

Air France Case

Team 4

2025-02-09

```
knitr::opts_chunk$set(
  echo = TRUE,
  message = TRUE,
  warning = TRUE
)
```

Brief case description

In the midst of an international growth strategy, Air France is seeking to optimize its presence in the U.S. air travel market. Air France uses the services of Media Contacts to implement its marketing campaigns. In this case, Media Contacts has the challenge of maximizing the performance of Air France's search engine marketing (SEM) campaigns. The French company needs to further improve its return on investment (ROA) in online advertising to continue to capture the attention of U.S. travelers and convert that interest into ticket sales.

```
library(readxl)
Air_France <- read_excel("C:/Users/wenco/Documents/HULT/R/Air France Case Spreadsheet Supplement.xls",
                        sheet = "DoubleClick")
summary(Air_France)
```

##	Publisher ID	Publisher Name	Keyword ID	Keyword
##	Length:4510	Length:4510	Length:4510	Length:4510
##	Class :character	Class :character	Class :character	Class :character
##	Mode :character	Mode :character	Mode :character	Mode :character
##				
##				
##				
##	Match Type	Campaign	Keyword Group	Category
##	Length:4510	Length:4510	Length:4510	Length:4510
##	Class :character	Class :character	Class :character	Class :character
##	Mode :character	Mode :character	Mode :character	Mode :character
##				
##				
##				
##	Bid Strategy	Keyword Type	Status	Search Engine Bid
##	Length:4510	Length:4510	Length:4510	Min. : 0.000
##	Class :character	Class :character	Class :character	1st Qu.: 3.384
##	Mode :character	Mode :character	Mode :character	Median : 6.250
##				Mean : 5.435
##				3rd Qu.: 6.250

```
##                                     Max.      :27.500
##      Clicks      Click Charges      Avg. Cost per Click Impressions
## Min.      :    0.0 Min.      :    0.00 Min.      : 0.000 Min.      :    0
## 1st Qu.:    1.0 1st Qu.:    2.31 1st Qu.: 0.825 1st Qu.:    28
## Median :    4.0 Median :    6.76 Median : 1.650 Median :   176
## Mean   :   113.7 Mean   :   167.48 Mean   : 1.890 Mean   :   9284
## 3rd Qu.:   19.0 3rd Qu.:   28.49 3rd Qu.: 2.663 3rd Qu.:   844
## Max.    :34012.0 Max.    :46188.44 Max.    :10.000 Max.    :8342415
## Engine Click Thru % Avg. Pos.      Trans. Conv. % Total Cost/ Trans.
## Min.      : 0.000 Min.      : 0.000 Min.      : 0.0000 Min.      : 0.00
## 1st Qu.:  1.532 1st Qu.:  1.143 1st Qu.: 0.0000 1st Qu.: 0.00
## Median :  4.106 Median :  1.594 Median : 0.0000 Median : 0.00
## Mean   : 11.141 Mean   :  1.930 Mean   : 0.5693 Mean   : 27.61
## 3rd Qu.: 10.917 3rd Qu.:  2.308 3rd Qu.: 0.0000 3rd Qu.: 0.00
## Max.    :200.000 Max.    :15.000 Max.    :900.0000 Max.    :9597.17
##      Amount      Total Cost      Total Volume of Bookings
## Min.      :    0 Min.      :    0.00 Min.      : 0.0000
## 1st Qu.:    0 1st Qu.:    2.31 1st Qu.: 0.0000
## Median :    0 Median :    6.76 Median : 0.0000
## Mean   :  1034 Mean   :   167.48 Mean   : 0.8734
## 3rd Qu.:    0 3rd Qu.:   28.49 3rd Qu.: 0.0000
## Max.    :567463 Max.    :46188.44 Max.    :439.0000
```

Summary description

This summary shows the length of the data set, the type of data for each variable and the main statistical results for each variable. Knowing this information is important to start the analysis, as a first step we analyze the meaning of each variable and how they are related to each other and the value this brings to decision making.

