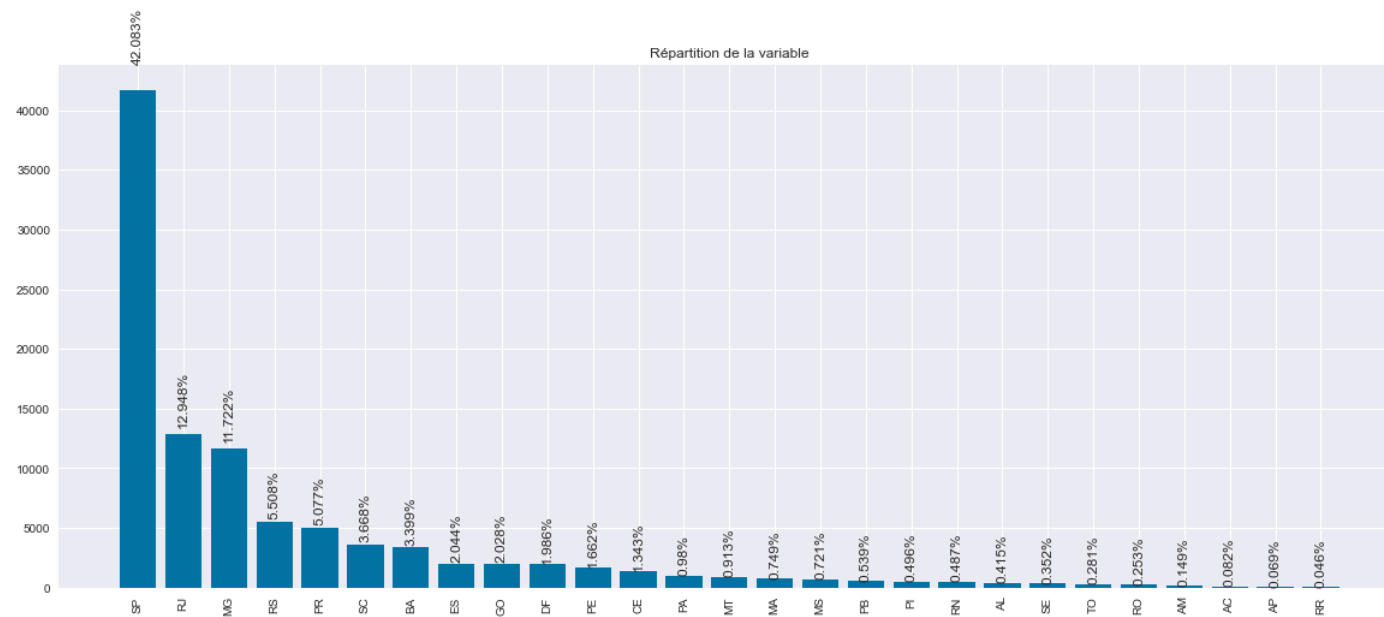
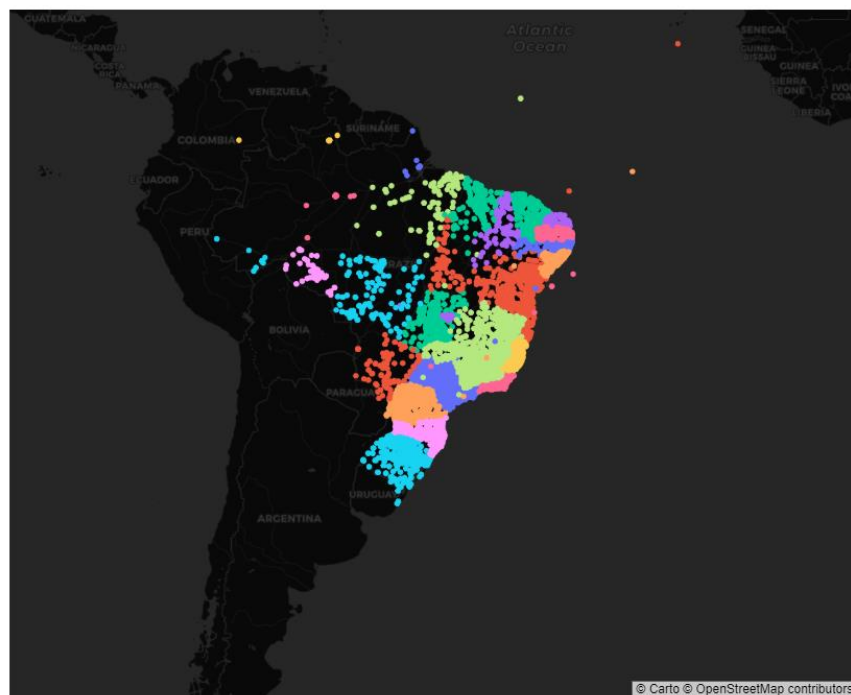
#selection at the end -add
mirror_ob.select= 1
modifier_ob.select=1
context.scene.objects.active = modifier_ob
("Selected" + str(modifier_ob.name))
mirror_ob.select = 0
= bpy.context.selected_objects[0]
data.objects[one.name].select = 1

print("please select exactly one object")

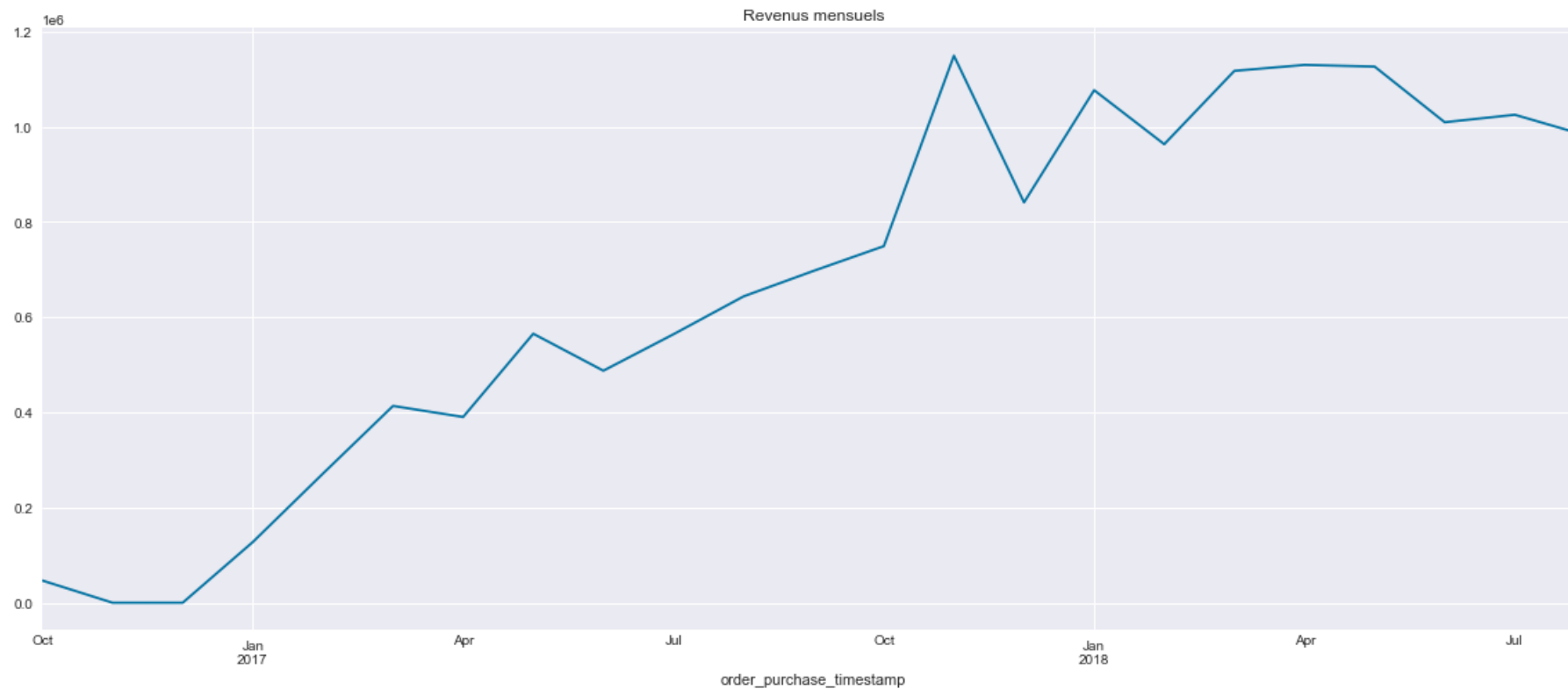
-- OPERATOR CLASSES -----

bpy.types.Operator):
    "X mirror to the selected object.mirror_mirror_x"
    "mirror X"
```

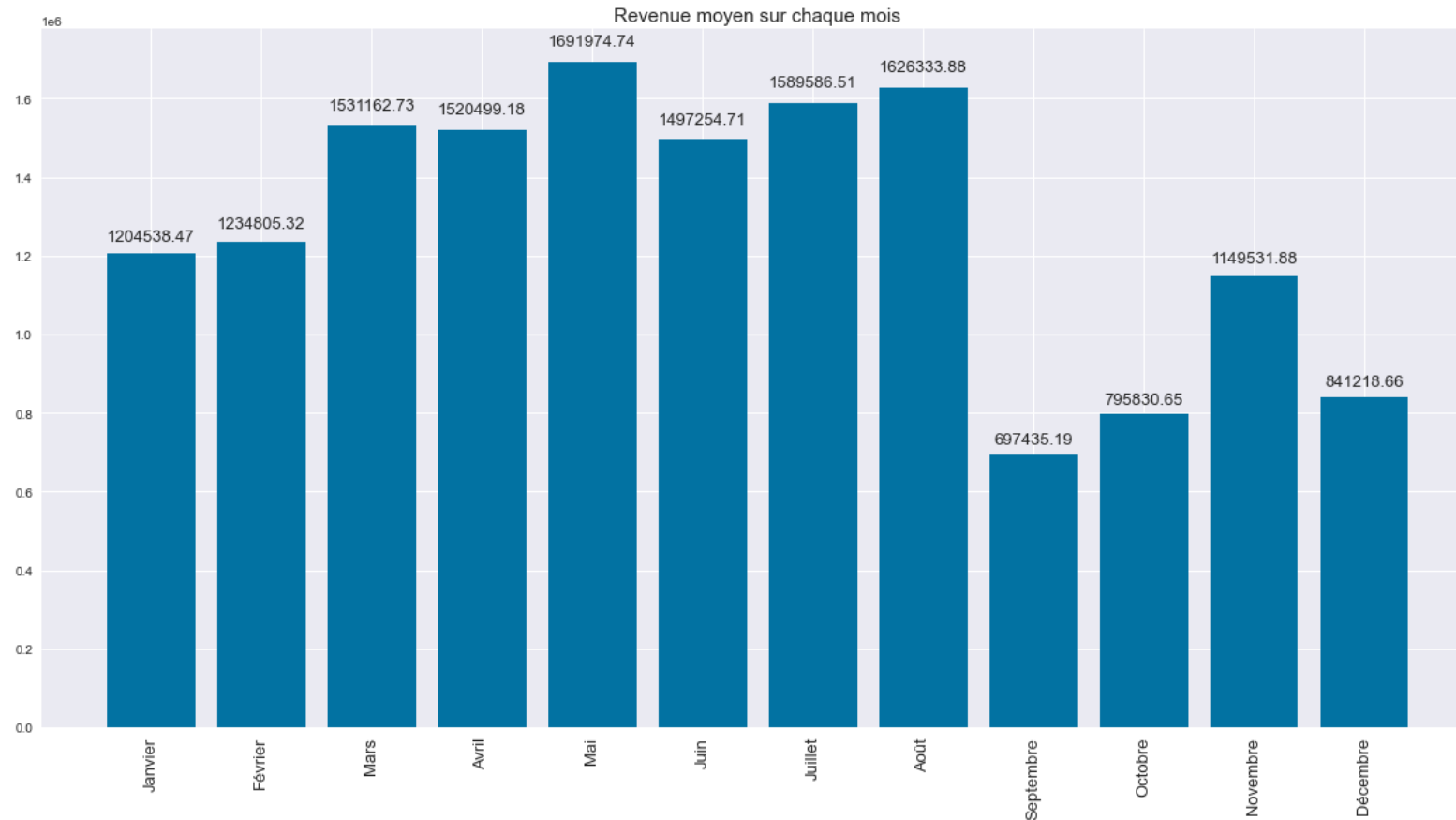
Analyse du jeu de données (spatial)



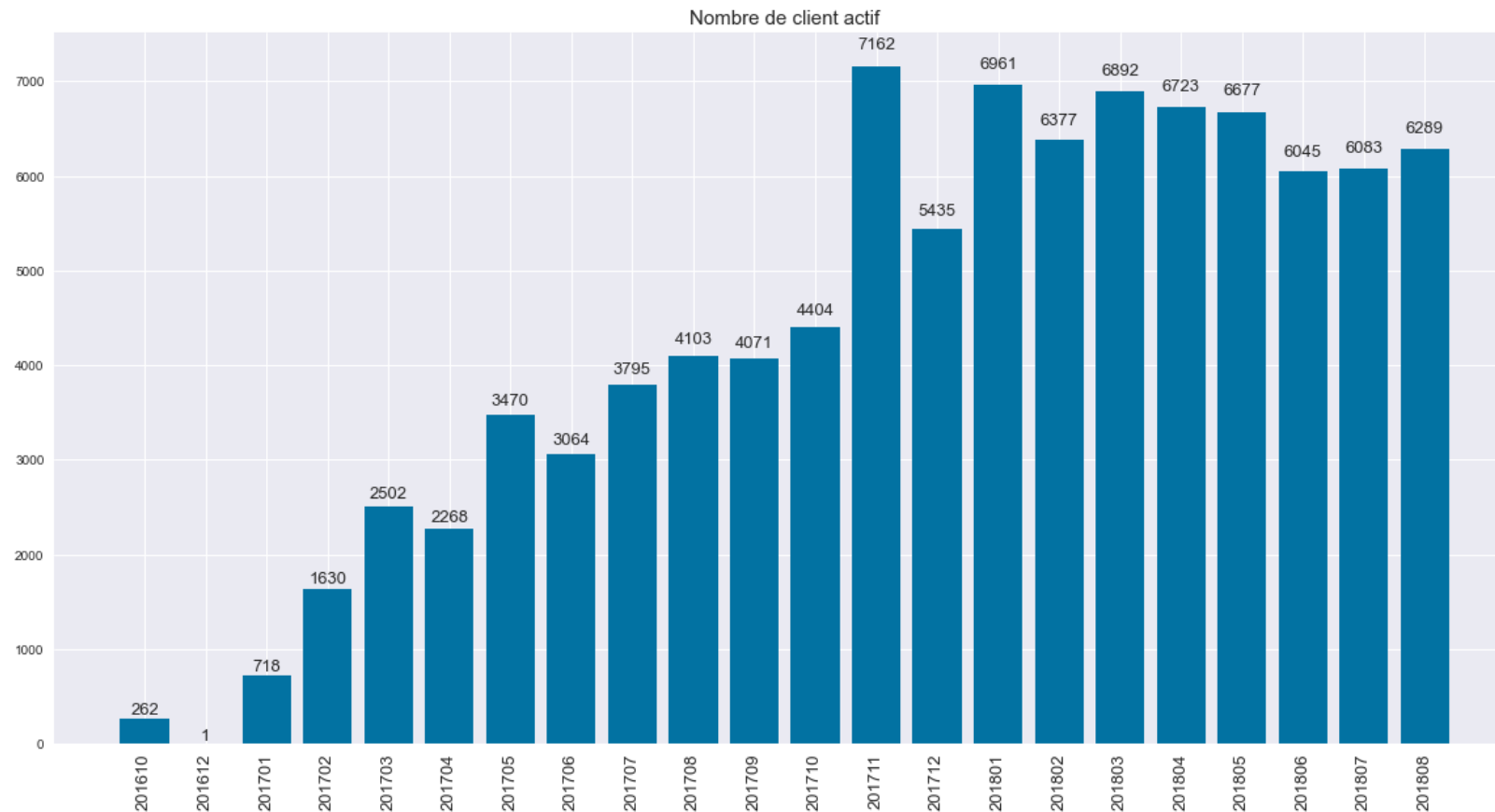
