Show me the numbers.

Analysis of guests' booking and cancellation trends for two Portuguese hotels.

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Date : 20 September 2020
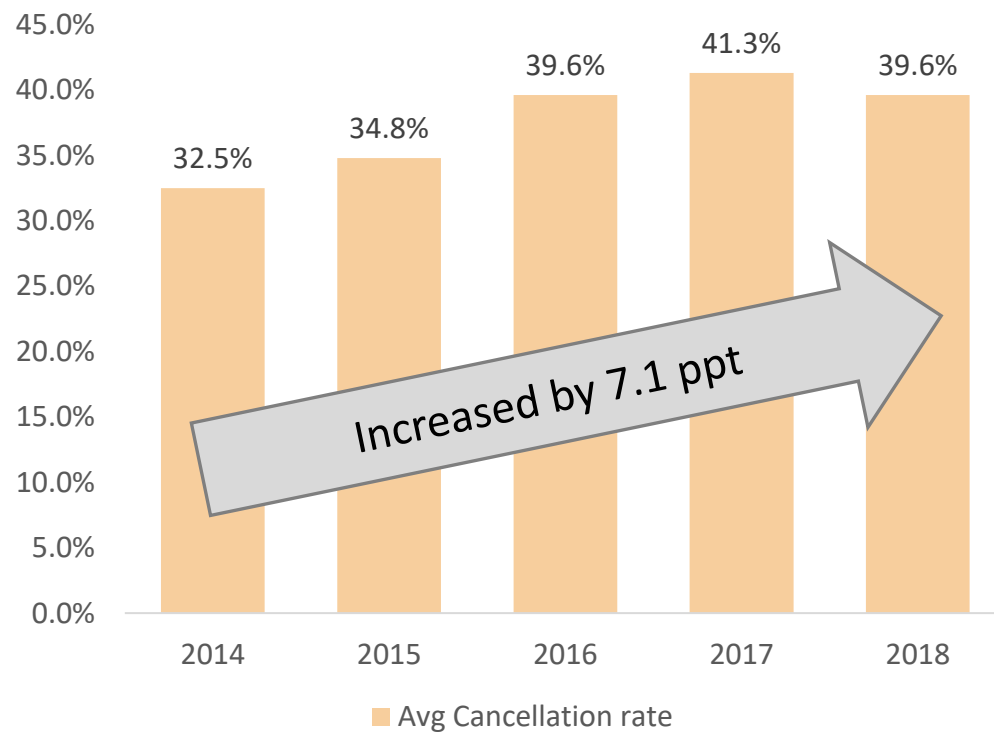
Content

Hotel industry trend

Insights

- **Traveller profile** - Who are my guests?
- **Nationality** - Where are they from?
- **Profile and nationality** - Who and where?
- **Seasonality** - When are they cancelling?
- **Lead time** - How long are bookings made in advance?
- **Distribution channel** – Where are the cancellations coming from?
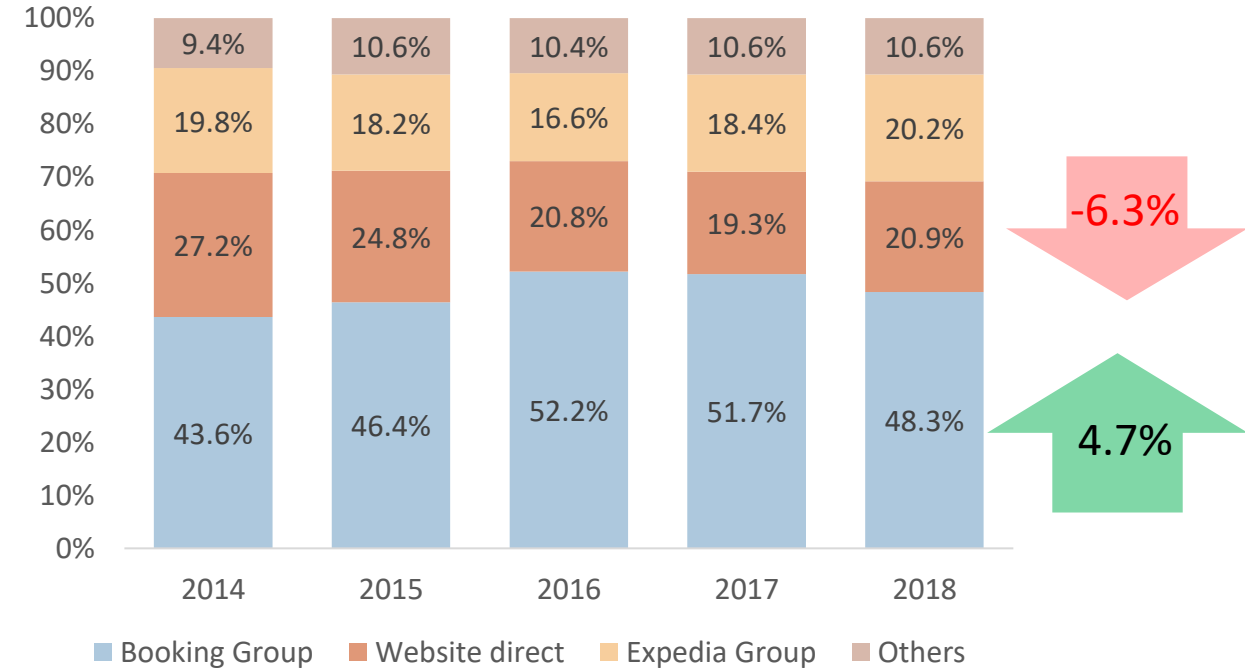- **Guests' satisfaction** – Are my guests satisfied?