In this case we can see that the information is sectorized by search engines and campaigns, and also contains key indicators such as: Engine Click Thru %, Trans. Conv. % and Total Cost/ Trans.

```
#creating a summary of principal values
df_summary <- aggregate(cbind(`Total Volume of Bookings`, Amount, `Total Cost`) ~
                        `Publisher Name`, data = Air_France, sum, na.rm = TRUE)
```

This table contain a summary of Total volume of bookings, Revenue and Total cost per Engine Search, this information give an insight to solve the first question of the case:

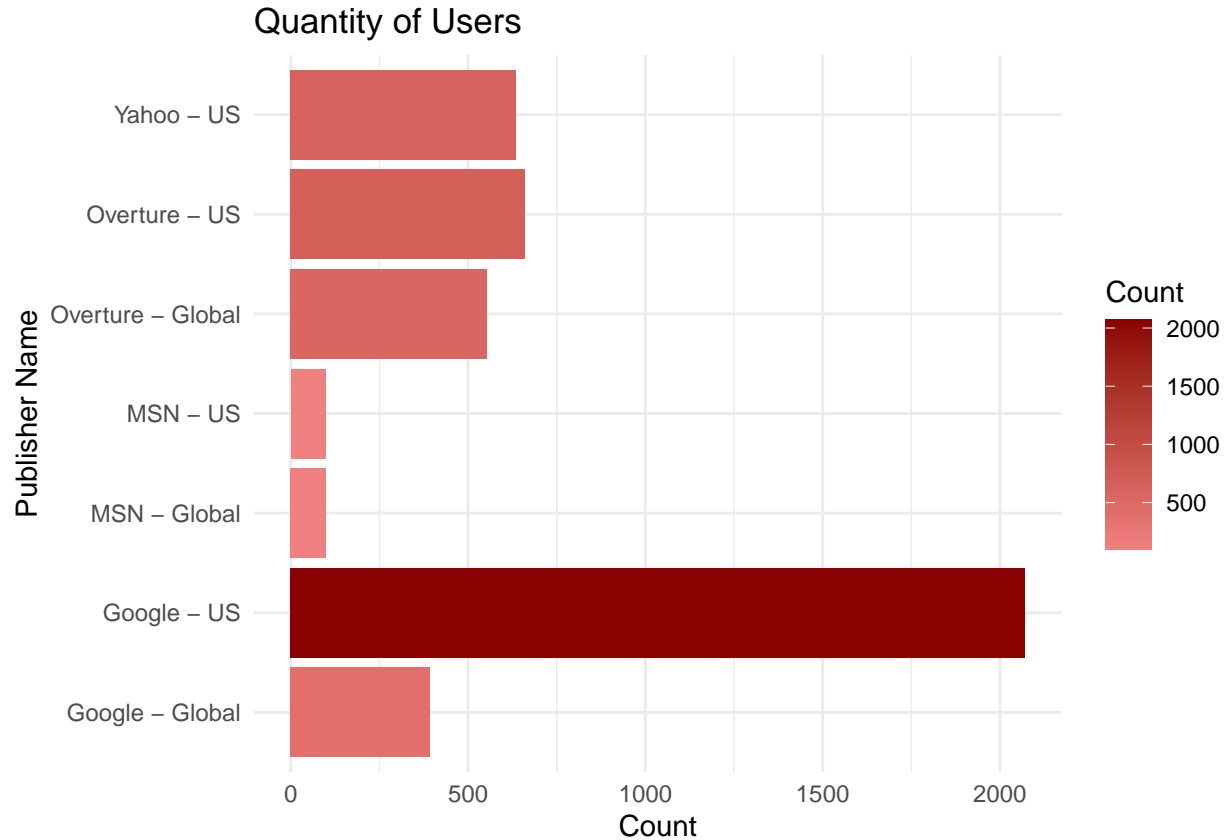
First Question

- 1) Should Media Contacts recommend a uniform strategy for Air France across search engine publishers? Or would it be more effective to tailor each publisher strategy to maximize return on investment?

To solve this question it is necessary to know our quantity of user per Engine Search.

```
# Counting Publisher Name
publisher_counts <- as.data.frame(table(Air_France$`Publisher Name`))
colnames(publisher_counts) <- c("Publisher Name", "Count")
library(ggplot2)
ggplot(data = publisher_counts, aes(x = Count, y = `Publisher Name`, fill = Count)) +
```

```
geom_col() +
scale_fill_gradient(low = "lightcoral", high = "darkred") +
labs(title = "Quantity of Users", x = "Count", y = "Publisher Name") +
theme_minimal()
```



The graph shows that Google-US is the search engine with the highest number of users, followed by Overture-US and Yahoo-US.