Données sur les commandes / clients



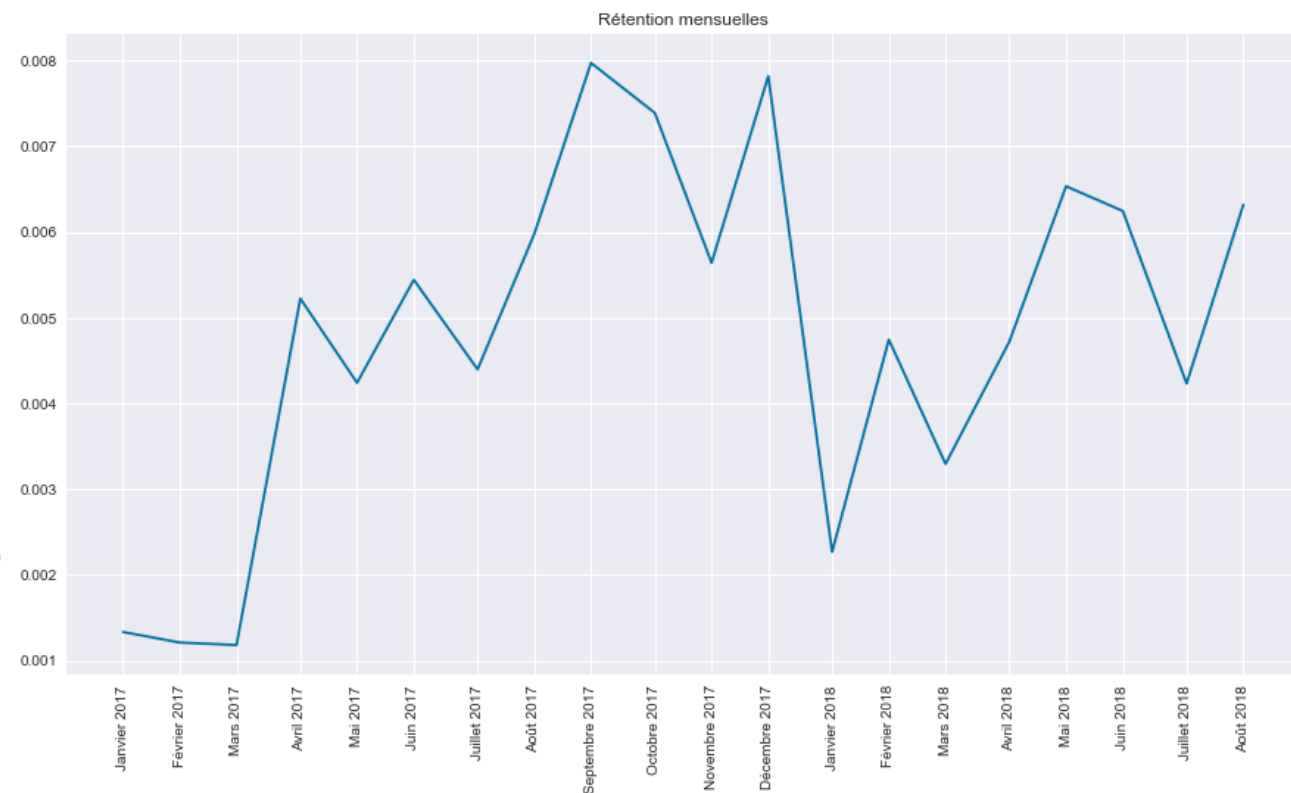
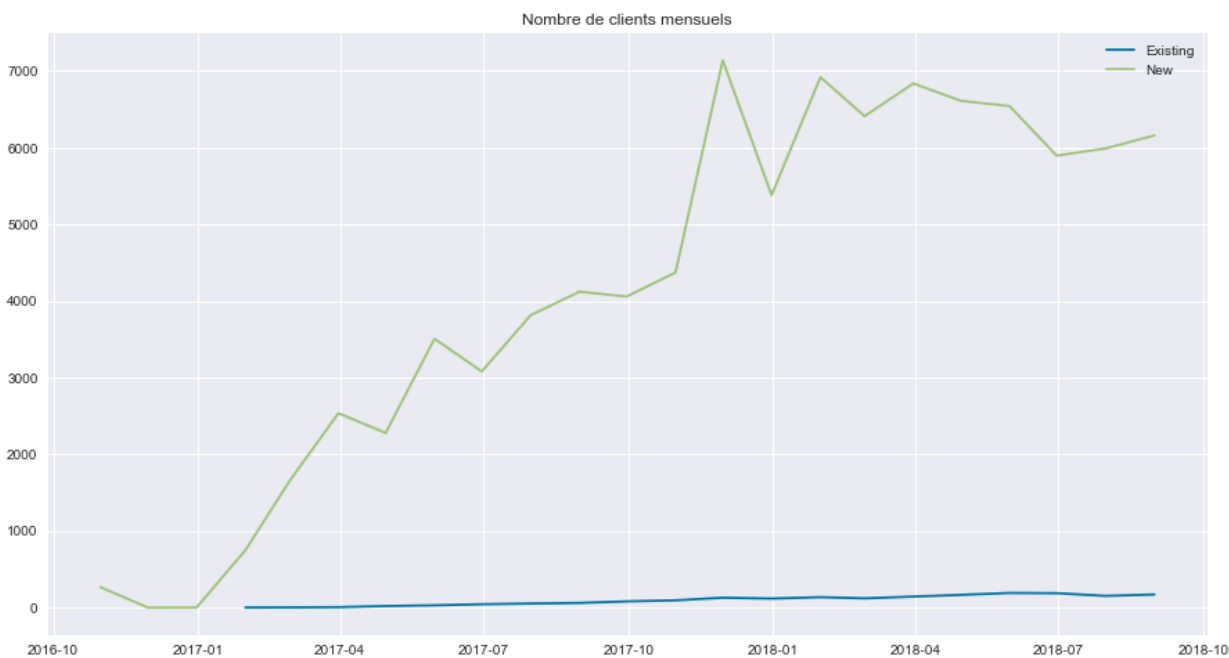
Données sur les commandes / clients (bis)



Données sur les commandes / clients (bis)



Nombre de nouveaux clients et rétention



Nettoyage du jeu de données



Valeurs manquantes



Valeurs dupliquées



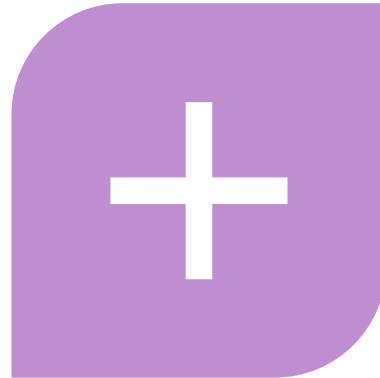
Valeurs aberrantes

Modélisation / Segmentation

Segmentation RFM



R = RÉCENCE

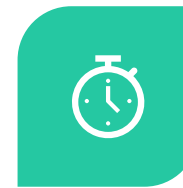
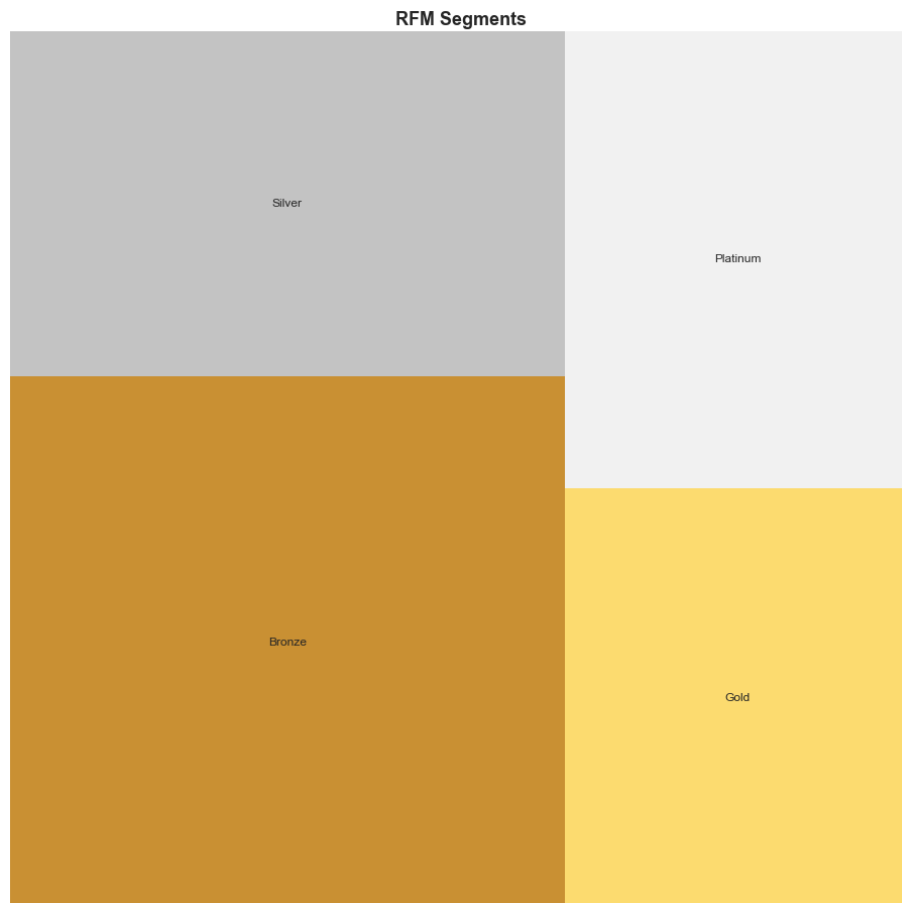


F = FRÉQUENCE



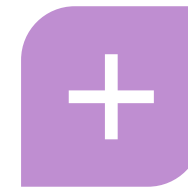
M = MONÉTAIRE
(MONTANT TOTAL)

