

# Is Your Franchise's Quarterback Elite?

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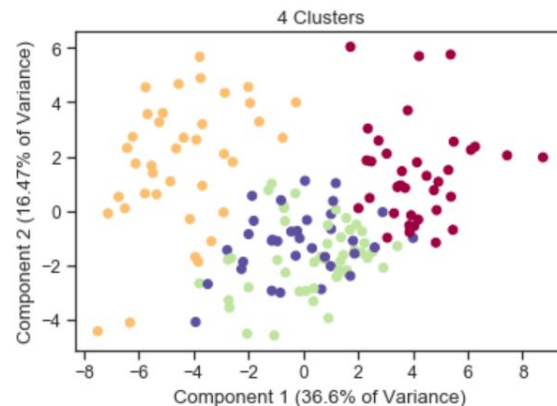
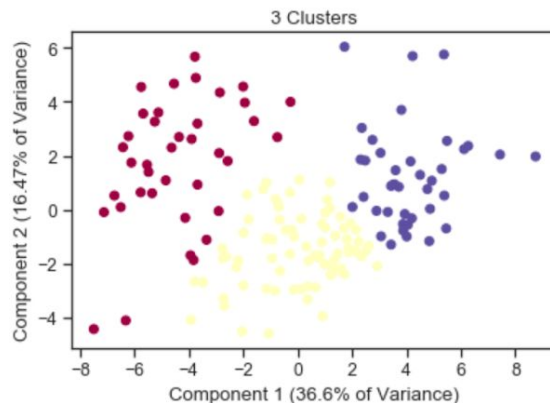
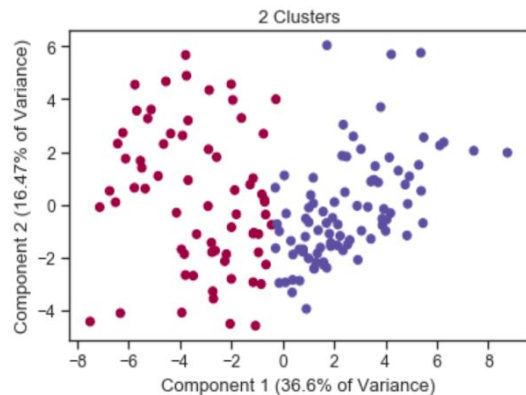


# Data Description

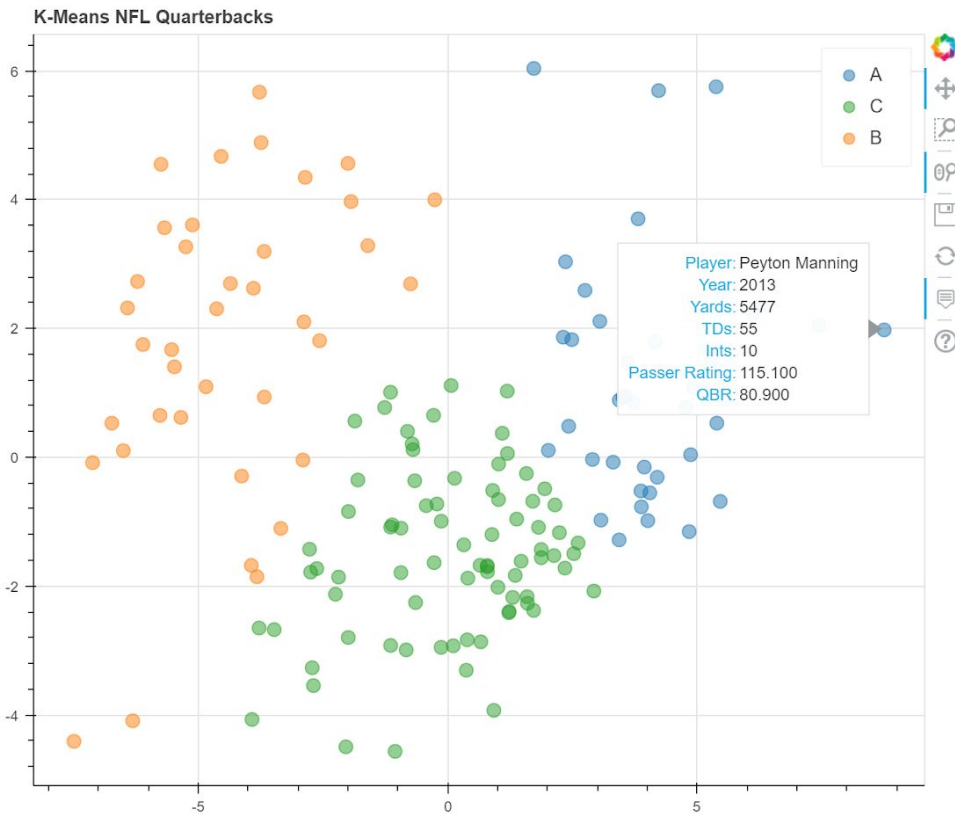
- The data includes quarterbacks from 2013 to 2017 NFL seasons.
- We focused on quarterbacks who started at least 8 games in a given season.
- The dataset included a total of 35 variables. Some of them include:
  - Completion Percentage
  - Touchdowns
  - Interceptions
  - Total Passing Yards
  - Total Rushing Yards
  - Yards per Attempt
  - Passer Rating

# How Did We Cluster?

- Principal Components Analysis
- How many Clusters?



# Clustering Results



# Comparing the 3 Clusters

	Cmp	Att	Yds	TD	Int	Y/G	Sk	4QC	GWD	Rate	QBR
Label											
Elite	349.34	528.93	4190.41	30.78	9.41	276.08	27.12	2.00	2.56	102.43	69.70
Middle	333.89	535.33	3768.67	22.74	13.00	243.84	36.38	2.07	2.61	87.41	55.01
Scrub	200.41	333.85	2243.49	11.67	10.28	208.59	25.36	1.03	1.21	79.55	45.30

	wins	losses	ties	win%
Label				
Elite	10.39	4.63	0.02	69.34
Middle	7.68	7.63	0.07	49.82
Scrub	3.41	6.62	0.03	34.49

# How Can NFL Teams Use This?

- Unsure how much to pay your starting quarterback?
- Has your quarterback improved or regressed over the past 5 seasons?
- If your team collects more data, the results will improve
- NFL Teams are moving towards an analytic-heavy approach - look at the Rams and their turnaround over the past 3 seasons
- Is Joe Flacco elite?