Now it is necessary to create the ROA calculation using the information from the dataset, the return on investment is calculated as follows: $ROA = \frac{\text{Amount} - \text{Total Cost}}{\text{Total Cost}}$

```
#defining ROA in df_summary
df_summary$ROA <- (df_summary$Amount - df_summary$`Total Cost`) / df_summary$`Total Cost`

#defining ROA in Air France dataset
Air_France$ROA <- (Air_France$Amount - Air_France$`Total Cost`) / Air_France$`Total Cost`
df_summary
```

##	Publisher Name	Total Volume of Bookings	Amount	Total Cost	ROA
## 1	Google - Global	797	929549.8	120946.71	6.685614
## 2	Google - US	1550	1745481.8	353640.60	3.935751
## 3	MSN - Global	129	145524.2	12160.36	10.967098
## 4	MSN - US	140	181549.8	16098.49	10.277445
## 5	Overture - Global	372	430084.7	64295.86	5.689151
## 6	Overture - US	289	347433.2	141976.07	1.447125
## 7	Yahoo - US	662	882289.0	46197.82	18.098063

Based on the table it can be observed that the return on investment rates are very varied, having Yahoo-US as the engine publisher with the highest rate with 18.09, this is due to the low cost per click, making this search engine a potential for the company in future campaigns.

On the other hand Google-US shows a low rate of 3.9, very low compared to Yahoo-US, this is due to the high cost per click that represents the company, however it is the search engine with the highest amount of users with bookings in the last year, it is recommended to reevaluate the cost per click with Google-US to maximize future earnings.

Next we will analyze the analysis of the users in each search engine:

```
#clics analysis
clics_summary <- aggregate(
  cbind( `Engine Click Thru %`, `Avg. Cost per Click`) ~ `Publisher Name`,
  data = Air_France,
  FUN = mean,
  na.rm = TRUE
)
clics_summary
```

##	Publisher Name	Engine Click Thru %	Avg. Cost per Click
## 1	Google - Global	8.994485	2.2249594
## 2	Google - US	15.089745	2.3839418
## 3	MSN - Global	7.335605	2.1529982
## 4	MSN - US	8.263521	2.8674701
## 5	Overture - Global	3.547863	0.8047588
## 6	Overture - US	2.672846	0.7639206
## 7	Yahoo - US	16.059019	1.9988757

Google -US and Yahoo-US show the best results in clicks per impression of the users implying that the implemented keywords have been effective. It is recommended to give continuity to these campaigns. On the other hand, looking at the results of Overture-US and Overture-global, they show the lowest return rate of the group as well as the lowest conversion rate, making this search engine ineffective.

Considering the above Media contacts should not recommend a uniform strategy on all search engines for Air France, it is recommended instead to implement stronger campaigns on Google-US and Yahoo-Us due to the high customer potential they can offer and the return rate, on the other hand renegotiating the prices per click on Google-Us would significantly increase Air France's revenues.

Second Question

- 2) How can campaigns be improved to increase overall value gained from investment with a search engine publisher? Should keywords be added or dropped from the campaign? Should campaign tactics or copy be adjusted to improve campaign performance?

in this case the analysis is focused on the different campaigns implemented and their results based on ROA.

```
Campaign_summary <- aggregate(
  cbind(`ROA`, Amount, `Total Cost`, `Total Volume of Bookings`) ~ `Publisher Name` + `Campaign`,
  data = Air_France,
  FUN = sum,
  na.rm = TRUE
)
```

```
Campaign_summary_negatives <- subset(Campaign_summary, ROA < 0)

print(Campaign_summary_negatives)
```