Segmentation RFM (résultat)



R = 236,97

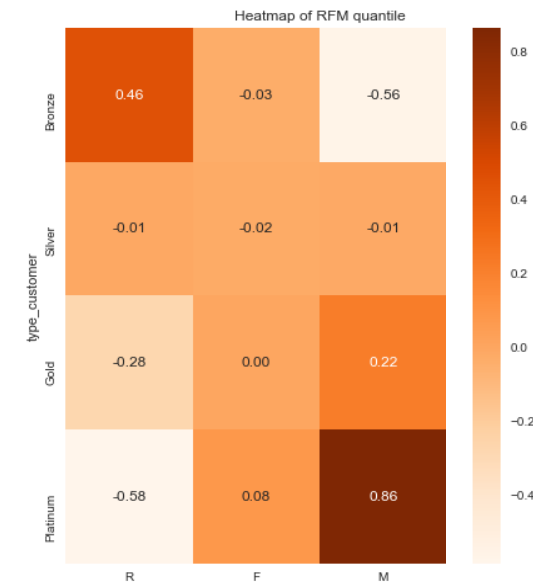
MOYENNE :



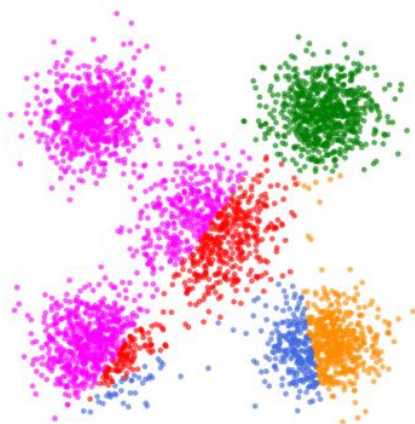
F = 1,03



M = 165,1



Iteration #01
(inertia: 3622.78)



Kmeans
clustering
(choix
variables)

Récence

Fréquence

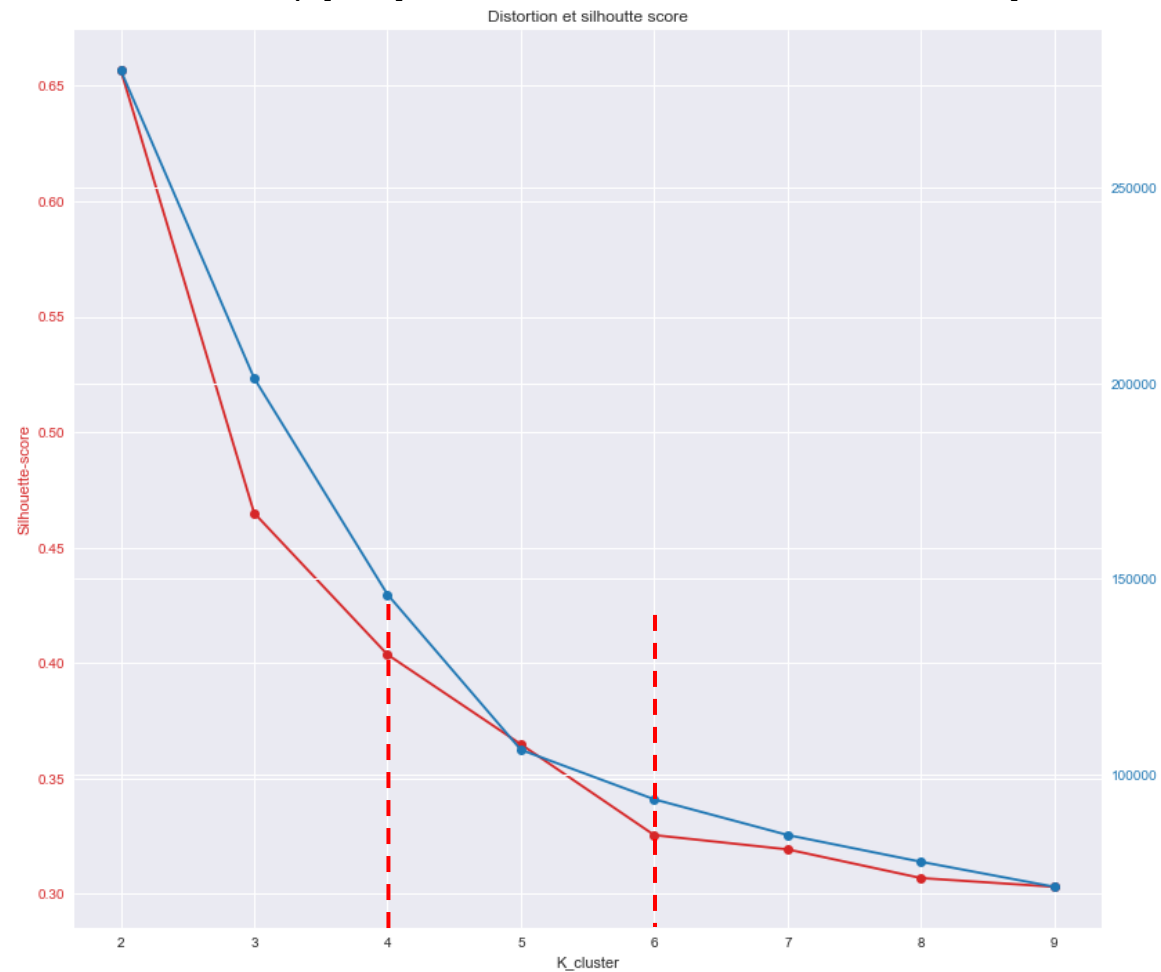
Montant

Review_score

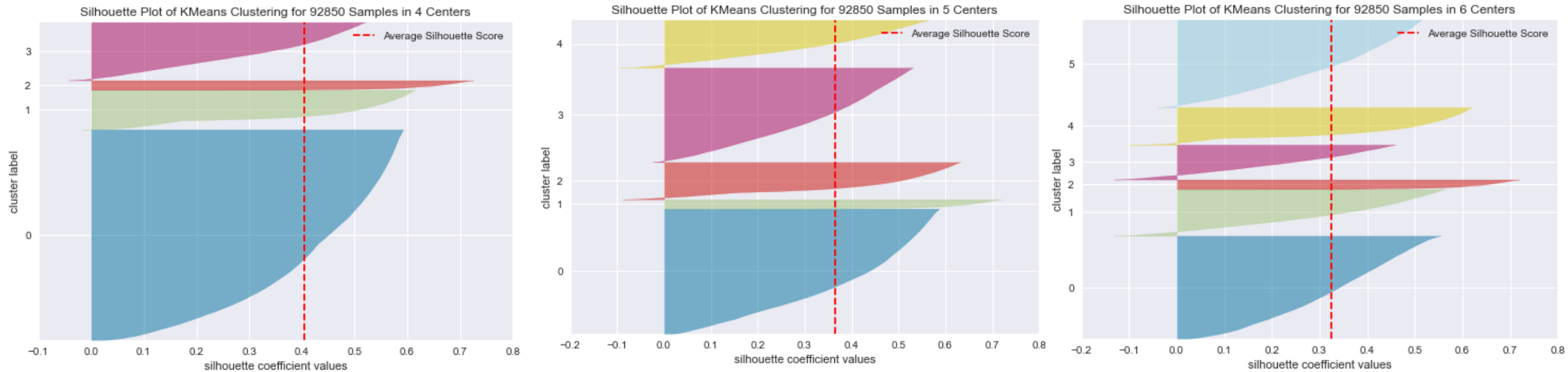
✗ Geolocation_state (one_hot_encoder)

✗ Payment_value_xxxx (credit_card,voucher...)

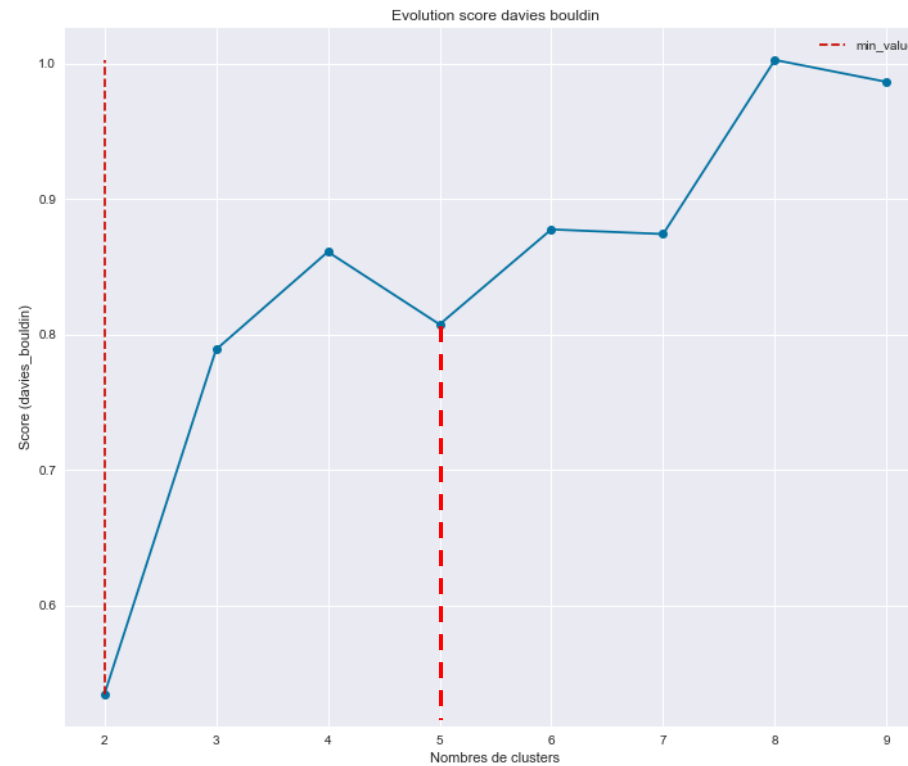
Kmeans clustering (choix cluster)



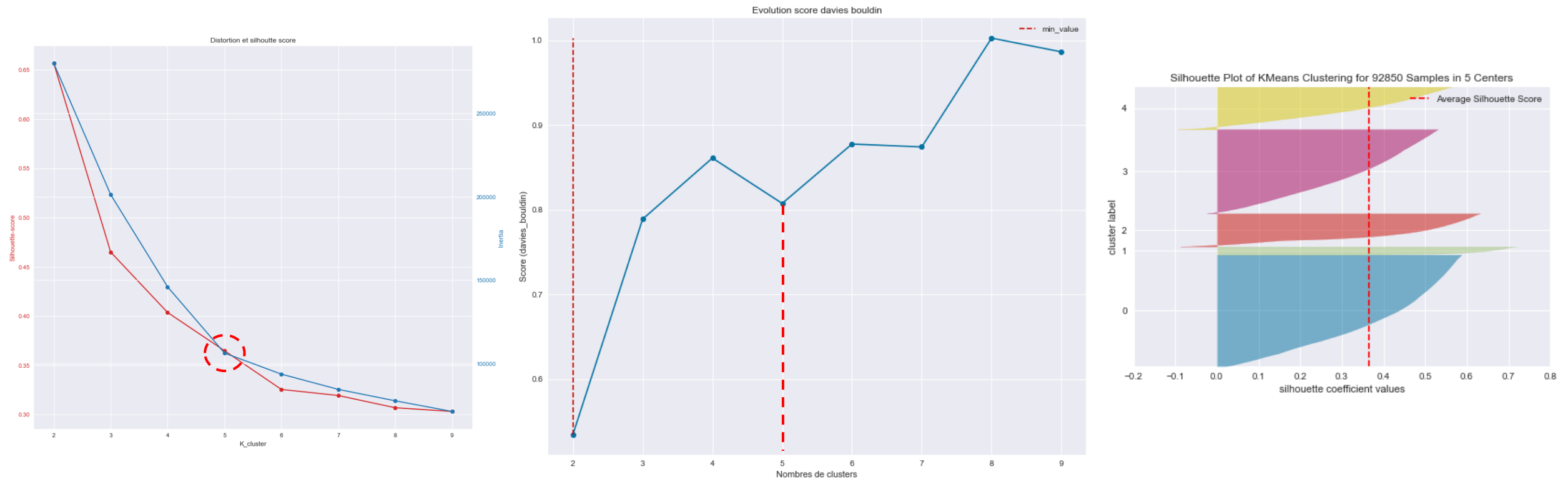
Kmeans clustering (choix cluster) (bis)



Kmeans clustering (choix cluster) (bis)



