Onsite Funnel for a webshop in electronics

```
csvfilepath <- paste("../input/csv", "/", "monthly.csv", sep = "")
df_monthly <- read.csv(file=csvfilepath, header=TRUE, sep=",")
```

```
client <- as.character(params$clientid)
currency <- as.character(params$currency)
daterange <- as.character(params$Month)
service <- as.character("On Site")
plot.title <- "Onsite Funnel\n\n" # added an extra line here
Currency <- paste("Currency", currency, sep= " ")
Daterange <- paste("Date range:", daterange , sep=" ")
Service <- paste("Service:", service, sep= " ")
plot.subtitle <- paste( Currency, Daterange, Service, sep="\n")
table.title <- paste('Details for the ', params$startMonth, ' - ', params$endMonth )
y.label <- paste('Session data for the period ', params$endMonth)

cols <- c("#fec44f", "#fc9272", "#a1d99b", "#fee0d2", NA)
```

Date range: 2017-12
Service: On Site

```
df_monthly <- df_monthly  %>%
  filter(clientid == params$clientid, as.character(Month) >= params$startMonth, as.character(Month)<=pa
```

```
df_monthly$Month <- factor(df_monthly$Month)

#details
df_monthly <- df_monthly %>%
  mutate(StartedSessions = CountOfDirectSales + CountOfAbandonments,
         Abandonments = CountOfAbandonments,
         DirectSales = CountOfDirectSales,
         OnsiteDisplays = CountOfOpen,
         OnsiteClicksToContinue = CountOfPositiveClose,
         OnsiteClicksNotToContinue = CountOfNegativeClose,
         CompletedPurchases = CountOfOnsiteRecoveries,
         CompletedPurchases_value = ValueOfOnsiteRecoveries)

#kpi analysis
df_monthly <- df_monthly %>%
  mutate(DisplayRate = ifelse(StartedSessions==0 , 0, CountOfOpen/StartedSessions),
         ClickToContinueRate = ifelse(CountOfOpen==0 , 0, CountOfPositiveClose/CountOfOpen),
         ClickToConversionRate = ifelse((CountOfPositiveClose + CountOfNegativeClose)==0 , 0, CountOfOns

#main
df_monthly <- df_monthly %>%
  mutate(start = StartedSessions,
         display = OnsiteDisplays,
         click = OnsiteClicksToContinue,
         purchase = CompletedPurchases)
```

```
funnel <- gather(df_monthly, step, value, -clientid, -currency, -Month)
funnel$value <- round((as.numeric(funnel$value)),2)
```

```
funnel <- funnel %>%
mutate(detail =
  ifelse(step %in% c('start','display','click','purchase'), 'main',
  ifelse(step %in% c('StartedSessions, Abandonments','DirectSales'), 'start',
  ifelse(step %in% c('OnsiteDisplays'), 'display',
  ifelse(step %in% c('OnsiteClicksToContinue','OnsiteClicksNotToContinue'), 'click',
  ifelse(step %in% c('CompletedPurchases'), 'purchase',
  ifelse(step %in% c('DisplayRate', 'ClickToContinueRate', 'ClickToConversionRate'), 'kpi',
  'other')))))))
```

