

## BDCD BUSINESS ANALYTICS LAB EXERCISE- *Data Koalas*

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### Exercise 1

#### BACKGROUND WORK

	2017	2018	Final Score
Premiership Team	Adelaide Crows	Brisbane Lions	35 - 29
Runners Up	Brisbane Lions	Brisbane Lions	27 - 21
Best and Fairest	Erin Phillips ADELAIDE CROWS 10 Votes	Emma Kearney WESTERN BULLDOGS 14 Votes	

### Exercise 2

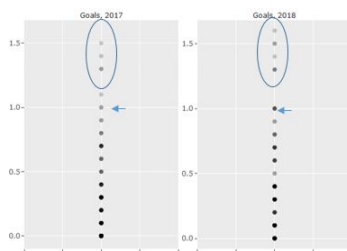
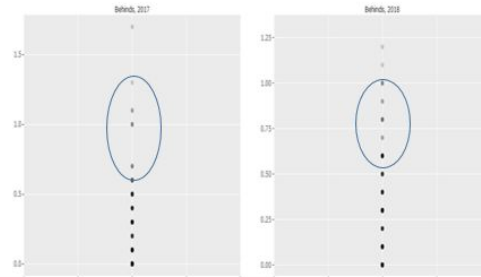
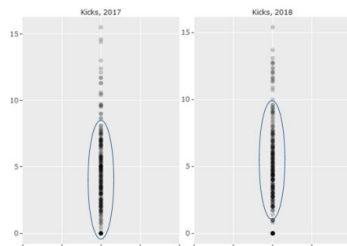
#### EXPLORE THE DATA

- Player which had the highest average kicks in 2017 - Erin Phillips  
Player which had the highest average kicks in 2018 - Emma Kearney
- 2017:** Erin Phillips, player with the highest average kicks in 2017 (15.5) had a dispatch efficiency of 57.5%. In comparison to the other players, Phillips is relatively in the middle of the distribution.  
**2018:** Emma Kearney, player with the highest average kicks in 2018 (15.4) had a dispatch efficiency of 60.5%. In comparison to the other players, Kearney is also in the middle of the distribution. However, in comparison to Phillips, Kearney had a higher dispatch efficiency (by 3%).  
From 2017, 2 players managed to dispatch 100% of the time: Natalie Plane and Kim Mickle. 4 players never managed to dispatch the ball: Taryn Priestly, Romy Timikins, Lou Wotton and Hannah Dunn.  
From 2018, 1 player managed to dispatch 100% of the time: Sarah Lampard. 2 players never managed to dispatch the ball: Ruby Blair and Louise Stephenson
- Highest number of goals by a player in **2017**: 2.0 by Darcy Vescio  
Highest number of goals by a player in **2018**: 1.6 by Jess Wuetschner  
Yes, the players who kicked the most were not the ones who had the highest number of goals. This could be because the kicks could be a pass to another player, or a kick towards the goal but was a miss.

### Exercise 3

#### CHECKING THE NEWS

1) as represented by the dot plot, the maximum number of behinds, decreased from 2017 to 2018, however, the data is more concentrated in 2018 towards the middle compared to the bottom in 2017, suggesting a higher average of goals. The number of kicks has not undergone much change, however we could see a slight shift of the data between 0 and 10 towards up.

