CHANGING THE WORLD OF CREDIT CARD

UltimateCloud

Credit Card



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Decline in Income

Constant income decline in the past 5 Quarters.

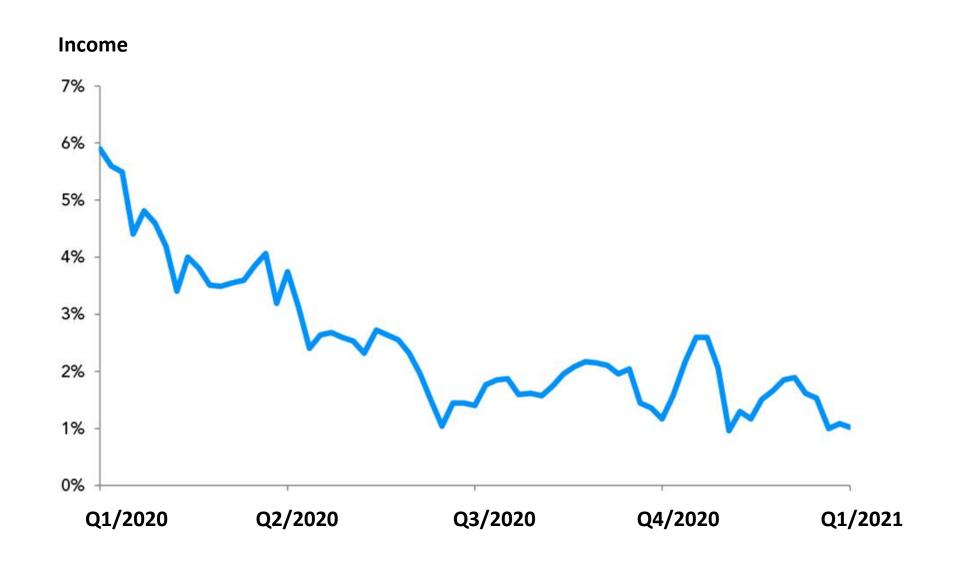




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customer segmentation, to improve the marketing campaign.



Take home

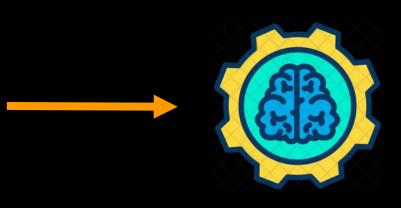
- Two marketing campaigns:
 - Large buyers (commissions)
 - Large cash-advance takers (interest rate)

- Buyers stimulate their purchases
- Cash-advance takers send more (e-)mail checks