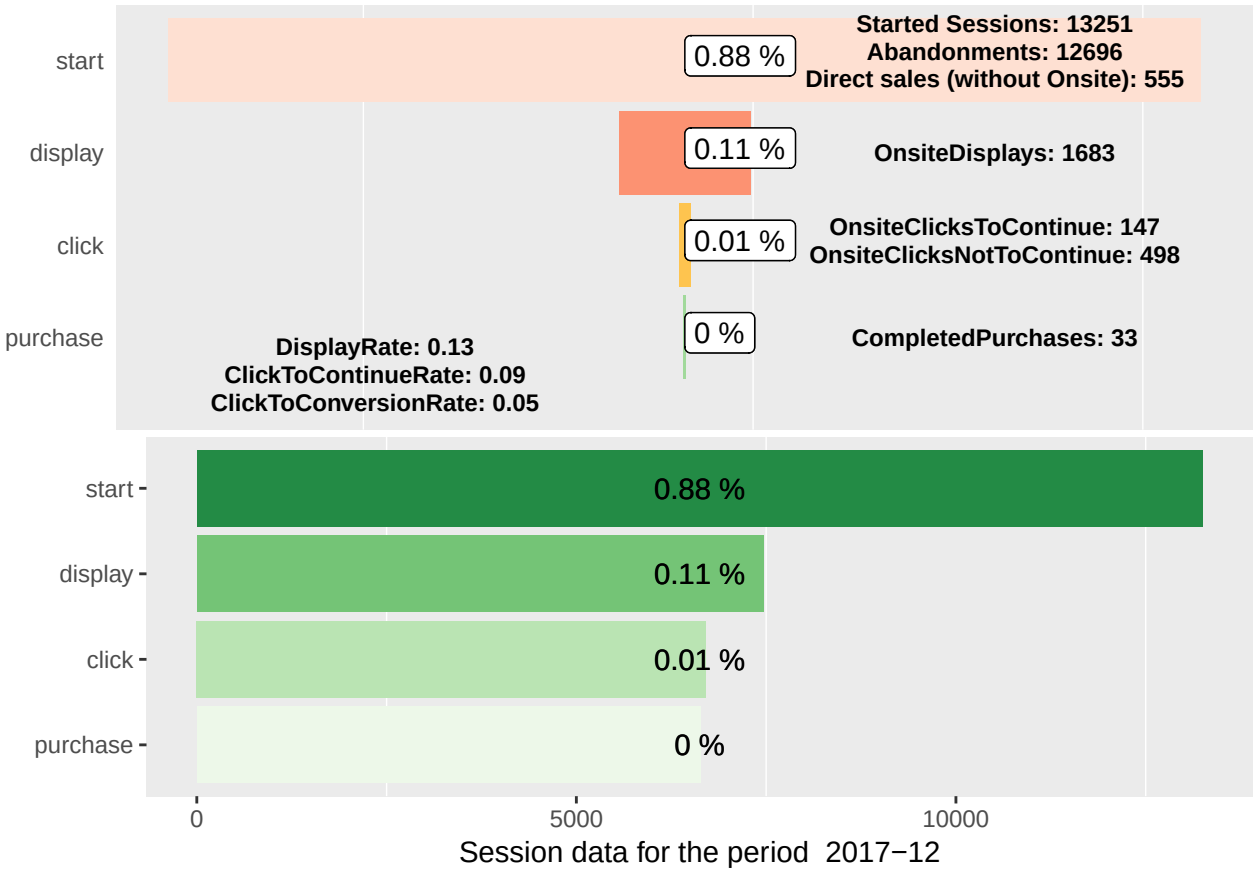
```
funnel_client <- funnel %>%
  filter(clientid==params$clientid, Month==params$endMonth)
```

```
funnel_main <- funnel_client %>%
  filter(detail=='main')

funnel_main <- funnel_main %>%
  mutate(rank = dense_rank(-value))

funnel_main <- funnel_main %>%
  mutate(rate = round(ifelse(value==0,0, value/sum(value)),2))

funnel_main$value <- round(funnel_main$value,0)

total <- subset(funnel_main, rank==1)$value


funnel_main$xpadding <- (total - funnel_main$value) / 2

funnel_main <- gather(funnel_main, variable, values, -clientid, -currency, -Month, -step, -detail, -rank

funnel_main$step <- factor(funnel_main$step, levels= c("purchase", "click", "display", "start"))

funnel_main <- funnel_main[order(funnel_main$step, decreasing = T), ]

funnel_main <- funnel_main %>%
  mutate(variable = ifelse(variable != 'xpadding',paste(step, variable, sep='_'), variable))

funnel_main <- funnel_main[order(funnel_main$variable), ]
```

```
p1 <- ggplot(funnel_main, aes(x=step, fill = step)) +
  geom_bar(aes(y = values),
           stat='identity', position='stack') +
  geom_text(data=funnel_main,
            aes(y=total/2, label= paste(rate, '%')),
            color='black') +
  scale_fill_brewer(type=seq, palette = "Greens")+
  scale_y_continuous(limits=c(0,total))+
  coord_flip() +
  theme(legend.position = 'none', plot.margin = unit(c(0, 0, 0, 0), "cm"),
        axis.title.y = element_text(size = 8, face = "bold"),
        panel.grid.major = element_blank()) +
  labs(x='', y=y.label)
```

```
p2 <- ggplot() +

  geom_bar(data = funnel_main, aes(y = values, x= step,fill=variable),
           stat='identity', position='stack') +
  scale_fill_manual(values = cols)+

  scale_y_continuous(limits=c(0,total))+
  geom_label(data=funnel_main,
             aes(x= step, y=total/2, label= paste(rate, '%')),
             color='black', hjust = 0, nudge_x = 0.05, size = 4) +
  geom_text(data= subset(funnel_client, step=="StartedSessions"),
             aes( x=4 + 0.4, y=0.8*total, label= paste('Started Sessions:', value)), color='black', size
  geom_text(data= subset(funnel_client, step=="Abandonments"),
             aes( x=4 + 0.1, y=0.8*total, label= paste('Abandonments:', value)), color='black', size = 3
  geom_text(data= subset(funnel_client, step=="DirectSales"),
             aes( x=4 - 0.2, y=0.8*total, label= paste('Direct sales (without Onsite):', value)), color=
 geom_text(data= subset(funnel_client, step=="OnsiteDisplays"),
             aes( x=3, y=0.8*total, label= paste('OnsiteDisplays:', value)), color='black', size = 3, fo
 geom_text(data= subset(funnel_client, step=="OnsiteClicksToContinue"),
             aes( x=2 +0.2, y=0.8*total, label= paste('OnsiteClicksToContinue:', value)), color='black',
 geom_text(data= subset(funnel_client, step=="OnsiteClicksNotToContinue"),
             aes( x=2 -0.1, y=0.8*total, label= paste('OnsiteClicksNotToContinue:', value)), color='blac
  geom_text(data= subset(funnel_client, step=="CompletedPurchases"),
             aes( x=1, y=0.8*total, label= paste('CompletedPurchases:', value)), color='black', size = 3
  geom_text(data= subset(funnel_client, step=="DisplayRate"),
             aes( x=0.9, y=0.2*total, label= paste('DisplayRate:', value)), color='black', size = 3, fon
  geom_text(data= subset(funnel_client, step=="ClickToContinueRate"),
             aes( x=0.6 , y=0.2*total, label= paste('ClickToContinueRate:', value)), color='black', size
  geom_text(data= subset(funnel_client, step=="ClickToConversionRate"),
             aes( x=0.3, y=0.2*total, label= paste('ClickToConversionRate:', value)), color='black', siz
  geom_text(data= subset(funnel_client, step=="Rate"),
             aes( x=0, y=4000, label= paste(' ', value)), color='black', size = 3.5)+


  coord_flip() +
  theme(legend.position='none', axis.ticks=element_blank(), axis.text.x=element_blank(),
 axis.title.x=element_blank(),axis.title.y=element_blank(), plot.margin = unit(c(0, 0, 0, 0), "cm"),
 panel.grid.major = element_blank()

 )
```

```
multiplot(p2, p1, cols = 1)
```




```
funnel_table <- funnel %>%
  spread(Month, value)

steps <- c("StartedSessions", "Abandonments", "DirectSales", "OnsiteDisplays", "OnsiteClicksToContinue"


funnel_maintable <- funnel_table %>%
  select(-clientid, -currency, -detail) %>%
  filter(step %in% steps)

funnel_maintable$step <- factor(funnel_maintable$step)

# ordering step on steps
funnel_maintable <- funnel_maintable[match(steps, funnel_maintable$step),]

names(funnel_maintable)[names(funnel_maintable) == 'step'] <- 'Details'

kable(funnel_maintable, knitr.table.format = "html", row.names = FALSE, caption = table.title)
```

