Conversant

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```
attrib = read.csv('Extracted_data.csv',header=TRUE,na = FALSE)
per = table(attrib$Converted)
per = per/sum(per) * 100
repeated = (attrib[attrib$Userid %in% subset(data.frame(table(attrib$Userid)),Freq!=1)$Var1,])
repeat_noVal = subset(repeated,First_channel==''& Converted==1)
firstconv = repeat_noVal %>%
  select(Userid,event_timestamp,Last_date,First_date)%>%
  inner_join(select(subset(repeated,Converted==0),Userid,event_timestamp,Last_date,First_date),by="User
attrib = subset(attrib,!(attrib$Userid %in% repeated$Userid))
repeated = subset(repeated,(First_channel!='' & Converted==1))
attrib = rbind(attrib,repeated)
attrib = subset(attrib,device_types>0)
attrib$Converted = as.factor(attrib$Converted)
 attrib$event_timestamp = as.POSIXct(attrib$event_timestamp)
attrib$First_date = as.POSIXct(attrib$First_date)
attrib$Last_date = as.POSIXct(attrib$Last_date)
write.csv(attrib,"Filtered_data.csv",row.names = FALSE)
```

```
library(dplyr)
library(ChannelAttribution)
```

```
## Warning: package 'ChannelAttribution' was built under R version 3.3.2
```

```
library(ggplot2)
library(reshape2)
library(tidyr)
```

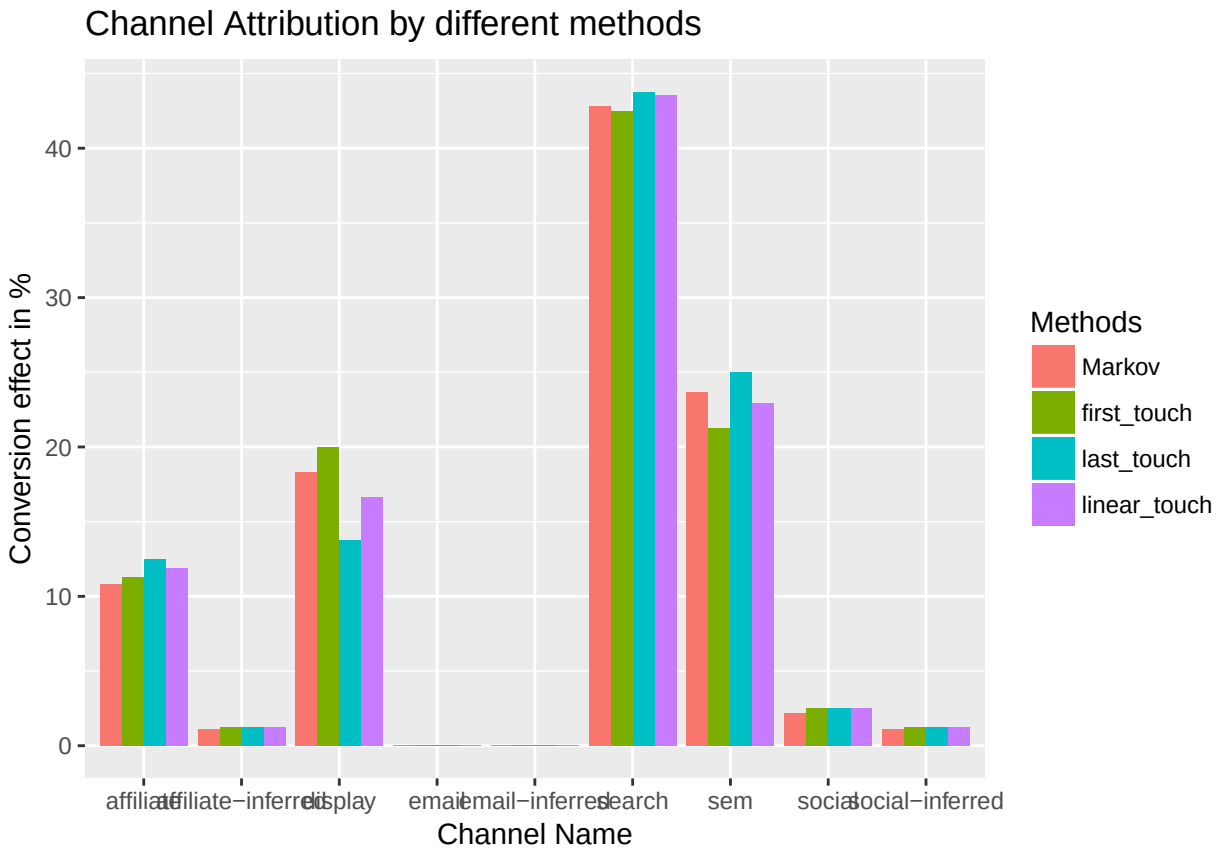
```
## Warning: package 'tidyr' was built under R version 3.3.2
```

```
##
## Attaching package: 'tidyr'
```

```
## The following object is masked from 'package:reshape2':
##
##     smiths
```

```
markov = read.csv('markov.csv')
markov  = subset(data.frame(table(markov$Converted,markov$Path)),Var2!='')
markov = spread(markov,Var1,Freq)
M = markov_model(markov,var_path = 'Var2',var_conv = '1',var_null = '0')
colnames(M) = c('channel_name','Markov')
M$Markov = (M$Markov/sum(M$Markov))*100
H = heuristic_models(markov,var_path = 'Var2',var_conv = '1')
H$first_touch = (H$first_touch/sum(H$first_touch))*100
H$last_touch = (H$last_touch/sum(H$last_touch))*100
H$linear_touch = (H$linear_touch/sum(H$linear_touch))*100

H = melt(merge(M,H),id='channel_name')
ggplot(H,aes(x = channel_name,y = value,fill=variable)) + geom_bar(stat='identity',position='dodge') + l
```


Channel Attribution by different methods
Conversion effect in %
40
30
20
10
0
affiliate
affiliate−inferred
display
email
email−inferred
search
sem
social
social−inferred
Channel Name
Methods
Markov
first_touch
last_touch
linear_touch