Kmeans clustering (choix cluster) (bis)



Kmeans clustering (résultat)



R = 236,97



F = 1,03

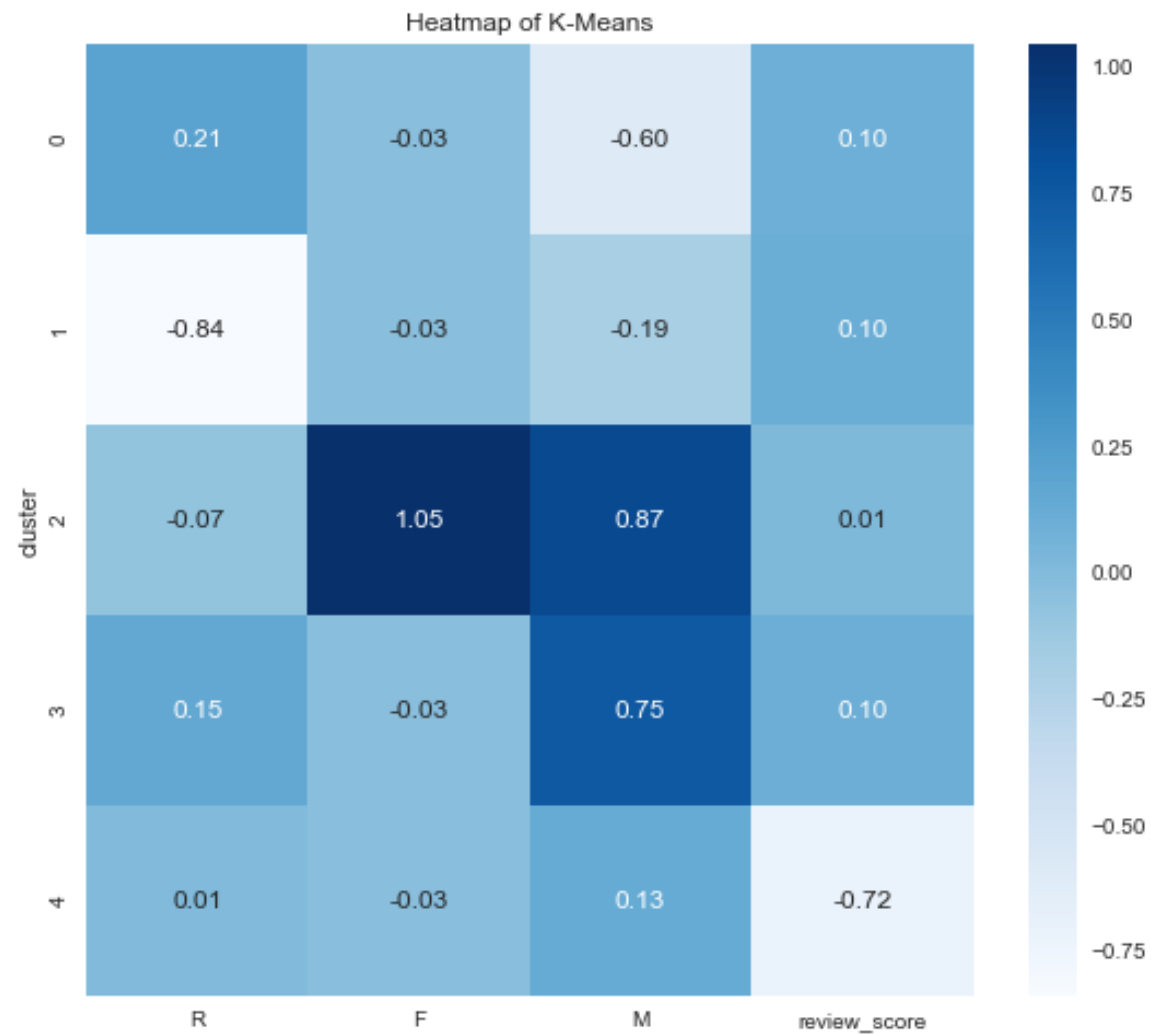


M = 165,19

MOYENNE :



REVIEW_SCORE
= 4,14

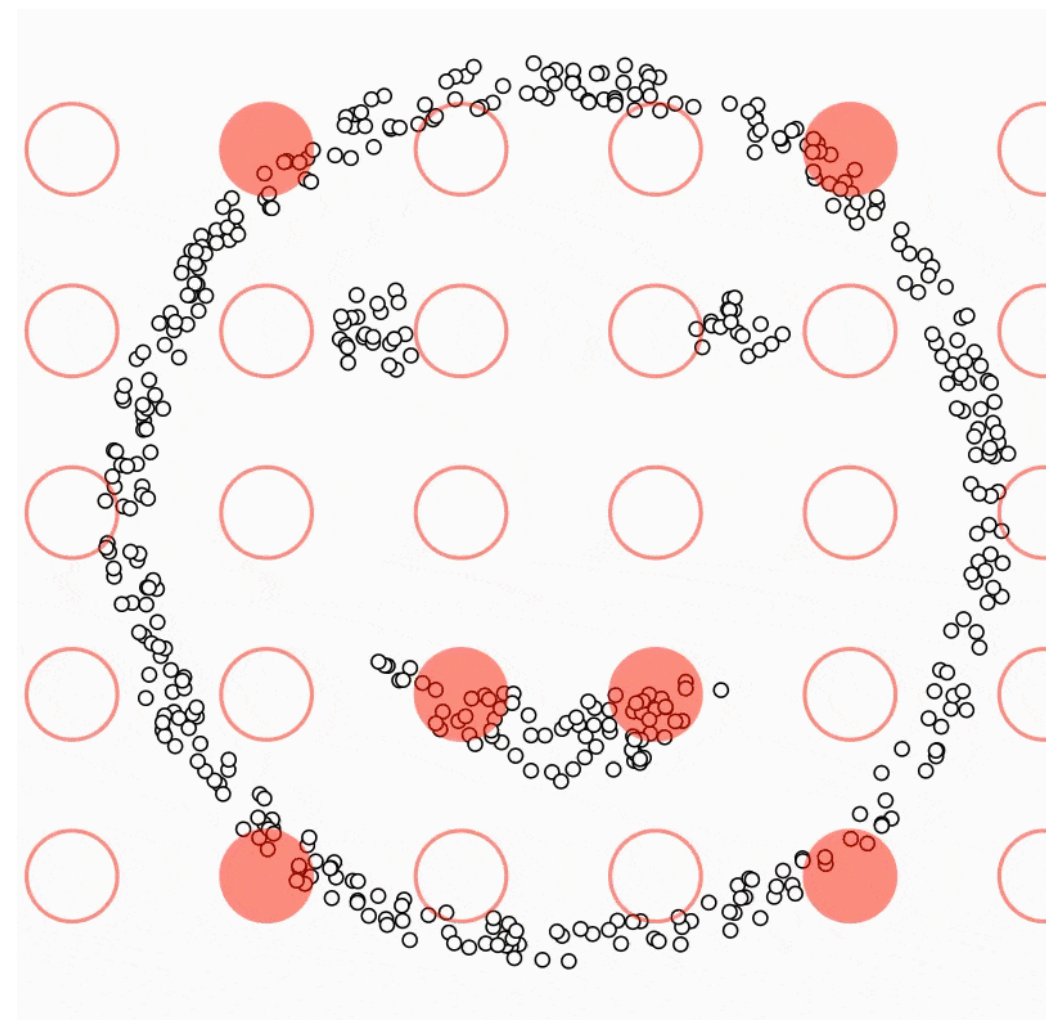


DBScan

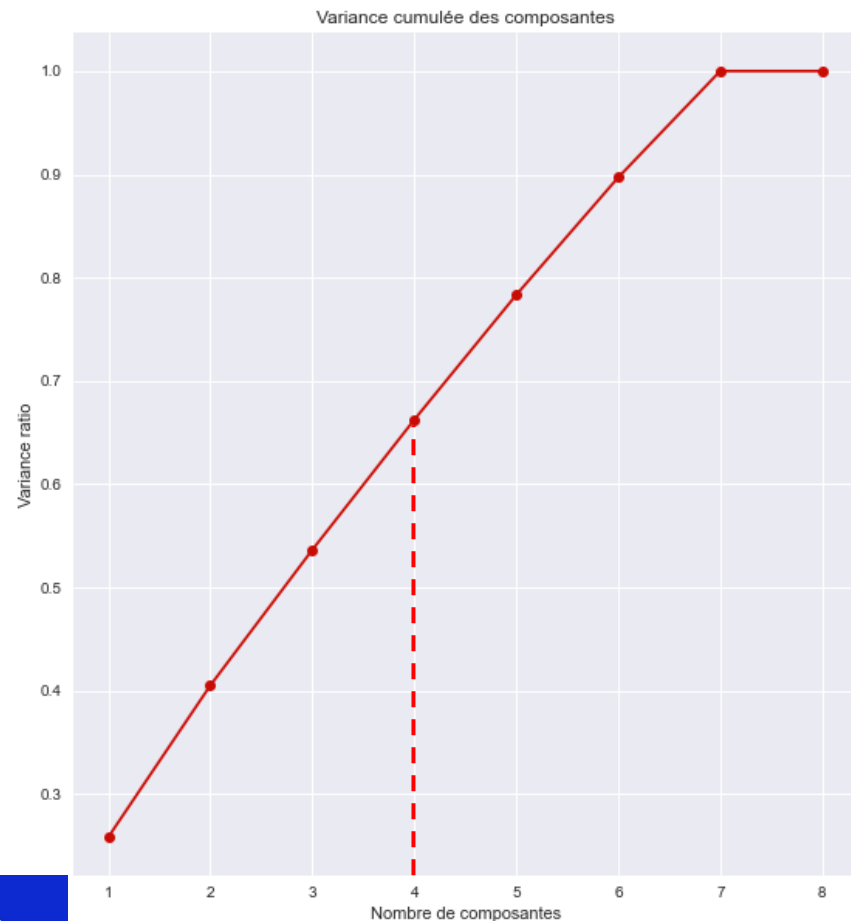


Silhouette-score : 0,48

	R_mean	F_mean	M_mean	Review_score	GroupSize
cluster					
-1	132.212121	4.363636	1288.427273	3.686195	33
0	236.697519	1.000000	156.719776	4.491350	80987
1	232.420595	1.000000	194.095607	1.000000	9080
2	220.628874	2.000000	291.281295	4.177128	2549
3	213.994220	3.000000	435.929769	4.435453	173
4	175.142857	4.000000	678.645238	4.535714	21
