

Text Mining

IGNASIUS PRESDA

2022-12-14

```
#Input Library dan Dataset
```

```
library(wordcloud)
```

```
## Loading required package: RColorBrewer
```

```
library(tm)
```

```
## Loading required package: NLP
```

```
library(textclean)
```

```
library(tidytext)
```

```
amazon_reviewsss <- read.csv("C:/Users/ASUS/Downloads/amazon_reviewsss.csv",  
sep=";", stringsAsFactors=TRUE)
```

```
head(amazon_reviewsss)
```

```
##      reviewerID      asin reviewerName helpful
```

```
## 1 A3SBTW3WS4IQSN B007WTAJTO           [0, 0]
```

```
## 2 A18K1ODH1I2MVB B007WTAJTO      Omie [0, 0]
```

```
## 3 A2FII3I2MBMUIA B007WTAJTO      1K3 [0, 0]
```

```
## 4 A3H99DFEG68SR B007WTAJTO      1m2 [0, 0]
```

```
## 5 A375ZM4U047O79 B007WTAJTO      2&amp;
```

```
## 6 A2IDCSC6NVONIZ B007WTAJTO      2Cents! [0, 0]
```

```
##
```

```
reviewText
```

```
## 1
```

```
No issues.
```

```
## 2
```

```
Purchased this for my device, it worked as advertised. You can never have too  
much phone memory, since I download a lot of stuff this was a no brainer for  
me.
```

```
## 3
```

```
it works as expected. I should have sprung for the higher capacity. I think  
its made a bit cheesier than the earlier versions
```

```
## 4 This think has worked out great.Had a diff. bran 64gb card and if went s  
outh after 3 months.This one has held up pretty well since I had my S3, now o  
n my Note3.*** update 3/21/14I've had this for a few months and have had ZERO  
issue's since it was transferred from my S3 to my Note3 and into a note2. Thi  
s card is reliable and solid!Cheers!
```

```
## 5

## 6                                     It's mini stor
age.  It doesn't do anything else and it's not supposed to.  I purchased it t
o add additional storage to my Microsoft Surface Pro tablet which only come i
n 64 and 128 GB.  It does what it's supposed to and SanDisk has a long standi
ng reputation that speaks for itself.

##      overall                                summary unixReviewTime reviewTime
## 1          4                                Four Stars          1406073600 23/07/2014
## 2          5                                MOAR SPACE!!!       1382659200 25/10/2013
## 3          NA                                NA
## 4          5 Great buy at this price!!! *** UPDATE          1384992000 21/11/2013
## 5          NA                                NA
## 6          5                                Not a lot to really be said    1367193600 29/04/2013
##      day_diff helpful_yes total_vote X X.1
## 1          138              0          0
## 2          409              0          0
## 3          NA              NA          NA
## 4          382              0          0
## 5          NA              NA          NA
## 6          588              0          0
```

```
#Mengubah Data Frame Menjadi Data Vektor
```

```
rev<- amazon_reviewsss$reviewText
```

```
head (rev)
```

```
## [1] No issues.

## [2] Purchased this for my device, it worked as advertised. You can never h
ave too much phone memory, since I download a lot of stuff this was a no brai
ner for me.

## [3] it works as expected. I should have sprung for the higher capacity.  I
think its made a bit cheesier than the earlier versions

## [4] This think has worked out great.Had a diff. bran 64gb card and if went
south after 3 months.This one has held up pretty well since I had my S3, now
on my Note3.*** update 3/21/14I've had this for a few months and have had ZER
O issue's since it was transferred from my S3 to my Note3 and into a note2. T
his card is reliable and solid!Cheers!

## [5]

## [6] It's mini storage.  It doesn't do anything else and it's not supposed
to.  I purchased it to add additional storage to my Microsoft Surface Pro tab
let which only come in 64 and 128 GB.  It does what it's supposed to and SanD
isk has a long standing reputation that speaks for itself.

## 4898 Levels:  ...
```

```
##Text Cleaning
```

```
#Mengubah Kapital Menjadi Huruf Kecil
```

```
rev <- tolower(rev)
```

```
head(rev)
```

```
## [1] "no issues."
```

```
## [2] "purchased this for my device, it worked as advertised. you can never have too much phone memory, since i download a lot of stuff this was a no brainer for me."
```

```
## [3] "it works as expected. i should have sprung for the higher capacity. i think its made a bit cheesier than the earlier versions"
```

```
## [4] "this think has worked out great.had a diff. bran 64gb card and if went south after 3 months.this one has held up pretty well since i had my s3, now on my note3.*** update 3/21/14i've had this for a few months and have had zero issue's since it was transferred from my s3 to my note3 and into a note2. this card is reliable and solid!cheers!"
```

```
## [5] ""
```

```
## [6] "it's mini storage. it doesn't do anything else and it's not supposed to. i purchased it to add additional storage to my microsoft surface pro tablet which only come in 64 and 128 gb. it does what it's supposed to and sandisk has a long standing reputation that speaks for itself."
```

```
#Mengembalikan Kata yang disingkat Menjadi Kata Aslinya
```

```
rev <- replace_contraction(rev)
```

```
head(rev)
```

```
## [1] "no issues."
```

```
## [2] "purchased this for my device, it worked as advertised. you can never have too much phone memory, since i download a lot of stuff this was a no brainer for me."
```

```
## [3] "it works as expected. i should have sprung for the higher capacity. i think its made a bit cheesier than the earlier versions"
```

```
## [4] "this think has worked out great.had a diff. bran 64gb card and if went south after 3 months.this one has held up pretty well since i had my s3, now on my note3.*** update 3/21/14I have had this for a few months and have had zero issue's since it was transferred from my s3 to my note3 and into a note2 . this card is reliable and solid!cheers!"
```

```
## [5] ""
```

```
## [6] "it is mini storage. it does not do anything else and it is not supposed to. i purchased it to add additional storage to my microsoft surface pro tablet which only come in 64 and 128 gb. it does what it is supposed to and sandisk has a long standing reputation that speaks for itself."
```

```
#Mengembalikan Kata yang Mengalami Perpanjangan Menjadi Kata Aslinya
```

```
rev <- replace_word_elongation(rev)
```

```
head(rev)
```

```
## [1] "no issues."

## [2] "purchased this for my device, it worked as advertised. you can never
have too much phone memory, since i download a lot of stuff this was a no bra
iner for me."

## [3] "it works as expected. i should have sprung for the higher capacity.
i think its made a bit cheesier than the earlier versions"

## [4] "this think has worked out great.had a diff. bran 64gb card and if wen
t south after 3 months.this one has held up pretty well since i had my s3, no
w on my note3.*** update 3/21/14I have had this for a few months and have had
zero issue's since it was transferred from my s3 to my note3 and into a note2
. this card is reliable and solid!cheers!"

## [5] ""

## [6] "it is mini storage. it does not do anything else and it is not suppo
sed to. i purchased it to add additional storage to my microsoft surface pro
tablet which only come in 64 and 128 gb. it does what it is supposed to and
sandisk has a long standing reputation that speaks for itself."
```

