

# Trivago Data Analysis

September 2020

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# Agenda

“To analyse booking data to understand market trends and areas of optimizations for each advertiser”

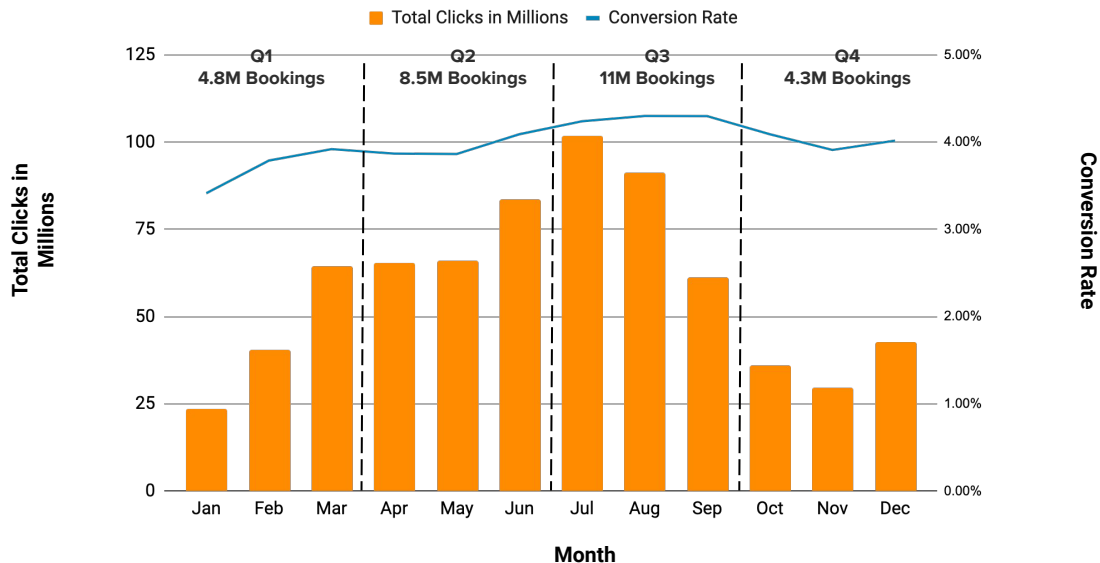
Assumptions about the data

# Assumptions about data

- Advertisers are hotels agencies that post advertisements about room availability on the Trivago site. A, B & C are such advertisers.
- The revenue is in dollars.
- These figures are for a single country. This means that the advertisers are placing ads for hotel rooms for a single country.
- $\text{Profit Margin} = (\text{Revenue} - \text{Total Cost}) / (\text{Revenue})$ . This means that  $\text{Profit} = \text{Profit Margin} * (\text{Revenue})$ , where profit margin is 15%.
- $\text{ROI} = \text{Revenue} / \text{Spend}$
- $\text{CPA} = \text{Spend} / \text{Booking}$
- A booking is made for 7 days of stay on average.

# High Level Insights

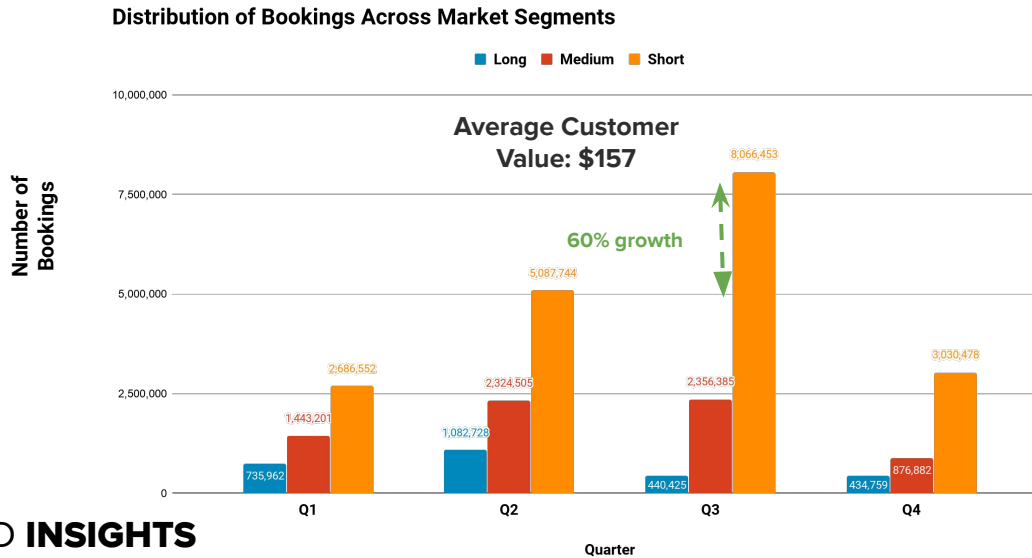
# Hotel reservations peak in Q2-Q3 of 2019