5	150.714286	5.000000	610.208571	4.228571	7



Kmeans ACP



Récence

Fréquence

Montant

Review_score

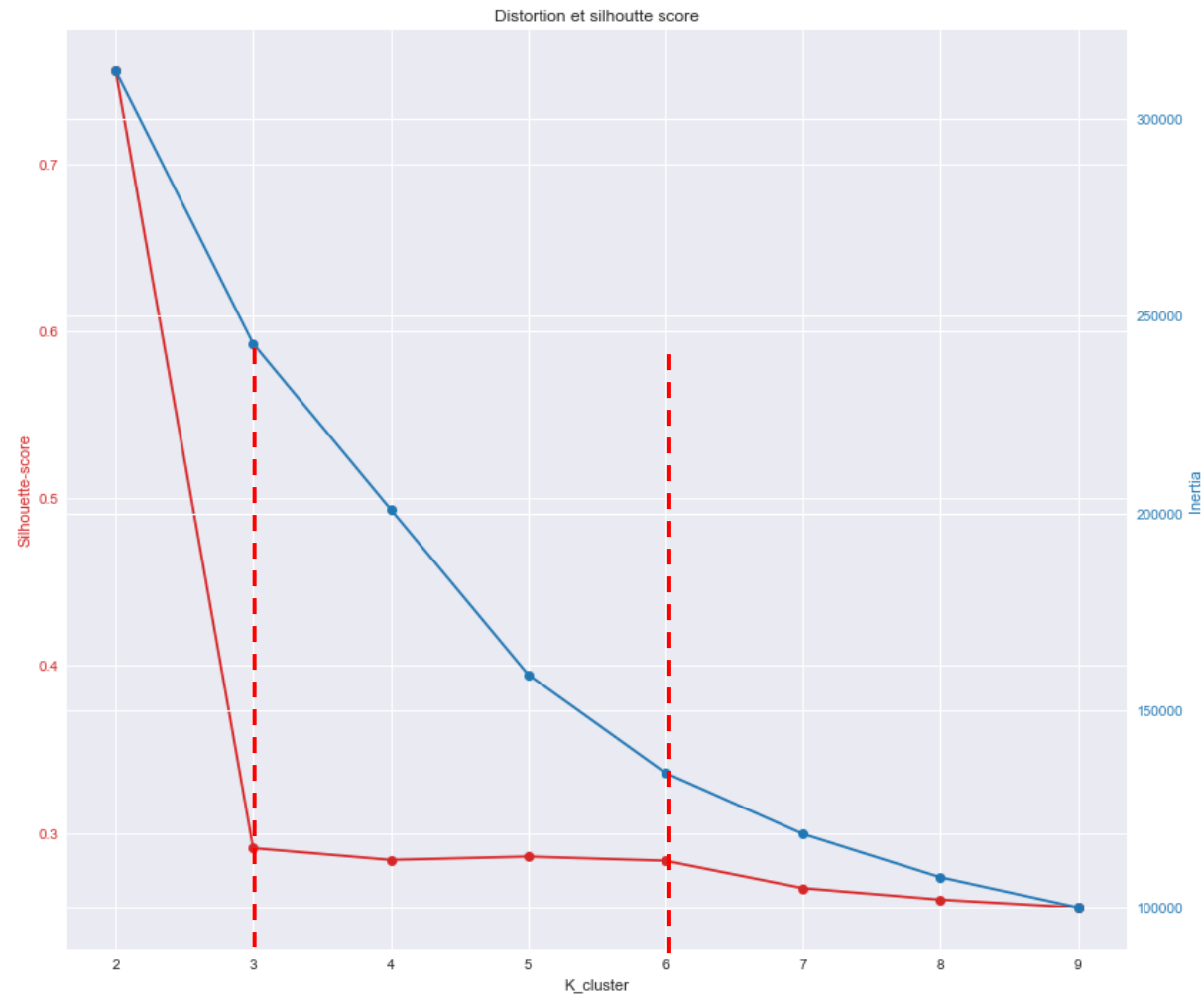
Geolocation_state (population)

Time_to_answer (days)

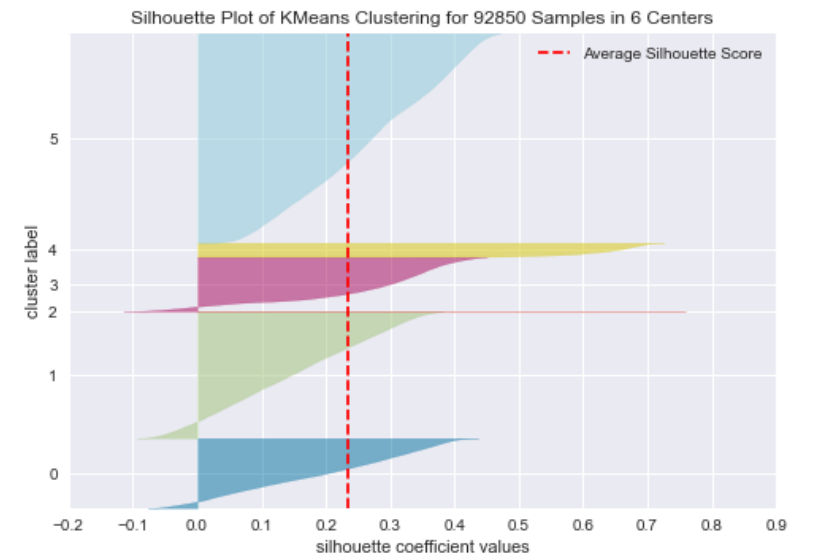
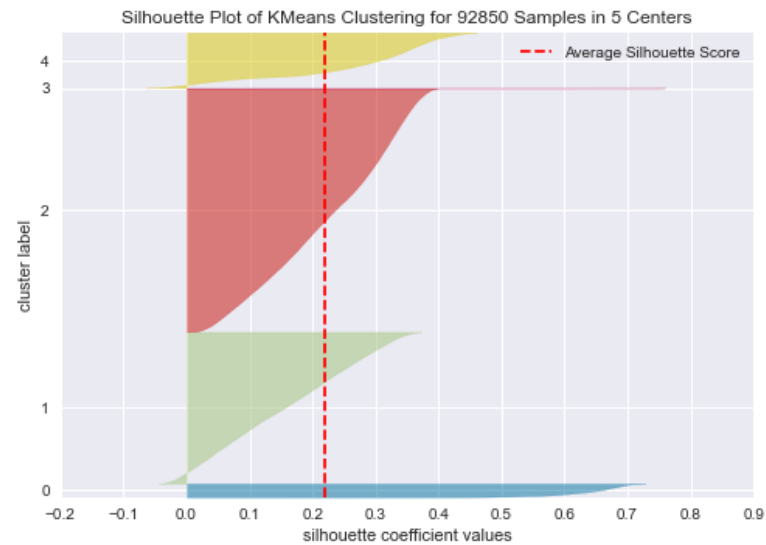
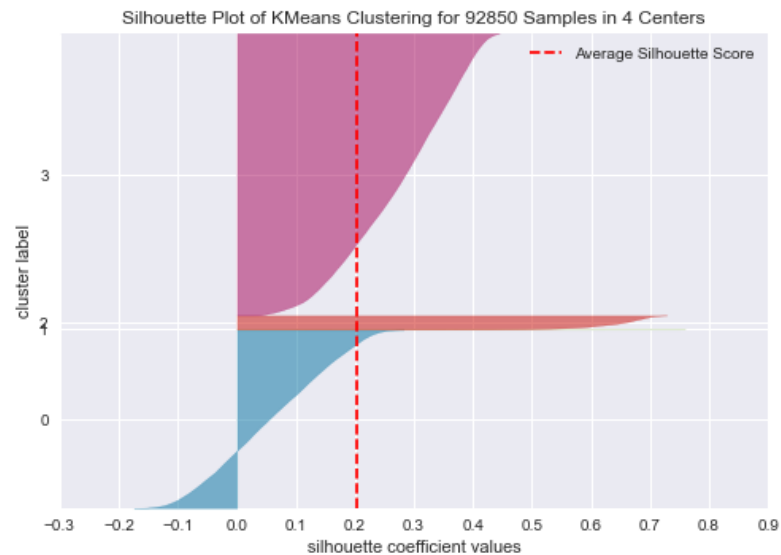
Score_evolution

Nb_review

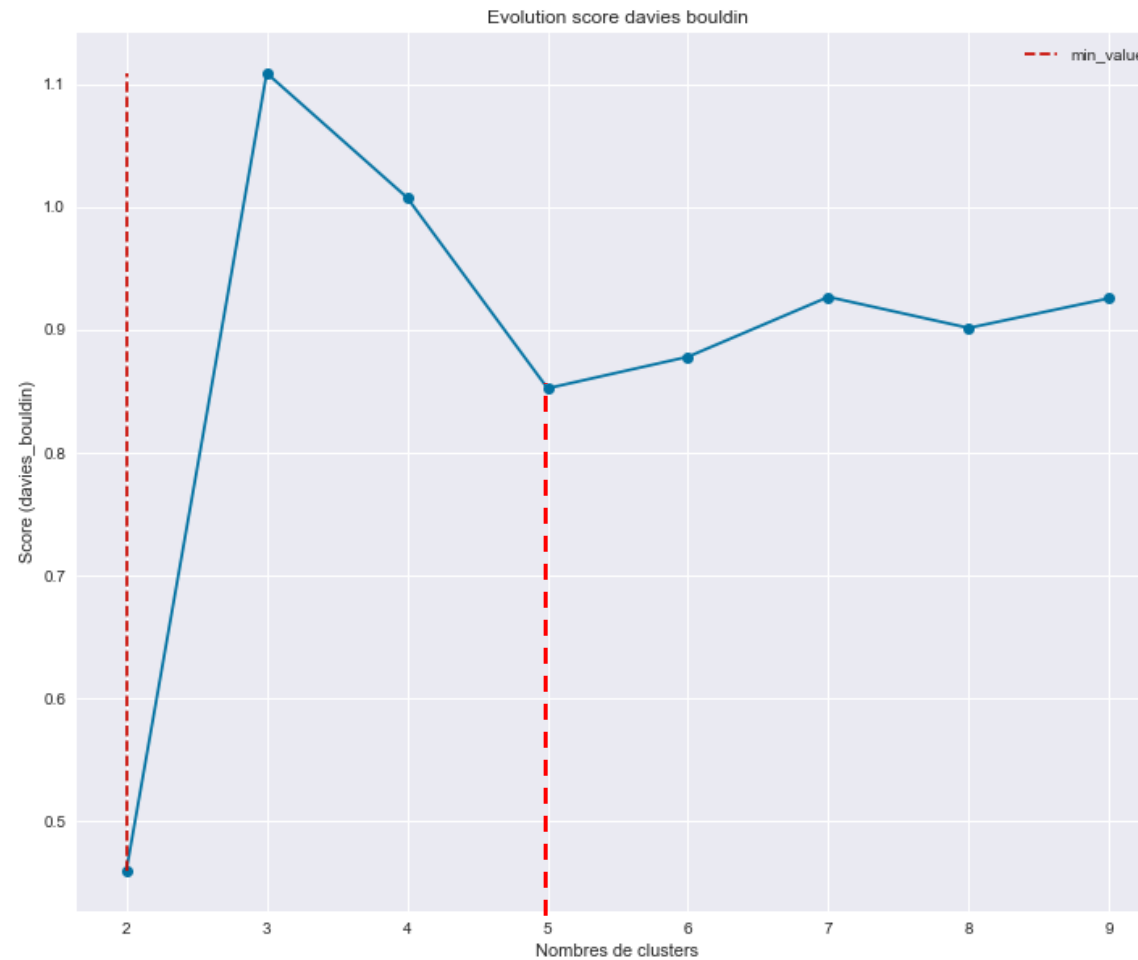
Kmeans ACP (bis)



Kmeans ACP (bis)



Kmeans ACP (bis)



Kmeans ACP (résultat)

	monetary	review_score	review_score_evolution	nb_review	frequency	recency	time_to_answer	state_population	GroupSize
cluster									
