ANZ Presentation

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Data Import and Clean

```
anz <- read_xlsx("ANZ.xlsx") #Data import
anz <- anz[,c(-3:-5,-8,-9,-19,-20,-21,-23)] #Unnecessary column removal
anz <- na.omit(anz)#NA Removals
colSums(is.na(anz)) #Null value Check
```

```
##            status card_present_flag          long_lat    txn_description
##                 0                 0                 0                  0
##        first_name           balance              date             gender
##                 0                 0                 0                  0
##               age    merchant_suburb    merchant_state         extraction
##                 0                 0                 0                  0
##            amount  merchant_long_lat
##                 0                 0
```

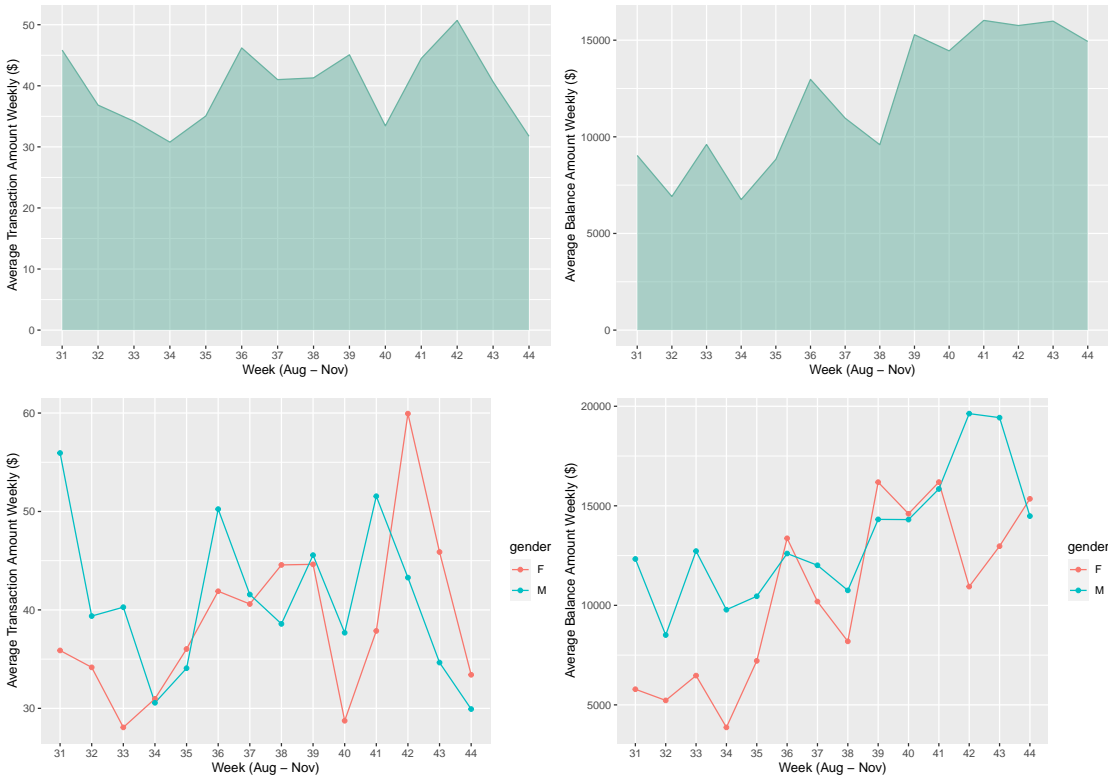## Dataframe Manipulation

```
anz <- anz %>% separate(`long_lat`,into = c("long","lat"),
                    sep=" ") #Customer and Merchant Column Split
anz <- anz %>% separate(`merchant_long_lat`, into = c("mer_long","mer_lat"), sep=" ")
anz$long <- as.numeric(anz$long) #Type Change
anz$lat <- as.numeric(anz$lat) #Type Change
anz$mer_long <- as.numeric(anz$mer_long) #Type Change
anz$mer_lat <- as.numeric(anz$mer_lat) #Type Change
anz$date <- as.Date(anz$date) #Type Change
anz <- anz %>% mutate(week=strftime(anz$date,format="%V")) #Week Number
anz <- anz %>% mutate(month=strftime(anz$date,format="%m")) #Month Number
```