## FINDINGS AND **INSIGHTS**

- Booking conversion rates increase slightly in the period Q2-Q3 of 2019, with bookings peaking in Q3.
- The country in question attracted ~29 M bookings. This means that at least 29 million tourists entered this country.
- Breaking down bookings by market segments can help discern the reasons for the above behaviour.

While, short TTT travellers drive the booking spike in Q3, medium TTT bookings peak in Q2-Q3 and long TTT bookings peak in Q2



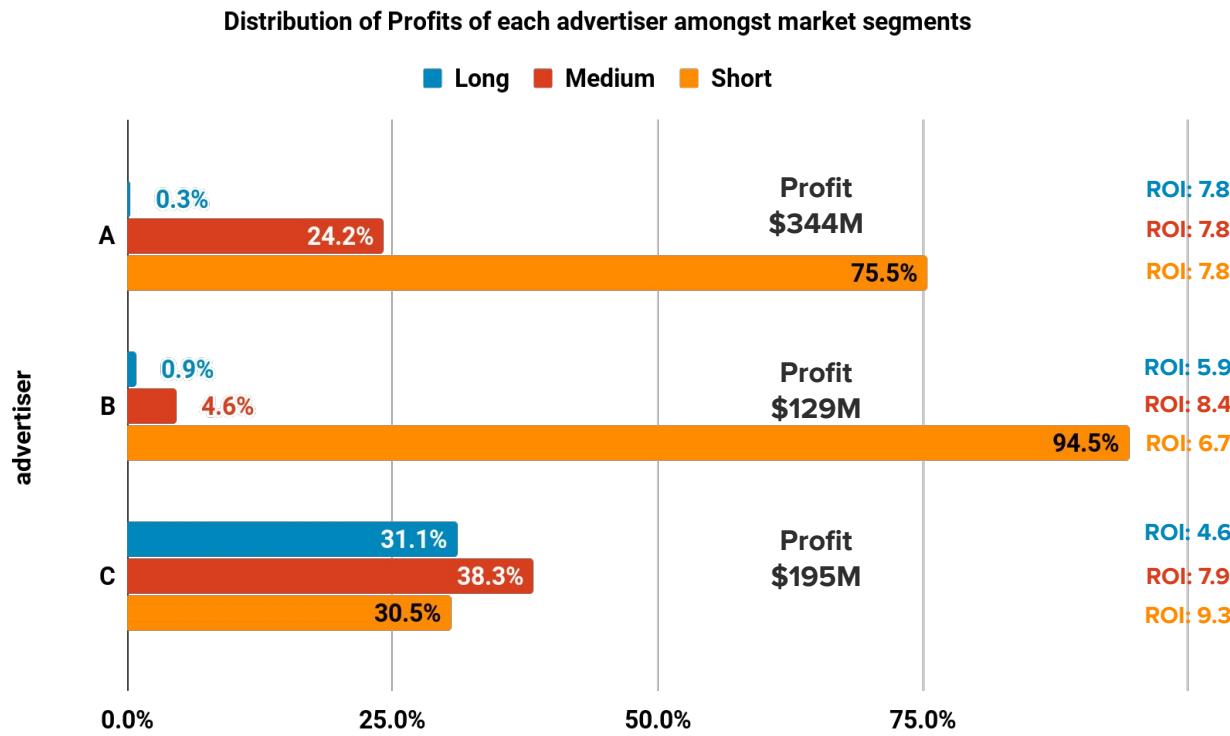
## FINDINGS AND INSIGHTS

- A spike in short TTT traveller bookings could mean that most visitors did not require a visa to enter the country in question as most tourist visa applications would require individuals to book hotels in advance (at least 1-3 months in advance).
- For each booking, the advertisers made \$157 on average, which means that hotels are located in a country that have provisions for cheaper accommodation. This could mean that the country would be located in Asia/Africa.
- Based on [online tourist data](#), the country that has > 29M foreign tourists and that is located in Asia, is Thailand. Thailand, predominantly has visitors from EU & Australia, who do not need a visa for the purpose of tourism.