Recommendations

Hotel cancellations in Europe

Average cancellation rate from 2014 to 2018

Chart: Avg Cancellation rate
- 2014: 32.5%
- 2015: 34.8%
- 2016: 39.6%
- 2017: 41.3%
- 2018: 39.6%

Increased by 7.1 ppt

Legend: Avg Cancellation rate

Market share of distribution channels in Europe

Year	Booking Group	Website direct	Expedia Group	Others
2014	43.6%	27.2%	19.8%	9.4%
2015	46.4%	24.8%	18.2%	10.6%
2016	52.2%	20.8%	16.6%	10.4%
2017	51.7%	19.3%	18.4%	10.6%
2018	48.3%	20.9%	20.2%	10.6%

-6.3%

4.7%

Legend: Booking Group Website direct Expedia Group Others

Source : D-Edge
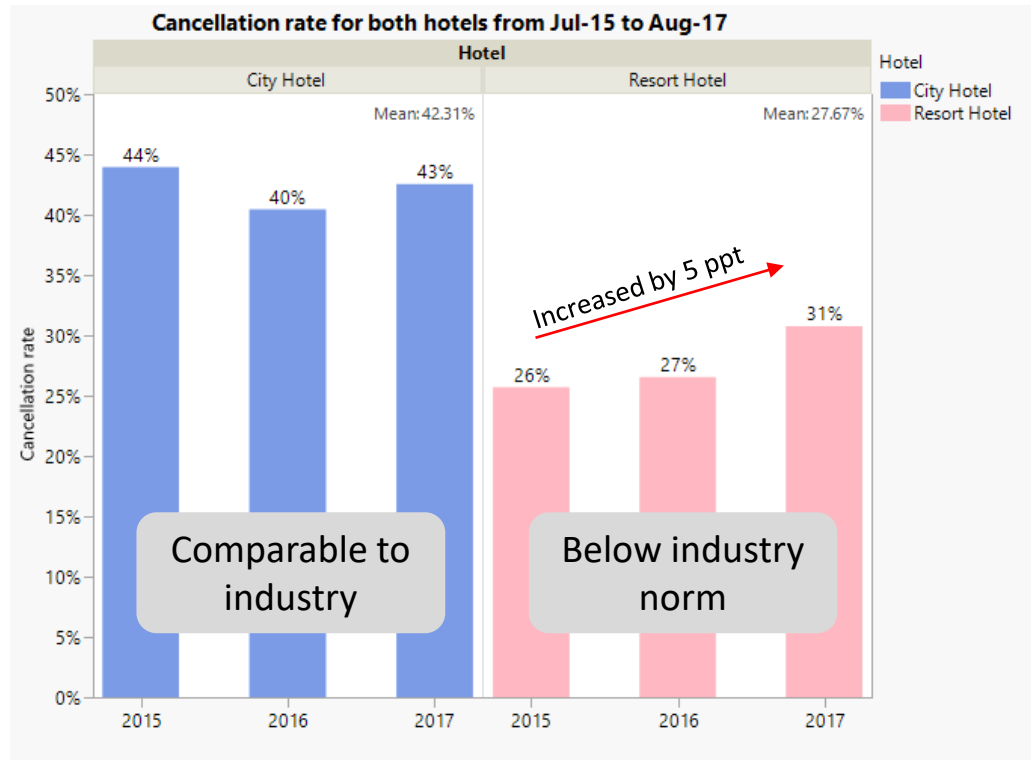(https://www.d-edge.com/how-online-hotel-distribution-is-changing-in-europe/)
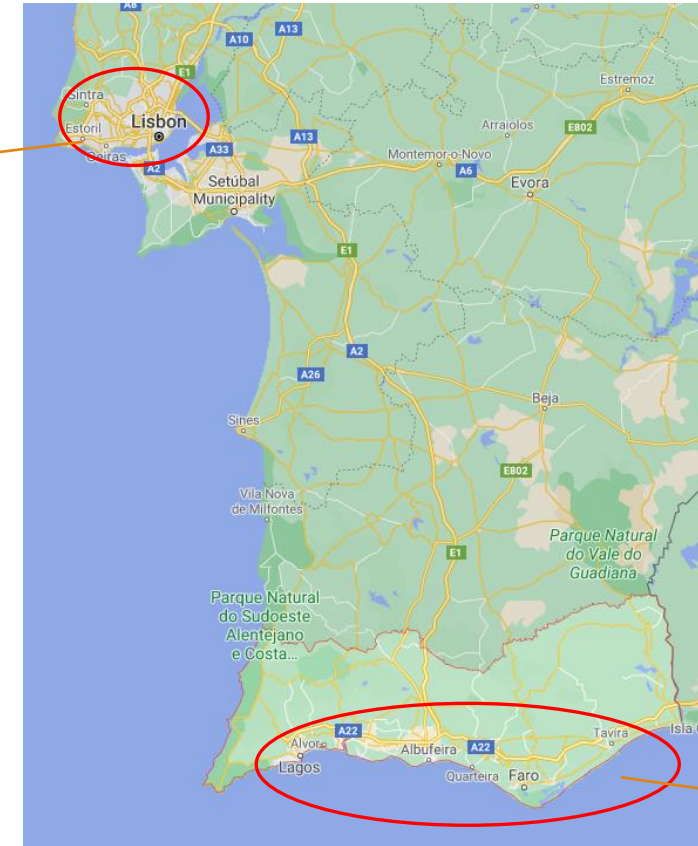
Is there a difference in cancellation rates between hotels? How are they performing against industry rates?
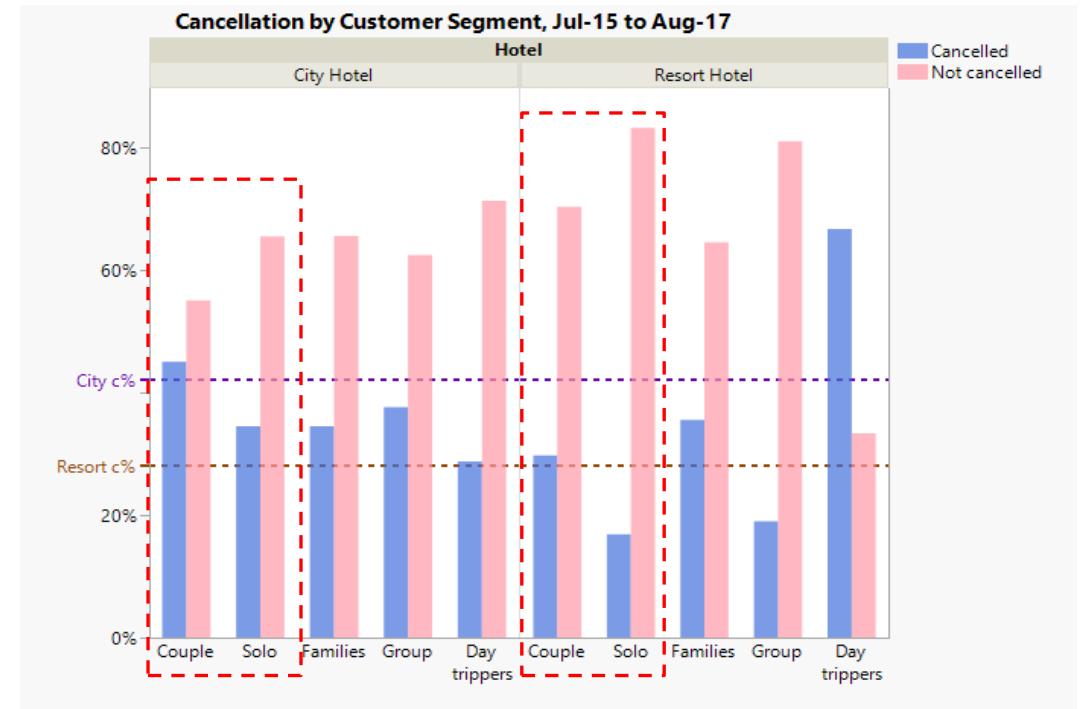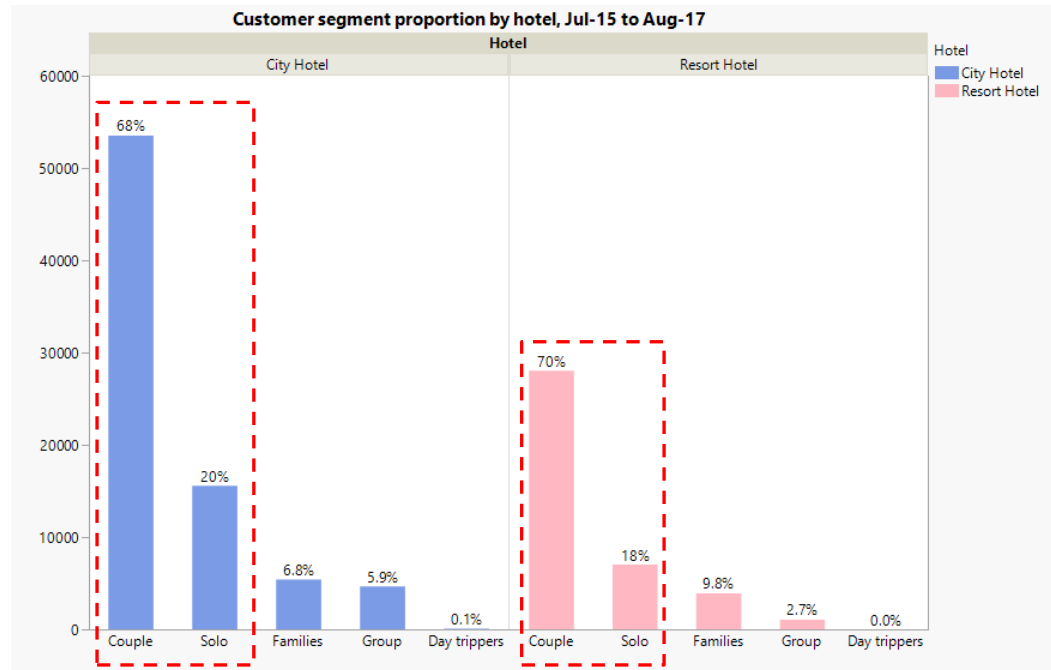