Table 1: Details for the 2017-09 - 2017-12

Details	2017-09	2017-10	2017-11	2017-12
StartedSessions	12738	13372	13120	13251
Abandonments	11869	12383	12153	12696
DirectSales	869	989	967	555
OnsiteDisplays	2856	2791	2661	1683

Details	2017-09	2017-10	2017-11	2017-12
OnsiteClicksToContinue	575	380	270	147
OnsiteClicksNotToContinue	1462	898	757	498
CompletedPurchases	225	148	100	33
CompletedPurchases_value	9121375	5741000	5662000	4230000

```r
kpis <- c("DisplayRate", "ClickToContinueRate", "ClickToConversionRate")

funnel_kpitable <- funnel_table %>%
  select(-clientid, -currency, -detail) %>%
  filter(step %in% kpis)

funnel_kpitable$step <- factor(funnel_kpitable$step)

# ordering step on steps
funnel_kpitable <- funnel_kpitable[match(kpis, funnel_kpitable$step),]

#rename a coloumn in a df
names(funnel_kpitable)[names(funnel_kpitable) == 'step'] <- 'KPI analysis'

kable(funnel_kpitable, knit.table.format = "html", row.names = FALSE)
```

KPI analysis	2017-09	2017-10	2017-11	2017-12
DisplayRate	0.22	0.21	0.2	0.13
ClickToContinueRate	0.20	0.14	0.1	0.09
ClickToConversionRate	0.11	0.12	0.1	0.05