General Summary

```
##     balance            amount
##  Min.   :     0.24   Min.   :   0.10
##  1st Qu.:  2723.89   1st Qu.:  12.08
##  Median :  5286.04   Median :  19.70
##  Mean   : 11871.06   Mean   :  40.15
##  3rd Qu.: 10278.29   3rd Qu.:  33.91
##  Max.   :267093.66   Max.   :7081.09
```

```
## [1] "$40.15 ~ average transaction amount"
```

```
## [1] "96 ~ average transactions per person"
```

```
## [1] "$11871.06 ~ average balance amount"
```

```
## [1] "32 ~ average age of customer"
```

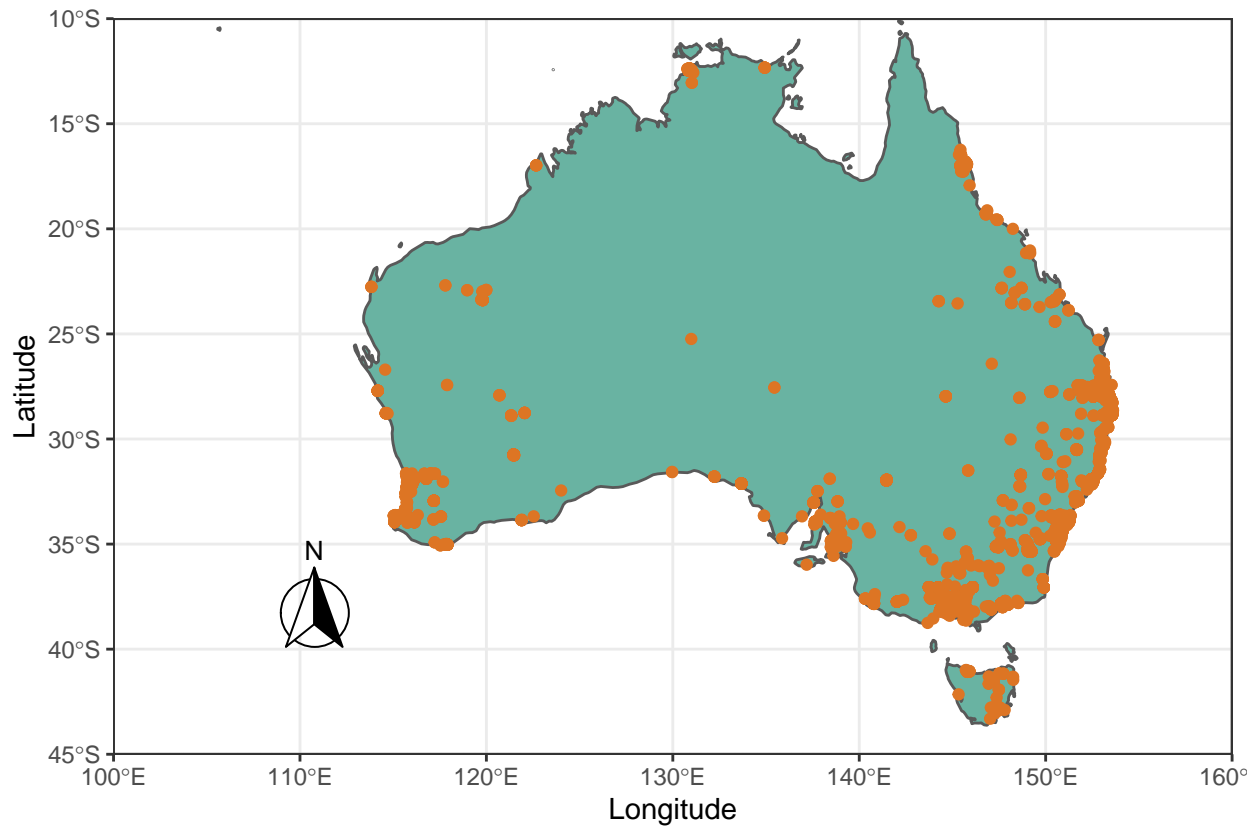# Insights - Weekly Transaction // Weekly Balance

Insights - Daily Transaction // Daily Balance

Insight - Geolocation

Merchant Transaction Map

Merchant Transactions Per State

```
##
##  NSW  VIC  QLD   WA   SA   NT  ACT  TAS
## 2169 2131 1556 1100  415  205   73   68
```

Top 10 Merchant Transactions Per Suberb

```
##
##    Melbourne        Sydney     Southport Brisbane City     Chatswood
##          255           233            82            79            55
##        Perth      Adelaide    Broadbeach Mount Gambier    Parramatta
##           45            44            41            41            39
```