Al Fantastic Four Workflow





Global Analyses



Detailed Analyses



Credit Limit

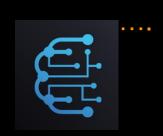
Purchase Amount

Payment Rate

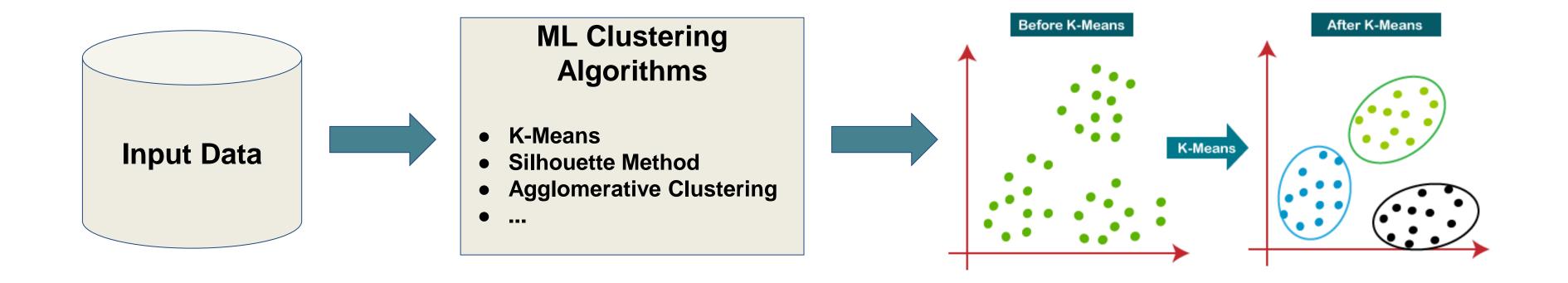
Payments

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Machine Learning Models