0	97.585912	4.567887	-0.000563	1.000000	1.000000	195.341817	45.738369	30548.754208	42593
1	253.305598	2.315349	-0.000061	1.000000	1.000000	233.455080	36.931801	13310.517398	16496
2	308.264214	4.210412	-0.022251	2.113744	2.113744	217.760481	69.921144	21747.152752	2743
3	198.215649	4.521922	-0.000646	1.000000	1.000000	294.006974	136.873190	11540.474947	30974
4	306.350682	2.662879	1.367424	1.954545	1.954545	298.704545	77.034880	16698.818182	44

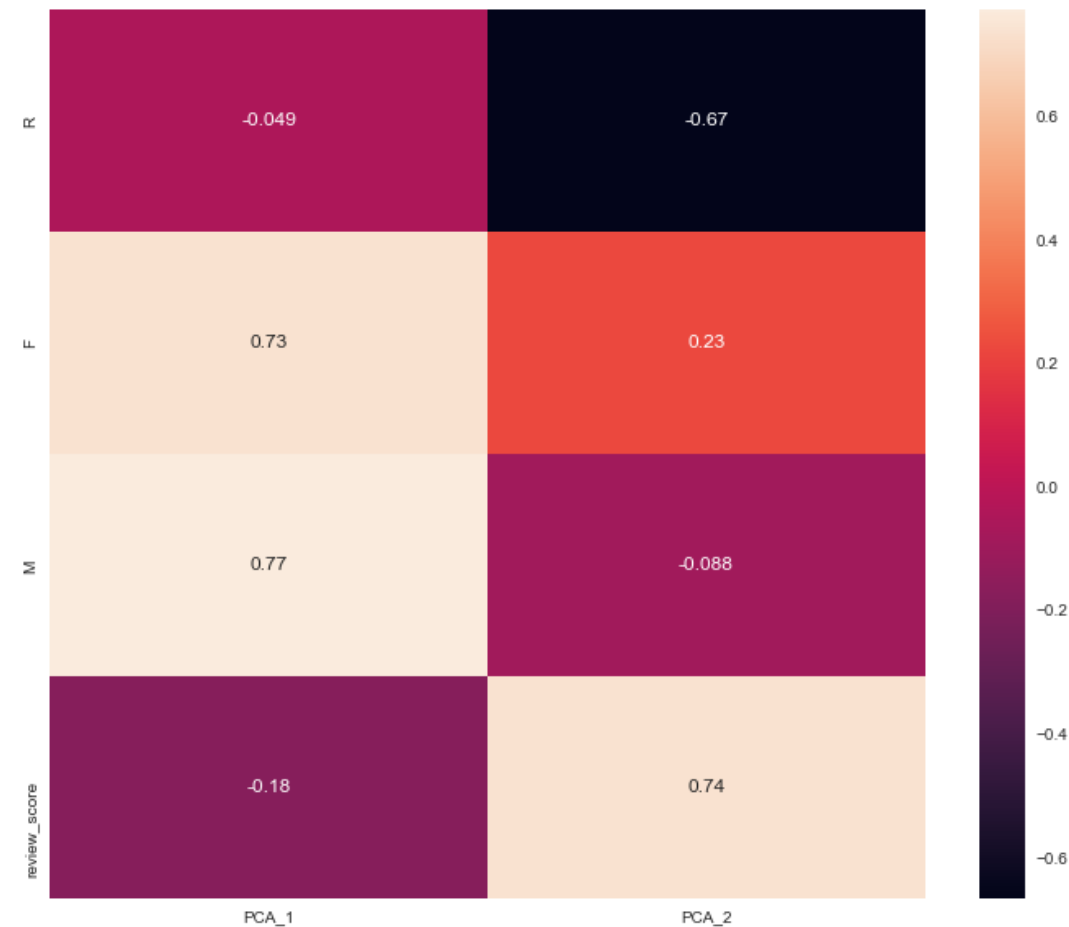
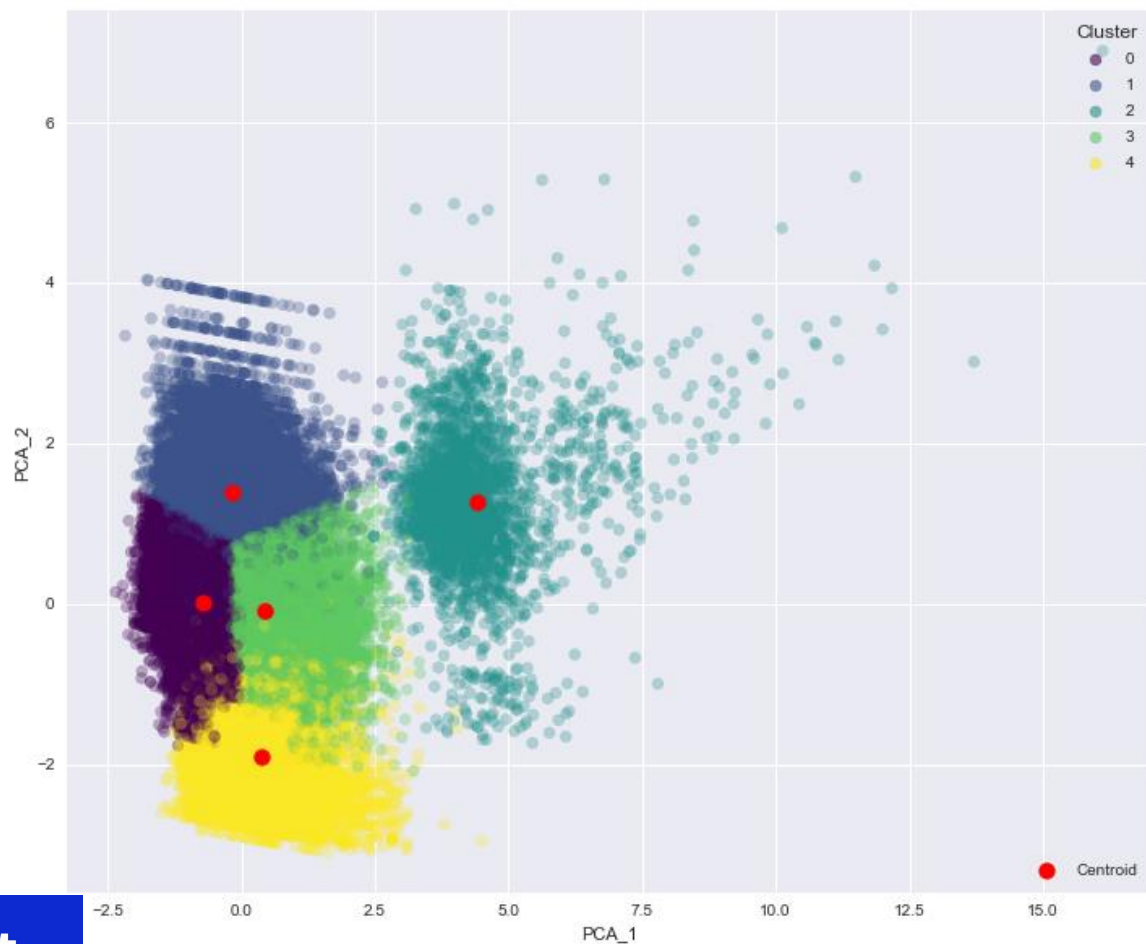
Modélisation finale



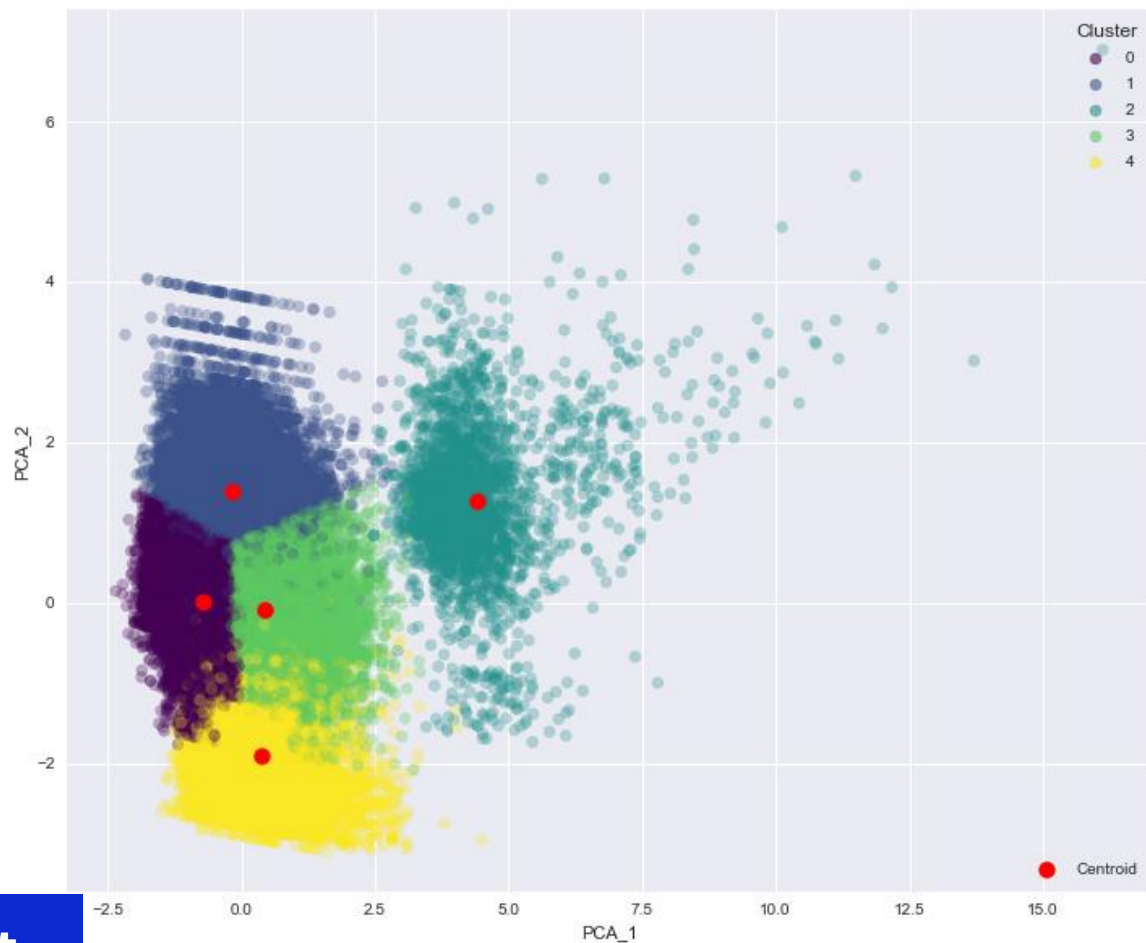
Modélisation finale



Représentation des données



Représentation des données