Profits made by advertisers

# Advertiser A generates the maximum profit of \$344M



## ABOUT THIS GRAPH

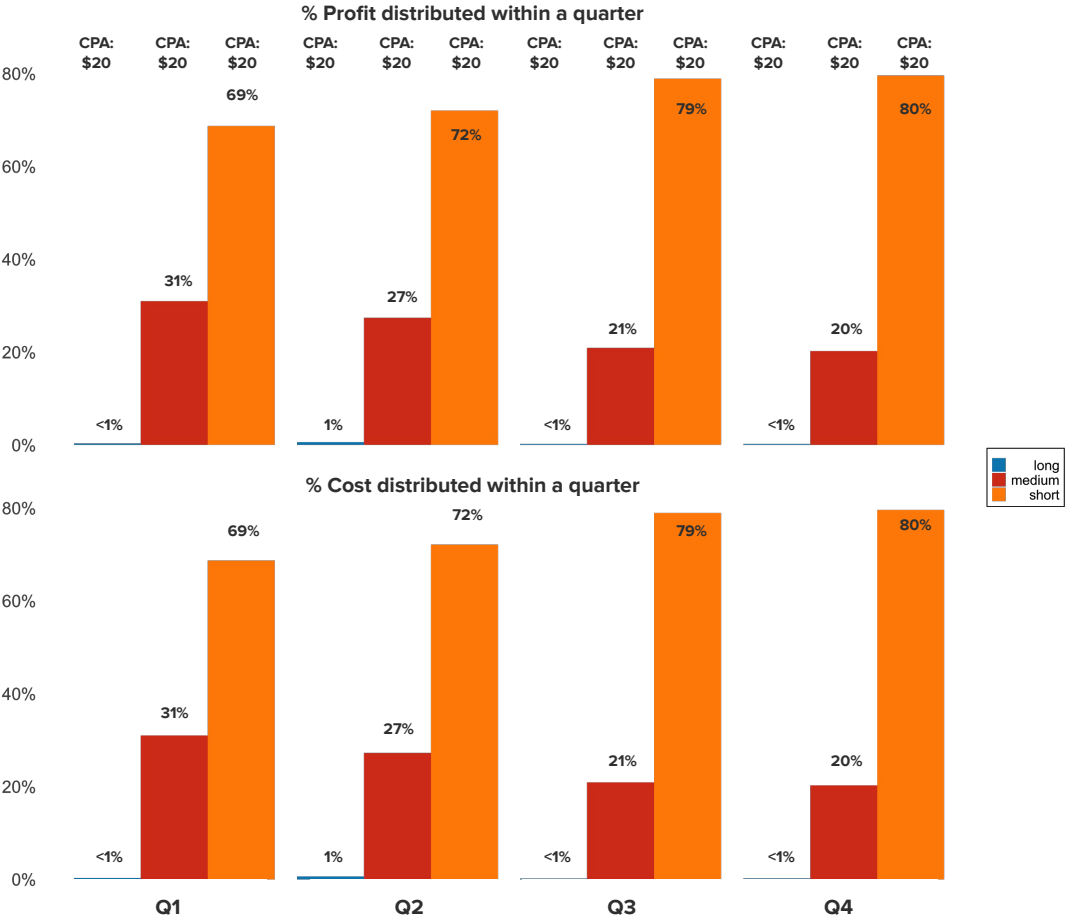
- Profit of each advertiser & how they are distributed across market segments.
- ROI attained by each market segment

## FINDINGS AND INSIGHTS

- Medium TTT travellers & Short TTT travellers are areas of further growth for B & C advertisers respectively, due to higher ROI values.
- Calculating cost incurred per booking (CPA), can help further strengthen our hypothesis, while identifying target segments that need optimization.