##	Publisher Name	Campaign	ROA	Amount	Total Cost
## 7	Google - US	Business Class	-14.91340	144.50	2288.5875
## 8	MSN - US	Business Class	-3.00000	0.00	128.9000
## 9	Yahoo - US	Business Class	-13.00000	0.00	851.5625
## 10	Google - US	French Destinations	-43.07259	5103.40	8017.6375
## 11	Yahoo - US	French Destinations	-18.21168	1120.30	414.1000
## 13	Yahoo - US	Geo Targeted Atlanta	-27.89082	170.00	265.2500
## 15	Yahoo - US	Geo Targeted Boston	-30.00000	0.00	377.7250
## 17	Yahoo - US	Geo Targeted Chicago	-12.95784	4403.85	804.4125
## 18	Yahoo - US	Geo Targeted Cincinnati	-9.00000	0.00	33.7500
## 22	Yahoo - US	Geo Targeted Detroit	-22.00000	0.00	202.2625
## 24	Yahoo - US	Geo Targeted Houston	-28.00000	0.00	318.9875
## 25	Google - US	Geo Targeted Los Angeles	-36.55096	2183.65	967.2500
## 26	Yahoo - US	Geo Targeted Los Angeles	-51.00000	0.00	832.7375
## 28	Yahoo - US	Geo Targeted Miami	-19.00000	0.00	394.7000
## 30	Yahoo - US	Geo Targeted New York	-20.49468	1650.70	1613.7125
## 32	Yahoo - US	Geo Targeted Philadelphia	-23.00000	0.00	386.2250
## 34	Yahoo - US	Geo Targeted San Francisco	-42.00000	0.00	773.4500
## 36	MSN - US	Geo Targeted Seattle	-1.00000	0.00	2.6750
## 37	Yahoo - US	Geo Targeted Seattle	-1.00000	0.00	0.3500
## 38	Google - US	Google_Yearlong 2006	-192.46656	22373.70	81959.4873
## 39	Google - US	Outside Western Europe	-14.00000	0.00	597.8375
## 40	Google - US	Paris & France Terms	-33.88989	112370.85	95787.3248
## 44	Google - US	Western Europe Destinations	-240.99627	27080.15	33851.6499
##	Total Volume of Bookings				
## 7			1		
## 8			0		
## 9			0		
## 10			13		
## 11			1		
## 13			1		
## 15			0		
## 17			1		
## 18			0		
## 22			0		
## 24			0		
## 25			2		
## 26			0		
## 28			0		
## 30			2		
## 32			0		
## 34			0		
## 36			0		
## 37			0		
## 38			15		
## 39			0		
## 40			103		
## 44			31		

The company should analyze the non-continuity of the campaigns with a negative return rate and few flight bookings, this means that the keywords used in the search engines of each campaign have not been as effective as expected, because if they have views but the user does not decide to click and know the promotion.

The following are the campaigns with best performance:

```
Campaign_summary <- aggregate(
  cbind(`ROA`, Amount, `Total Cost`, `Total Volume of Bookings`) ~ `Publisher Name` + `Campaign`,
  data = Air_France,
  FUN = sum,
  na.rm = TRUE
)
Campaign_summary_positives <- subset(Campaign_summary, ROA > 0)

print(Campaign_summary_positives)
```

##	Publisher Name	Campaign	ROA
## 1	Google - Global	Air France Brand & French Destinations	471.713177
## 2	MSN - Global	Air France Brand & French Destinations	1054.269392
## 3	MSN - US	Air France Brand & French Destinations	119.725596
## 4	Google - US	Air France Branded	1814.994419
## 5	Yahoo - US	Air France Branded	411.076227
## 6	Google - Global	Air France Global Campaign	1371.624538
## 12	Yahoo - US	General Terms	2.261388
## 14	Google - US	Geo Targeted Boston	Inf
## 16	Google - US	Geo Targeted Chicago	55.851439
## 19	Google - US	Geo Targeted DC	101.528136
## 20	Yahoo - US	Geo Targeted DC	2503.921568
## 21	Google - US	Geo Targeted Detroit	56.992424
## 23	Google - US	Geo Targeted Houston	99.003057
## 27	Google - US	Geo Targeted Miami	137.153846
## 29	Google - US	Geo Targeted New York	460.181741
## 31	Google - US	Geo Targeted Philadelphia	19.869565
## 33	Google - US	Geo Targeted San Francisco	292.619980
## 35	Google - US	Geo Targeted Seattle	22.311795
## 41	Yahoo - US	Paris & France Terms	165.728019
## 42	Overture - Global	Unassigned	2480.016536
## 43	Overture - US	Unassigned	803.879270
## 45	Yahoo - US	Western Europe Destinations	3804.670614
##	Amount	Total Cost	Total Volume of Bookings
## 1	461567.85	58887.2622	430
## 2	145524.25	12160.3624	129
## 3	181549.80	15966.9124	140
## 4	1517842.45	114363.8620	1314
## 5	832028.45	28713.9622	618
## 6	467981.95	62059.4498	367
## 12	1977.95	606.4750	1
## 14	2878.95	1018.4500	4
## 16	2740.40	777.2625	4
## 19	3300.55	803.9625	4
## 20	1891.25	467.4000	5
## 21	923.95	516.7625	1
## 23	7065.20	1673.8000	5
## 27	470.05	243.8250	1