0 : L'économe certainement parti



1 : Nouveau client neutre



2 : Meilleur client



3 :Dépensier occasionnel



4 :L'insatisfait

Personae



Jean-Bernard

Meilleur client

Dépense moyenne : 308 réal
Fréquence : 2 achats minimum
Satisfaction : 4.2

3%

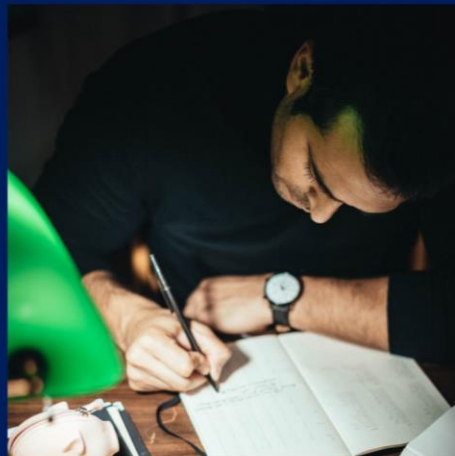


Mathilde

Dépendière occasionnelle

Dépense moyenne : 290 réal
Fréquence : 1 achat
Satisfaction : 4.55

30%



Léo

Client neutre (nouveau)

Dépense moyenne : 133 réal
Fréquence : 1 achat
Satisfaction : 4.57

15%



Annette

L'économe (partie)

Dépense moyenne : 66 réal
Fréquence : 1 achat
Satisfaction : 4.53

40%



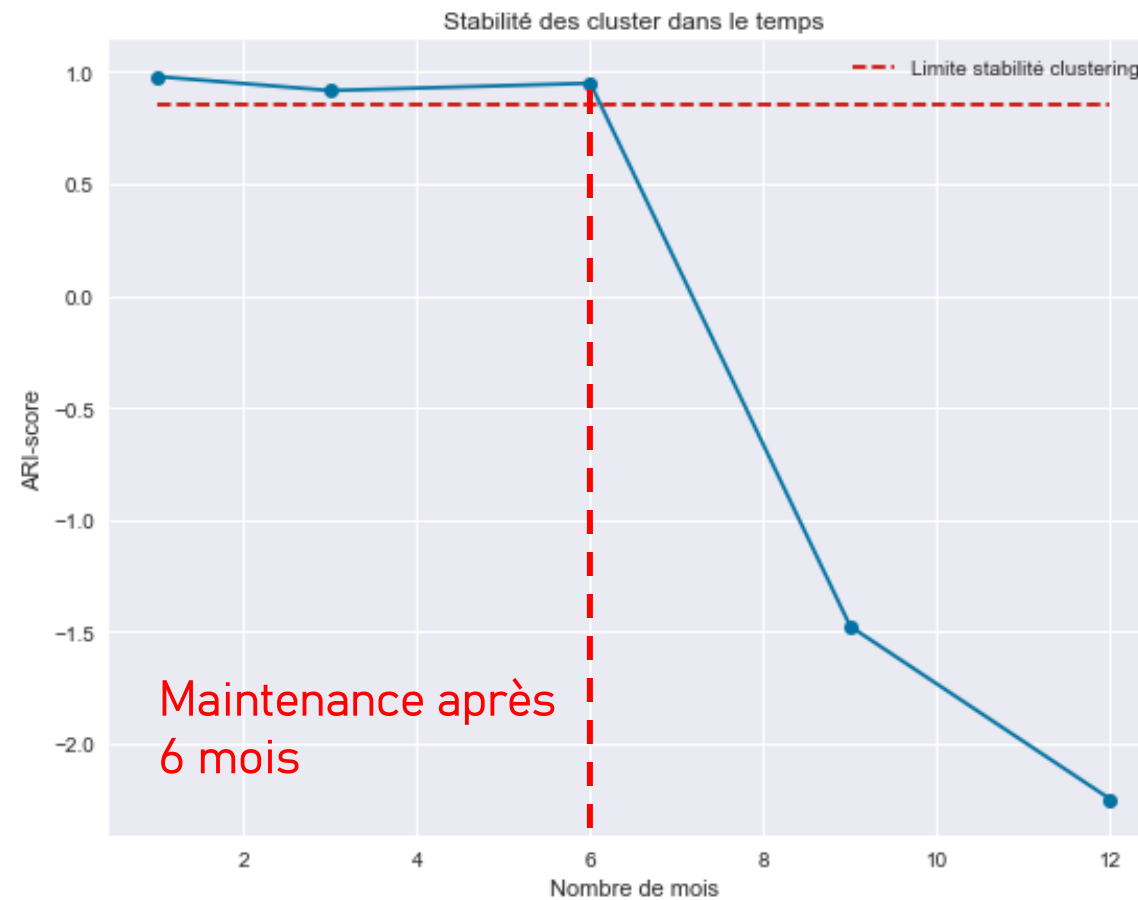