#Menghapus Huruf yang Bukan Kata

```
rev <- strip(rev)
head(rev)
```

```
## [1] "no issues"

## [2] "purchased this for my device it worked as advertised you can never ha
ve too much phone memory since i download a lot of stuff this was a no braine
r for me"

## [3] "it works as expected i should have sprung for the higher capacity i t
hink its made a bit cheesier than the earlier versions"

## [4] "this think has worked out greathad a diff bran gb card and if went so
uth after monthsthis one has held up pretty well since i had my s now on my n
ote update i have had this for a few months and have had zero issue's since i
t was transferred from my s to my note and into a note this card is reliable
and solidcheers"

## [5] ""

## [6] "it is mini storage it does not do anything else and it is not suppose
d to i purchased it to add additional storage to my microsoft surface pro tab
let which only come in and gb it does what it is supposed to and sandisk has
a long standing reputation that speaks for itself"
```

#Menghapus Beberapa Kata

```
rev <-removeWords(rev, c("the", "our", "you", "and", "was", "this", "with", "not", "t
oo", "but", "for",

                                "its", "who", "has", "what", "yet", "your", "out", "else", "
more",

                                "own", "are", "about", "just", "because", "all", "etc", "wo
rks", "these", "did", "say", "use", "end", "she", "lot", "can", "not", "for", "saw", "als
o", "have", "that", "after", ",", ""))

head(rev)
```

```
## [1] "no issues"

## [2] "purchased my device it worked as advertised never much phone me
mory since i download a of stuff a no brainer me"

## [3] "it as expected i should sprung higher capacity i think made a bi
t cheesier than earlier versions"

## [4] " think worked greathad a diff bran gb card if went south monthsth
is one held up pretty well since i had my s now on my note update i had a
few months had zero issue's since it transferred from my s to my note int
o a note card is reliable solidcheers"

## [5] ""

## [6] "it is mini storage it does do anything it is supposed to i purcha
sed it to add additional storage to my microsoft surface pro tablet which onl
y come in gb it does it is supposed to sandisk a long standing reputation
speaks itself"
```

```
##Membuat Word Cloud
```

```
#Mengubah Data Frame Menjadi Data Faktor
```

```
tdm <- TermDocumentMatrix(rev)
```

```
m <- as.matrix(tdm)
```

```
v <- sort(rowSums(m),decreasing = TRUE)
```

```
#Mengubah Data Faktor Menjadi Data Frame
```

```
d <- data.frame(word = names(v), freq = v)
```

```
wordcloud(d$word, d$freq,
```

```
  random.order = FALSE,
```

```
  max.words = 500,
```

```
  colors = brewer.pal(name = "Dark2",8 ))
```