## 29	33929.45	7925.9625	44
## 31	434.35	359.7500	1
## 33	3822.45	1315.9625	3
## 35	2817.75	1171.2250	4
## 41	24022.70	6810.0500	19
## 42	430084.70	64295.8621	372
## 43	347433.25	141976.0745	289
## 45	15023.75	2330.7125	14

To get involve in the US market We recommend increasing the effort in Google-US and Yahoo-US specifically in these campaigns. Based on this information we recommend to continue with this campaign, it maintains a good ROA and number of bookings.

The following shows the performance of the implemented Google-US campaigns.

```
keywords_summary <- aggregate(
  cbind(`Total Volume of Bookings`, Amount, `Total Cost`, `ROA`) ~ `Publisher Name` + `Campaign` + `Keyword`,
  data = Air_France,
  FUN = sum,
  na.rm = TRUE
)
#Creating a function to get the top 10 keywords for each publisher
top_10_por_publisher <- function(df) {
  df[order(-df$ROA), ][1:10, ]
}
# Create a list to store the top 10 keywords for each publisher
top_10_keywords_por_publisher <- lapply(split(keywords_summary, keywords_summary$`Publisher Name`), top_10_por_publisher)
#Google US
top_10_keywords_por_publisher[2]
```

```
## $'Google - US'
##      Publisher Name      Campaign
## 1275   Google - US      Geo Targeted Boston
## 3558   Google - US      Geo Targeted San Francisco
## 352    Google - US      Air France Branded
## 248    Google - US      Air France Branded
## 407    Google - US      Air France Branded
## 2144   Google - US      Geo Targeted New York
## 412    Google - US      Air France Branded
## 2110   Google - US      Geo Targeted Miami
## 2285   Google - US      Geo Targeted DC
## 2589   Google - US      Geo Targeted Detroit
##
##      Keyword Total Volume of Bookings
## 1275 cont:geo targeted boston::boston to paris sale      1
## 3558      paris cheap airline      1
## 352      airfrance      244
## 248      air france us      20
## 407      airfrance us      5
## 2144      france airline ticket      1
## 412      airfrance website      1
## 2110      france airfare sale      1
## 2285      france flights      3
## 2589      international airfares      1
```

```
##      Amount Total Cost      ROA
## 1275    417.35      0.0000      Inf
## 3558   1685.55      5.2125 322.3669
## 352 265466.90 2647.6249 294.4146
## 248   23076.65   99.5500 230.8096
## 407    5733.25   30.7875 185.2201
## 2144    494.70    2.6875 183.0744
## 412    1815.60    9.9375 181.7019
## 2110    470.05    2.7625 169.1538
## 2285    2810.10   18.3500 152.1390
## 2589     923.95    6.6000 138.9924
```

```
#Creating a function to get the top 10 worst keywords for each publisher
top_10_por_publisher_rev <- function(df) {
  df[order(df$ROA), ][1:10, ]
}
# Creating a function to get the top 10 best keywords for each publisher
top_10_keywords_por_publisher_rev <- lapply(split(keywords_summary, keywords_summary$`Publisher Name`),
#Google US
top_10_keywords_por_publisher_rev[2]
```

```
## $'Google - US'
##      Publisher Name      Campaign      Keyword
## 6      Google - US Western Europe Destinations [flight to istanbul]
## 7      Google - US Western Europe Destinations [flight to london]
## 8      Google - US Western Europe Destinations [flights to istanbul]
## 9      Google - US Western Europe Destinations [flights to london]
## 10     Google - US Western Europe Destinations [fly to istanbul]
## 11     Google - US Western Europe Destinations [istanbul airfare]
## 12     Google - US Western Europe Destinations [istanbul airlines]
## 13     Google - US Western Europe Destinations [istanbul airport]
## 14     Google - US Western Europe Destinations [istanbul cheap flights]
## 15     Google - US Western Europe Destinations [istanbul flight]
##      Total Volume of Bookings Amount Total Cost ROA
## 6      0      0      3.4875 -1
## 7      0      0      4.9000 -1
## 8      0      0     45.2375 -1
## 9      0      0      8.9625 -1
## 10     0      0      5.4250 -1
## 11     0      0      4.6875 -1
## 12     0      0      2.7250 -1
## 13     0      0      5.3250 -1
## 14     0      0      4.3125 -1
## 15     0      0      5.4750 -1
```