Luna(tique)

L'insatisfait(e)

Dépense moyenne: 186 réal
Fréquence : 1 achat
Satisfaction : 1.17

12%

Maintenance du clustering



Stratégie d'ajout des nouveaux clients

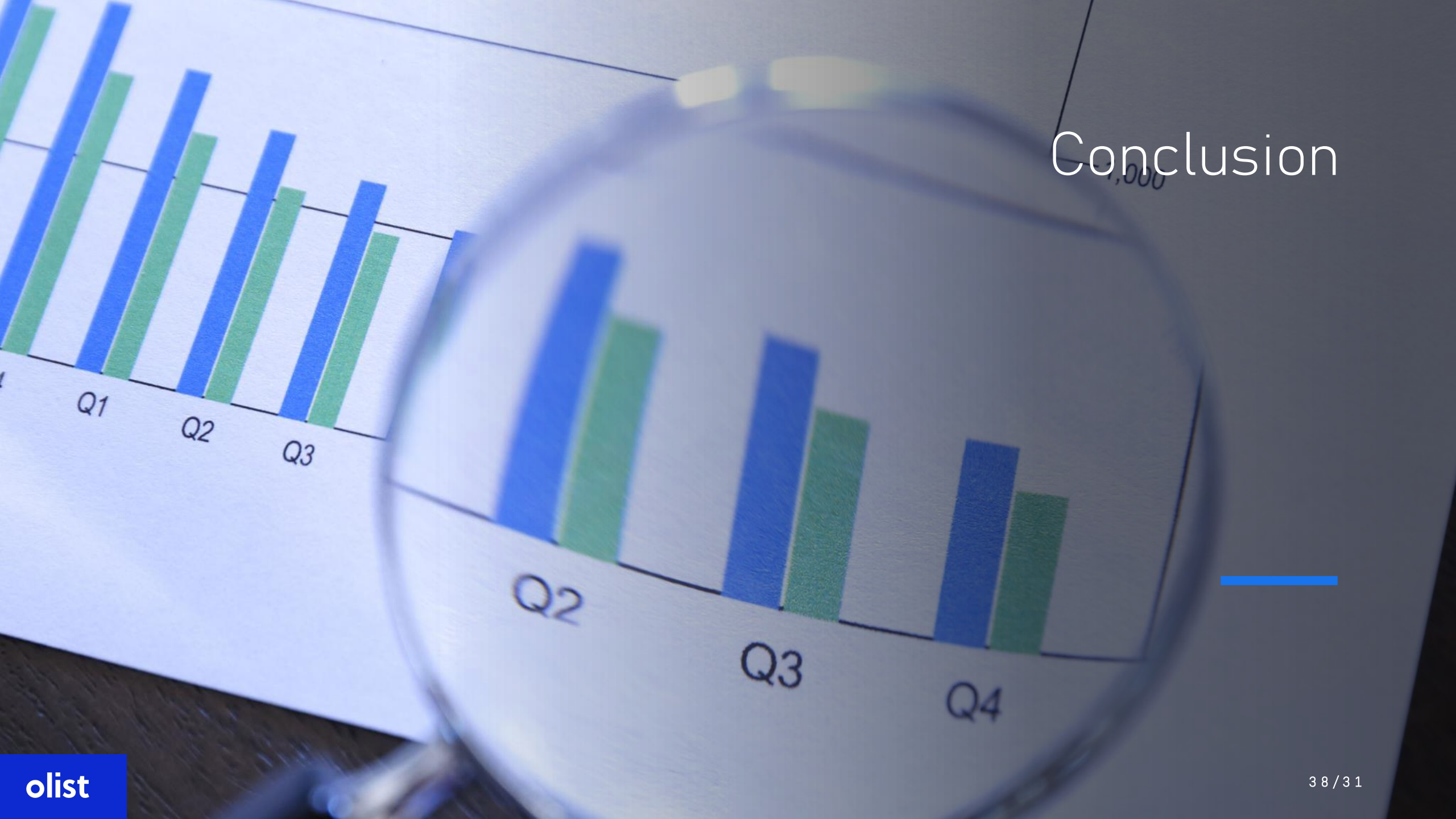
Calcul de
distance

Calcul distance centroïde

Classification
multi-classe

Apprentissage supervisé sur les
données labélisées par le clustering

Conclusion



Conclusion

- Ajout dimension du type d'achat voir NLP pour les commentaires
- Prédiction de l'évolution des clients dans le temps
- Interprétation des résultats difficiles (équipe marketing inexistante)



Merci de votre attention,
avez-vous des questions ?