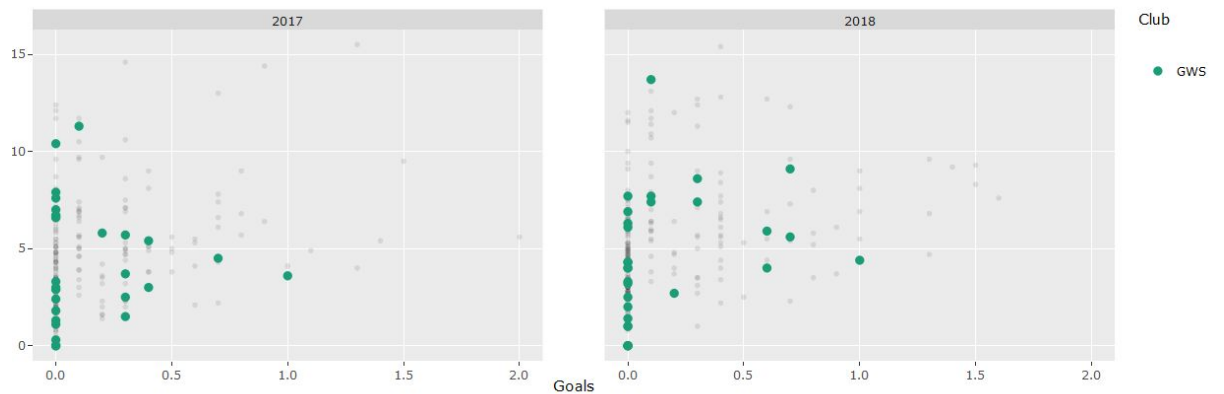


There is an outlier of 2 in 2017, but after changing the scales, there are more dots around 1.5 and more black dots are between 0.5 and 1, suggesting a higher average.

There is a shift to the right and also an increase in the number of dots from 2017 to 2018 in the circled area. That means more kicks

## 2: AFL rejects claim that votes were awarded to wrong player

a) The two players named in the article are Jessica Dal Pos and Alicia Eva from GWS



b)

\*Goals vs Kicks\*

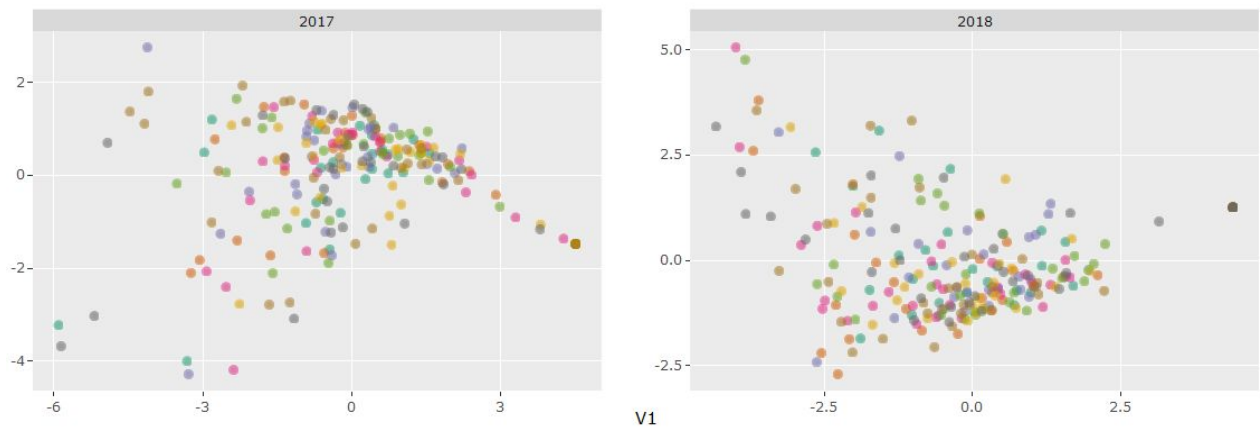
c) The data below shows the different statistics between Jessica and Alicia. The data seem to suggest that Alicia scored slightly better (as seen from kicks and marks) but worse in some aspects, such as dispatch efficiency.

2018 data	Jessica	Alicia
Kicks	7.4	13.7
Goals	0.1	0.1
Behind	0	0.1
Marks	0	1.4
Dispatch efficiency	63.6	56.0

#### Exercise 4

##### *SIMILARITY OF PLAYERS*

As more variables each individual player becomes more distinctive. This is because the added variables create more distinctive averages. As the ability of players high in specific areas (and lower in others).



#### Exercise 5

##### *YOUR TURN TO CODE*