The keyword trend in the Google-US search engine shows that the user prefers to type short words and the name of the company rather than site-specific words such as Istanbul. It is recommended to keep keywords like Air France US for future campaigns.

```
#Google US
top_10_keywords_por_publisher[7]
```



```

## $'Yahoo - US'
##      Publisher Name          Campaign          Keyword
## 2001      Yahoo - US Western Europe Destinations    fly to florence
## 2931      Yahoo - US          Geo Targeted DC low international airfare
## 2346      Yahoo - US          Paris & France Terms    france travel agency
## 429       Yahoo - US          Air France Branded      airfrance.us
## 4052      Yahoo - US Western Europe Destinations    rome travel
## 413       Yahoo - US          Air France Branded      airfrance.com
## 243       Yahoo - US          Air France Branded      air france travel
## 353       Yahoo - US          Air France Branded      airfrance
## 2680      Yahoo - US          Geo Targeted Chicago    international flight
## 419       Yahoo - US          Air France Branded      airfrance.com
##      Total Volume of Bookings    Amount Total Cost    ROA
## 2001              9    8777.95      2.3125 3794.87027
## 2931              1    1574.20      0.6250 2517.72000
## 2346              2    1978.80     15.4375 127.18138
## 429             14   10140.50     87.5750 114.79218
## 4052              4    5729.00     56.4125 100.55551
## 413              1     718.25      7.3125  97.22222
## 243              1    2772.70     33.7875  81.06289
## 353             490  660214.55  21562.5622  55.23148
## 2680              1    4403.85    118.8875  36.04216
## 419             85  121372.35   3491.7875  33.75937

```

#Google US

```
top_10_keywords_por_publisher_rev[7]
```

```

## $'Yahoo - US'
##      Publisher Name          Campaign
## 97       Yahoo - US          Business Class
## 99       Yahoo - US          Business Class
## 100      Yahoo - US          Business Class
## 106      Yahoo - US Western Europe Destinations
## 109      Yahoo - US          Air France Branded
## 132      Yahoo - US          Paris & France Terms
## 143      Yahoo - US          Geo Targeted Houston
## 153      Yahoo - US          Air France Branded
## 154      Yahoo - US          Air France Branded
## 161      Yahoo - US          Air France Branded
##      Keyword Total Volume of Bookings Amount
## 97      air france business class          0      0
## 99  air france business class flat bed      0      0
## 100     air france business class seat      0      0
## 106     air france cheap ticket turkey      0      0
## 109           air france co uk              0      0
## 132     air france discount ticket          0      0
## 143           air france flight             0      0
## 153           air france flights            0      0
## 154     air france flights paris            0      0
## 161           air france fr                 0      0
##      Total Cost ROA
## 97      7.5000 -1
## 99      0.1250 -1
## 100     1.0750 -1

```

```
## 106      1.0500  -1
## 109      0.3000  -1
## 132      2.9125  -1
## 143      1.0000  -1
## 153     273.9000  -1
## 154      4.1125  -1
## 161     10.0750  -1
```

On the other hand the case of Yahoo-us is similar considering that the most searched keyword was airfrance, people tend to search quickly using very narrow and direct keywords.