Cancellation rate for both hotels from Jul-15 to Aug-17

Hotel

City Hotel	Resort Hotel
Mean: 42.31%	Mean: 27.67%

City Hotel: 44% (2015), 40% (2016), 43% (2017) — Comparable to industry

Resort Hotel: 26% (2015), 27% (2016), 31% (2017) — Below industry norm — Increased by 5 ppt

City Hotel, Lisbon

Resort hotel, Algarve

Data used in this study are from the article 'Hotel booking demand dataset' published by Data In Brief.
Source : https://www.sciencedirect.com/science/article/pii/S2352340918315191

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Who are my guests?
(Traveller profile)

**Couples 70% + solo 20%
= ~90% of bookings**

**City couples 45%; Resort couple 30%
City solo 35%; Resort solo 17%**

Customer segment proportion by hotel, Jul-15 to Aug-17

Cancellation by Customer Segment, Jul-15 to Aug-17
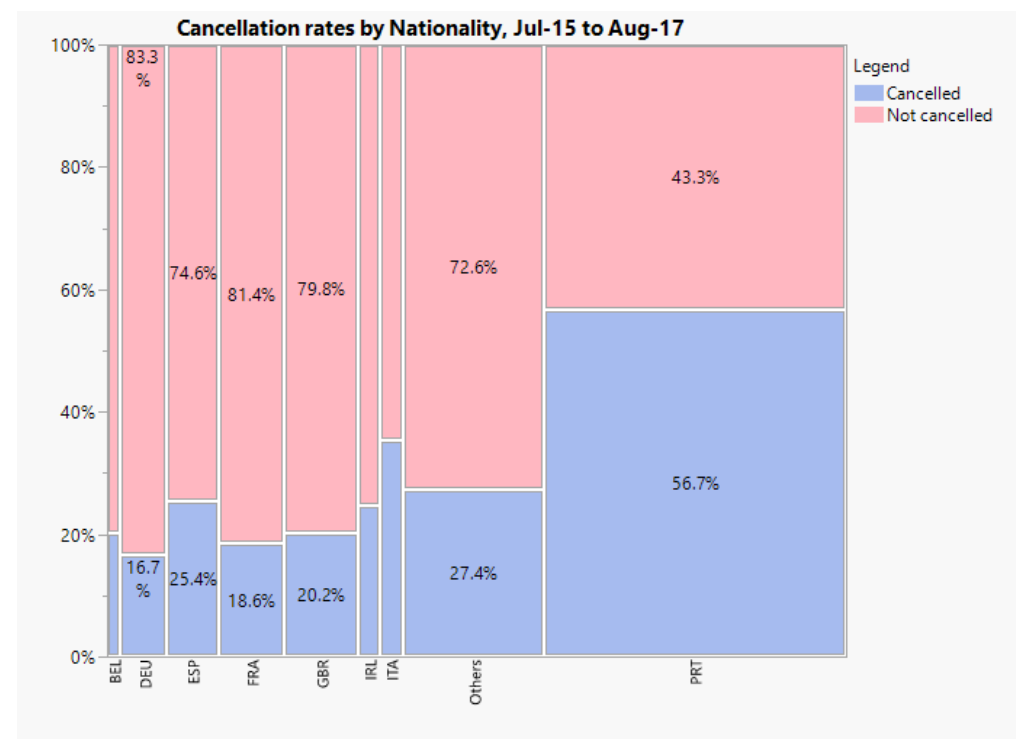
Where are they from? (Nationality)

Portuguese national formed 39% and 44% of each hotel's bookings.

**They cancelled twice as much as any other country!**
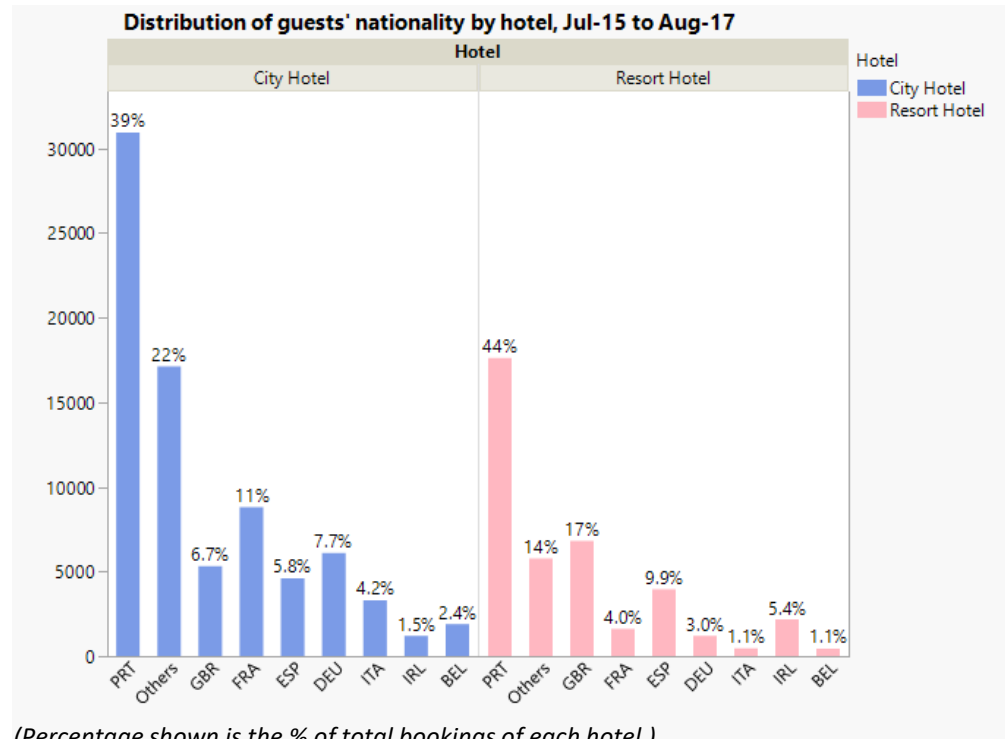
(Percentage shown is the % of total bookings of each hotel.)
Others – respective countries with this group accounts for <1% of total bookings.