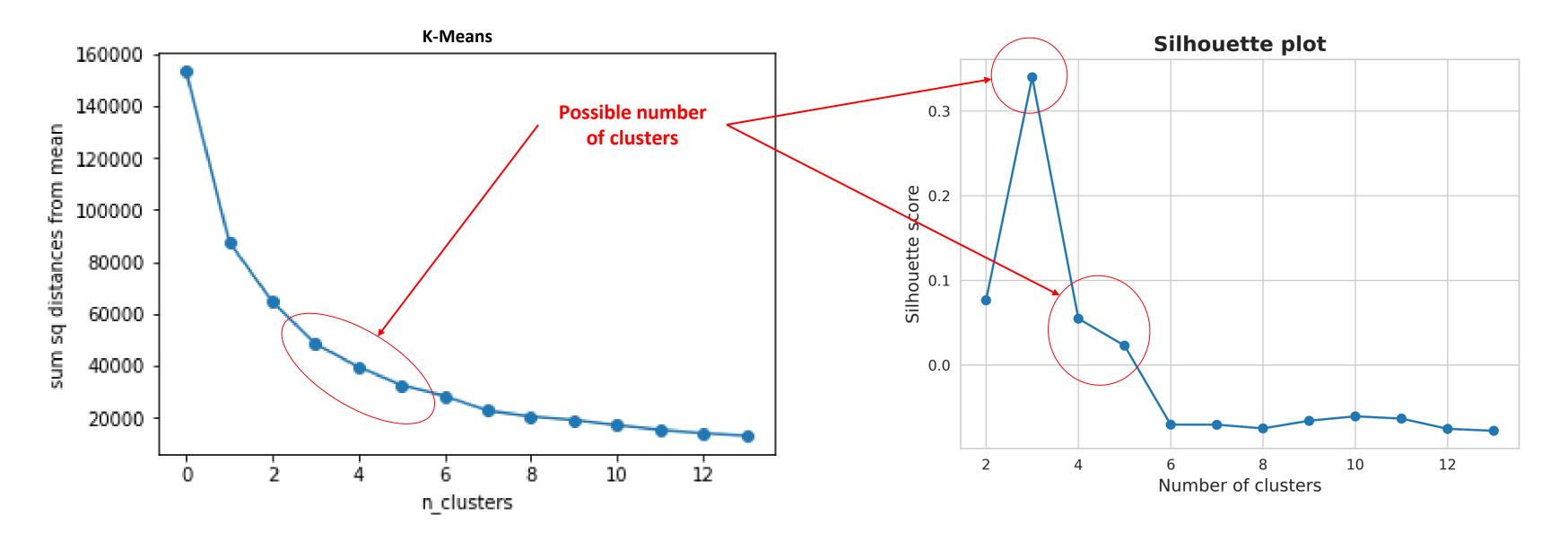


Customer Segmentation with Clustering Algorithms



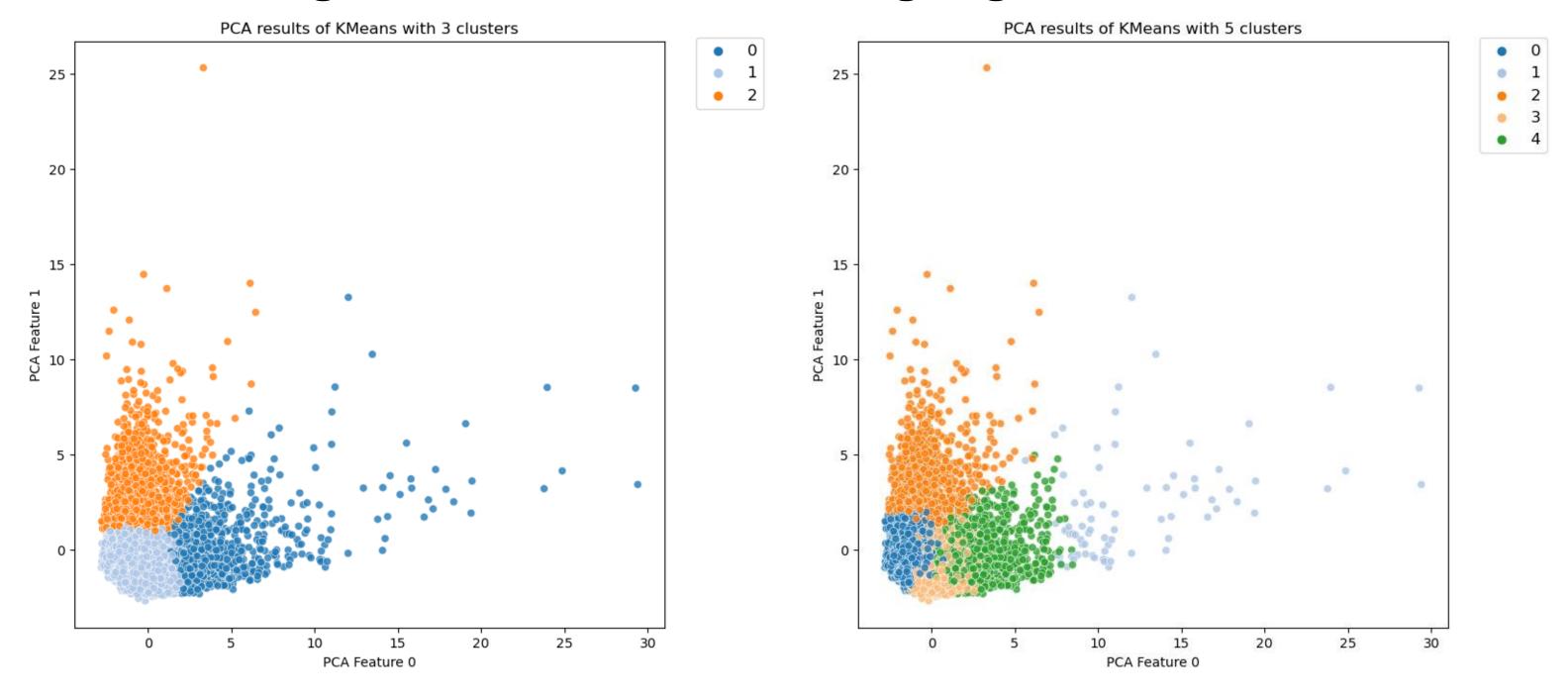


Customer Segmentation with Clustering Algorithms





Customer Segmentation with Clustering Algorithms



Customer Segmentation with Clustering Algorithms

Remarks:

1. Number of possible clusters: 3 - 5

1. Baseline with 3 clusters

1. Deeper analysis into customer segmentation with 5 clusters



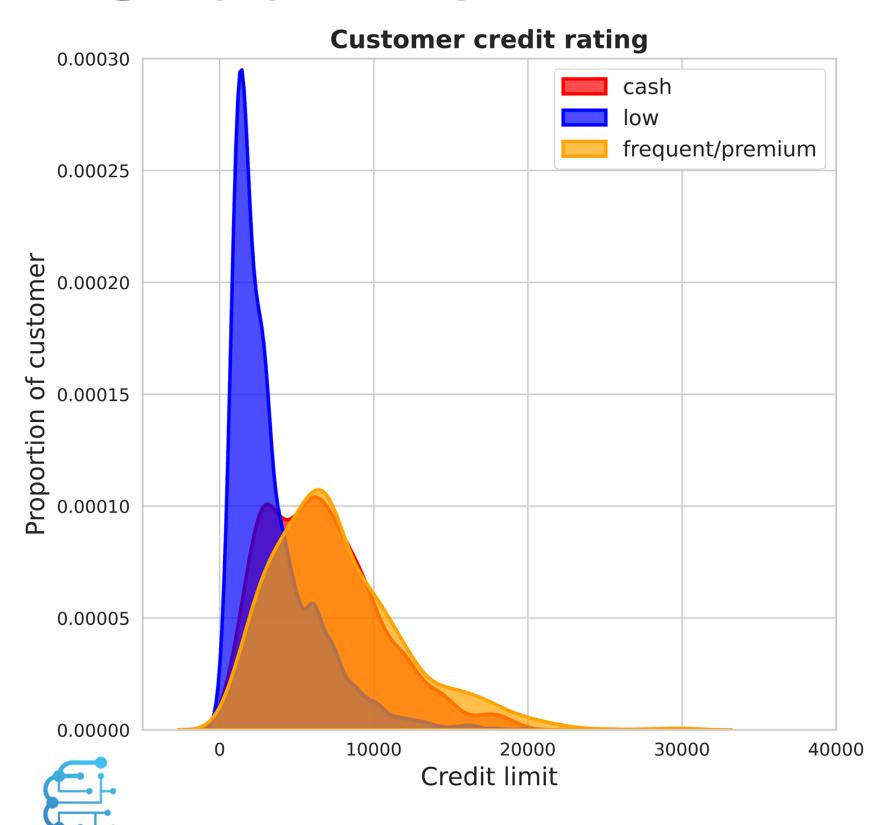
Two revenue streams

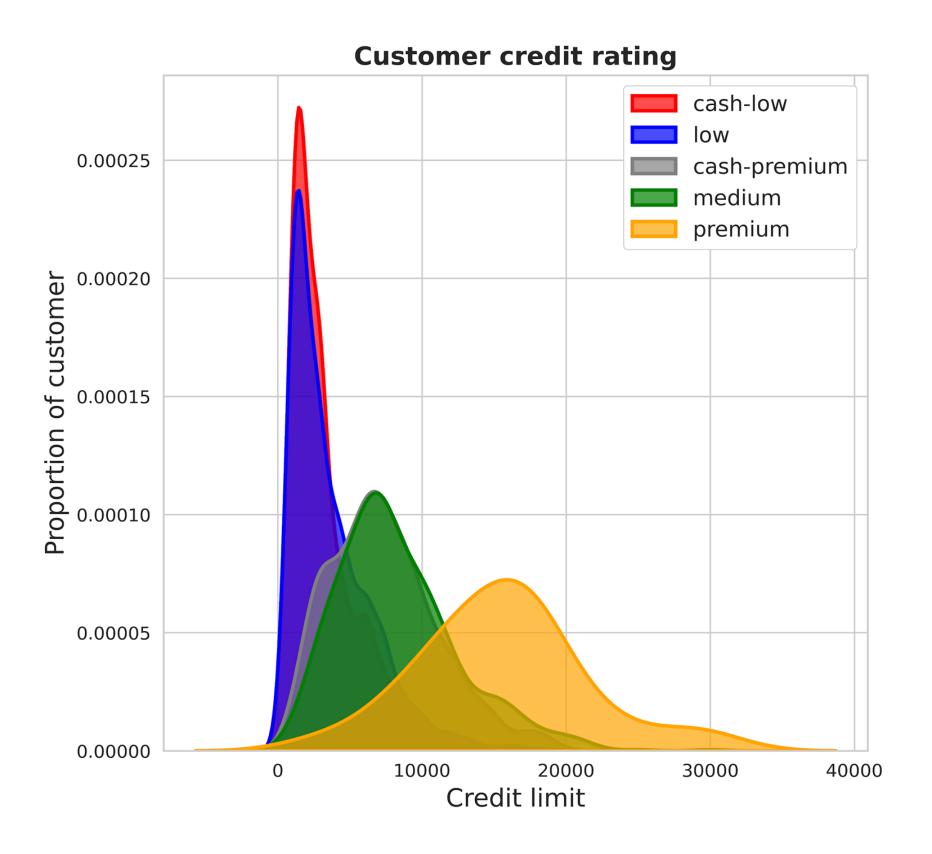
1. Commissions on purchases

1. Interest on cash advances



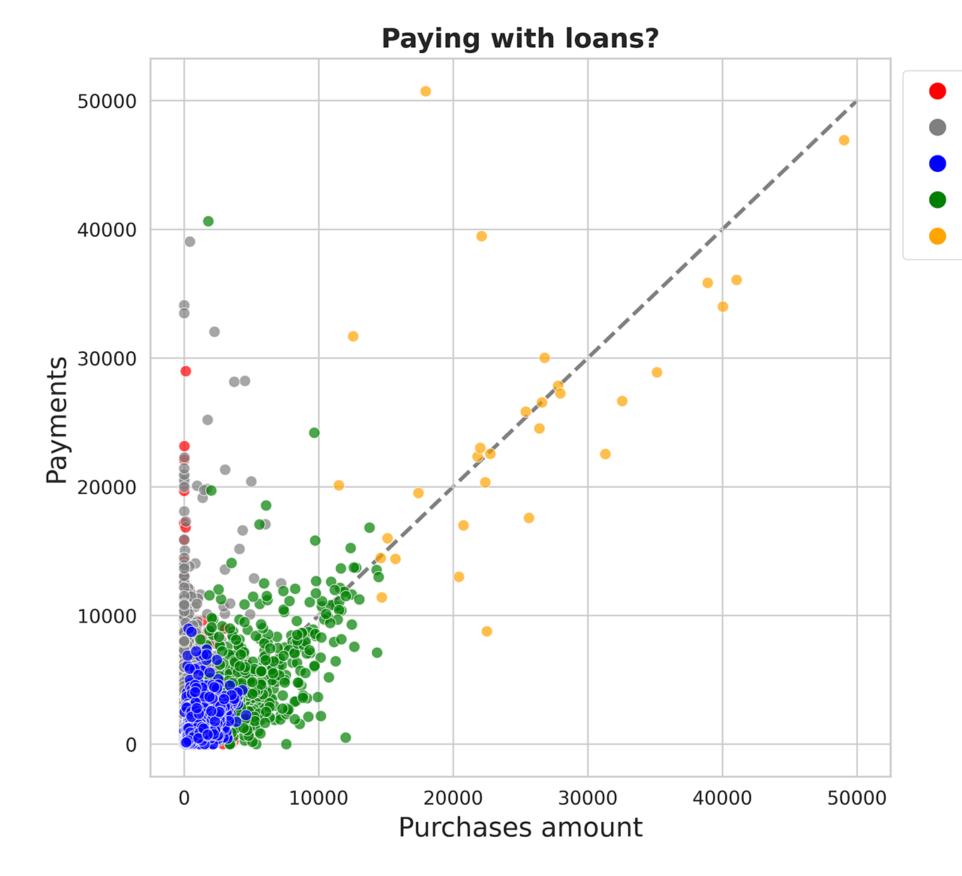
Credit risk





Large buyers & loan-takers

Medium & premium	largest buyersno cash advances
Cash-premium	largest cash advancesmedium purchases
Cash-low	73% use only cash advances



cash-low

medium

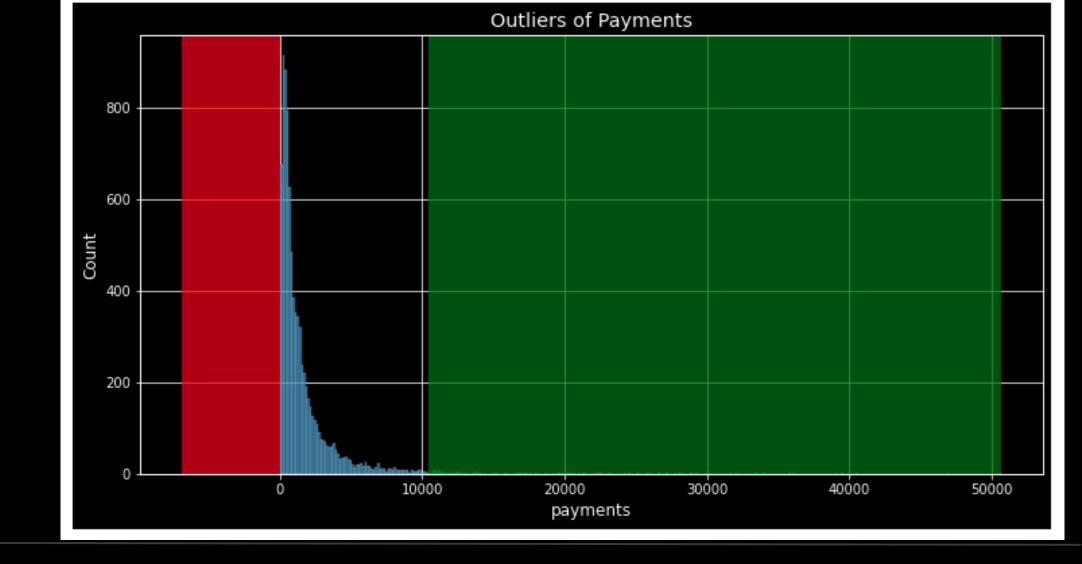
premium

low

cash-premium



Outliers



Who are the outliers according to 3 Sigma?

- All customers with a payment more than 10'400 CHF are outliers
- Number of Outliers is 148
- Ratio of Outliers is 1.8%
- Average Payment of Outliers is 17421 CHF

Outcome: Trace / Verify / Monitor each payment to avoid fraudulant payments



AI FANTASTIC FOUR

Groups

	CustomerNr	PaymentsSum	AveragePayment	BalanceAccount	PurchaseAVG	PaymentRate
group						
Cash Premium	2251	2109245.34	937.03	1474551.83	16.67	11.46
Cash-Low	1101	3870970.74	3515.87	5079132.05	7.39	11.37
Low	3690	3677302.07	996.56	3885112.00	2.97	11.46
Medium	1308	3613886.45	2762.91	2517918.49	43.68	11.89
Premium	78	1258750.35	16137.82	353438.84	135.63	11.96

Considerations

- Medium
 - Similar Sum of Payments as other top two groups
 - High Average of Purchases
 - Sum of Payments is higher than the Balance Account -> Installments
 - Focus of installments contracts with duration of 12 months



Points to Ponder

	CustomerNr	PaymentsSum	AveragePayment	BalanceAccount	PurchaseAVG	PaymentRate
group						
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Recommendations

- Capture cost per payment
- Capture number of contacts per payment or per customer
- Cost of balance account
- Number of failed payments / installments
- Cost of paid or received commission per payment



Conclusions

- Focus on Medium/Premium group stimulate their purchases
- Focus on Cash-advance takers stimulate them to take more cash advance
- Focus on 12 months repayment installment contract group
- Trace/monitor payment > 10,400 CHF (could be fraudulent payment or a new Platinum group)
- Capture more data (cost of payment, number of contacts with



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AI FANTASTIC FOUR