# Insights for Advertiser A

# Increase ad frequency to essential to improve consumer reach



## ABOUT THIS GRAPH

- Talks about how profit & costs are distributed within each quarter across market segments for advertiser A.
- This also includes quarterly cost per acquisition for each market segment
- The percentages add up to 100% for profit & cost for each quarter.

## FINDINGS AND INSIGHTS

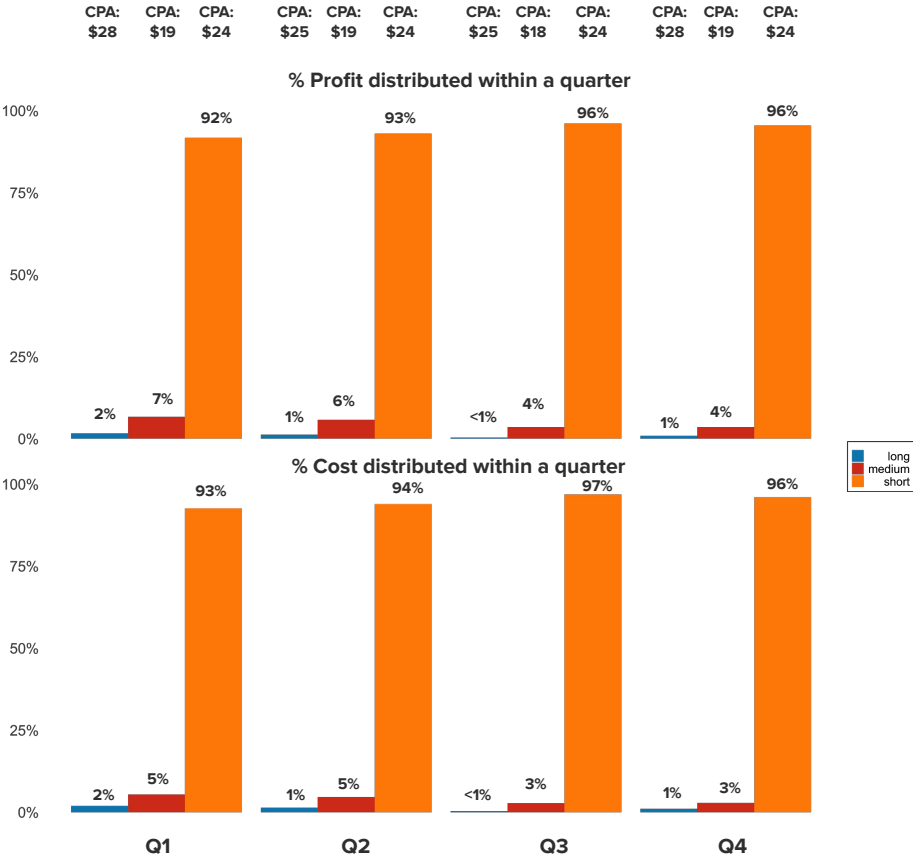
- Profit % contribution are proportional to cost % with constant CPA through the year. This , together with a high ROI (**Slide 10**), indicates room for growth.

## RECOMMENDATIONS

- Experiment with increasing ad run frequencies for each segment during periods of high demand for more reach. (Short - Q3, Medium- Q2 & Q3, Long - Q2).

# Insights for Advertiser B

# Medium TTT travellers' segment shows potential for growth



## ABOUT THIS GRAPH

- Talks about how profit & costs are distributed within each quarter across market segments for advertiser B.
- This also includes cost per acquisition.
- The percentages within each quarter add up 100%