Third Question

3) What are the most important KPIs, and what impact will campaign changes have on these KPIs?

The most important KPIs are the ROA (Return on Advertising), the Engine Click Thru % ((Clicks / Impressions) * 100) and the Avg. Cost per Click (Total Cost / Clicks), in this case if we increase the spending or change strategies the results will change.

- If we invest more in the publishers with high ROA like Yahoo-US (18.09) and MSN-Global(10.96), we also need to consider that MSN-Global can have a high ROA but it doesn't have many bookings (129), meaning that maybe there is not many people using that publisher. Considering this, if we focus on invest more on Yahoo-US could maximize overall return.
- Also Google-US has a low ROA (3.94) but has the biggest number in bookings(1550), meaning that the Avg. Cost per Click is too high (2.38) comparing with the others publishers, so if we change the campaign eliminating keywords with low performance and adjust the bidding strategy to reduce the Avg. Cost per Click maintaining the Engine Click Thru % (15.08) we can generate more return.
- Reducing or eliminating the spending on the lowest ROA campaign will save us some costs, Overture-US and Overture-Global. These two have lower Engine Click Thru % (2.67 and 3.55) suggesting weaker ad engagement or poor keyword targeting, despite having a cheap Avg. Cost per Click (0.76 - 0.80), they don't worth the investment.

Kayak Analysis

To assess whether Air France should optimize SEM with metasearch platforms, we analyze Kayak's performance and compare it with traditional search engines (Google, MSN, and Overture). The analysis considers key performance indicators such as **ROI, Cost per Click, and Conversion Rate**.

```
# Example of the existing data (ensure this dataframe is created first)
performance_comparison <- data.frame(
  `Publisher Name` = c("Google - Global", "Google - US", "MSN - Global", "MSN - US", "Overture - Global",
    Clicks = c(72895, 192109, 11217, 10808, 60899),
    `Total Revenue` = c(929549.8, 1745481.8, 145524.25, 181549.8, 430084.7),
    `Media Cost` = c(120946.71, 353640.60, 12160.36, 16098.49, 64295.86),
    `Total Bookings` = c(797, 1550, 129, 140, 372),
    `Cost per Click` = c(1.66, 1.84, 1.08, 1.49, 1.05),
    `Conversion Rate` = c(0.0109, 0.0081, 0.0115, 0.0129, 0.0061),
    `ROA` = c(6.69, 3.94, 10.97, 10.28, 5.69)
)#Placeholder

# Define the new row for Kayak
kayak_metrics <- data.frame(
```

```

`Publisher Name` = "Kayak",
Clicks = 11356,
`Total Revenue` = 934776,
`Media Cost` = 14288.534,
`Total Bookings` = 832,
`Cost per Click` = 1.26,
`Conversion Rate` = 0.07,
ROA = 63.51
)

# Ensure column names match before merging
colnames(kayak_metrics) <- colnames(performance_comparison)

# Combine both dataframes
full_comparison <- rbind(performance_comparison, kayak_metrics)

# Display the final table
print(full_comparison)

```

```

##      Publisher.Name Clicks Total.Revenue Media.Cost Total.Bookings
## 1   Google - Global  72895      929549.8  120946.71         797
## 2     Google - US  192109     1745481.8  353640.60        1550
## 3      MSN - Global  11217     145524.2   12160.36         129
## 4       MSN - US   10808     181549.8   16098.49         140
## 5 Overture - Global  60899     430084.7   64295.86         372
## 6         Kayak   11356     934776.0   14288.53         832
## Cost.per.Click Conversion.Rate   ROA
## 1          1.66          0.0109  6.69
## 2          1.84          0.0081  3.94
## 3          1.08          0.0115 10.97
## 4          1.49          0.0129 10.28
## 5          1.05          0.0061  5.69
## 6          1.26          0.0700 63.51

```

Interpretation of Kayak's Performance

Kayak has **exceptionally high ROI (63.51)**, a **low cost per click (\$1.26)**, and an **goog conversion rate (7%)**. Compared to Google, MSN, and Overture, Kayak offers: - **Much higher ROI** - **Significantly lower costs** - **Better conversion rates**

Given this, **Air France should increase investment in Kayak** while reducing spending on lower-performing search engines.