## FINDINGS AND INSIGHTS

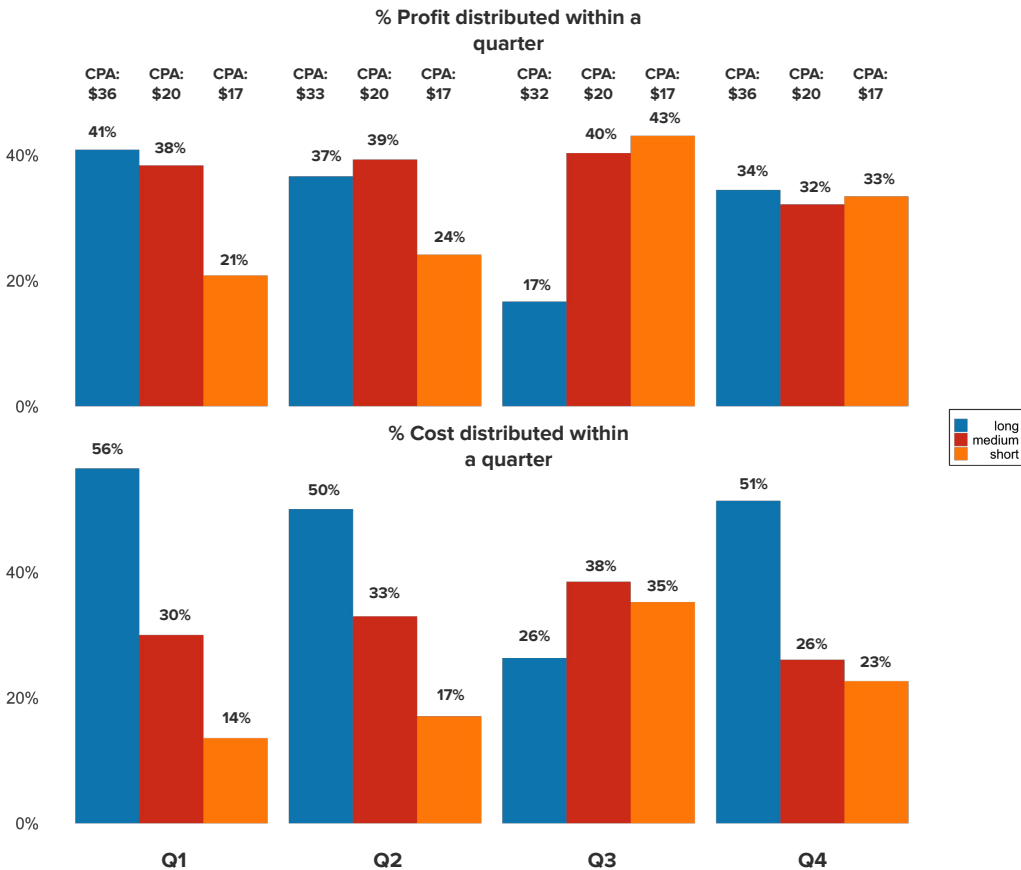
- Quarterly profit contribution %'s by medium TTT travellers are slightly higher than % costs incurred by them. This, together with a lower CPA, indicates room for growth.
- In spite of proportional profit % and cost %, a higher CPA for long TTT travellers, indicates need for optimization.

## RECOMMENDATIONS

- Experiment with increasing the frequency of ads that target medium TTT travellers, in Q2 and Q3 (**Slide 8**)
- Decrease frequency of ads served to long TTT travellers to improve CPA.

# Insights for Advertiser C

# Ad targeting towards long TTT travellers is costlier



## ABOUT THIS GRAPH

- Talks about how profit & costs are distributed within each quarter across market segments for advertiser C.
- This also includes cost per acquisition.
- The percentages add up to 100% per quarter for cost and profit.

## FINDINGS AND INSIGHTS

- Consumers tend to respond more positively to ads catering to medium and short TTT travellers as evidenced by their proportionally higher profit % and lower CPA's
- Higher cost % incurred by ads targeting long TTT travellers, does not translate to high quarterly profit %. This indicates that lower proportion of prospective long TTT consumers convert.

## RECOMMENDATIONS

- Reduce the frequency of ads targeted to long TTT travellers.
- Keep the strategy for short & medium TTT travellers the same.



# Final Recommendations

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## For advertiser A

- Experiment with increasing ad run frequencies for each segment during periods of high demand for more reach. (Short - Q3, Medium- Q2 & Q3, Long - Q2).

## For advertiser B

- Experiment with increasing the frequency of ads that target medium TTT travellers, in Q2 and Q3, so as to take advantage of the high demand during these periods
- Decrease frequency of ads served to long TTT travellers.

## For advertiser C

- Reduce the frequency of ads targeted to long TTT travellers so as to improve CPA.
- Continue the present ad strategy for short and medium TTT travellers.