(Size of plot - proportion of bookings; % label - rate of cancelled / non cancelled bookings.)

Who and where?
(Profile and nationality)

Mosaic plot of countries and customer segment and cancellation, Jul-15 to Aug-17
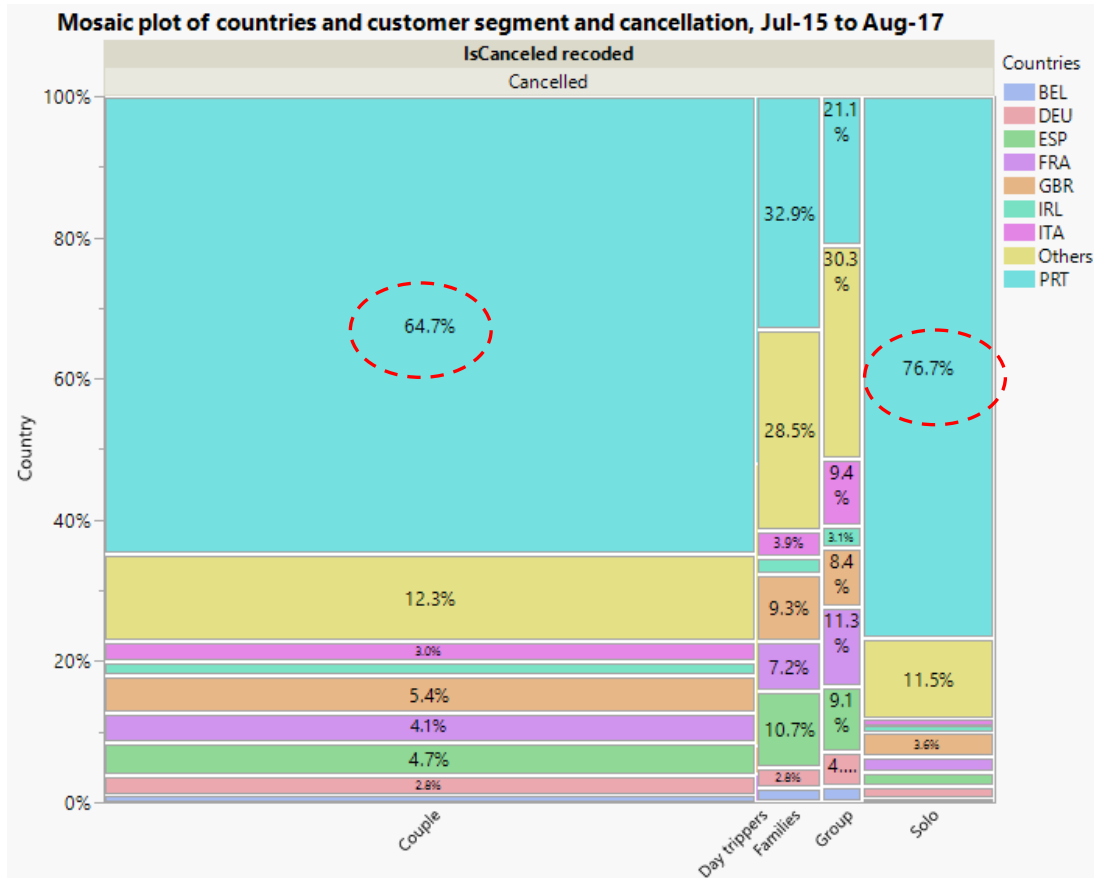
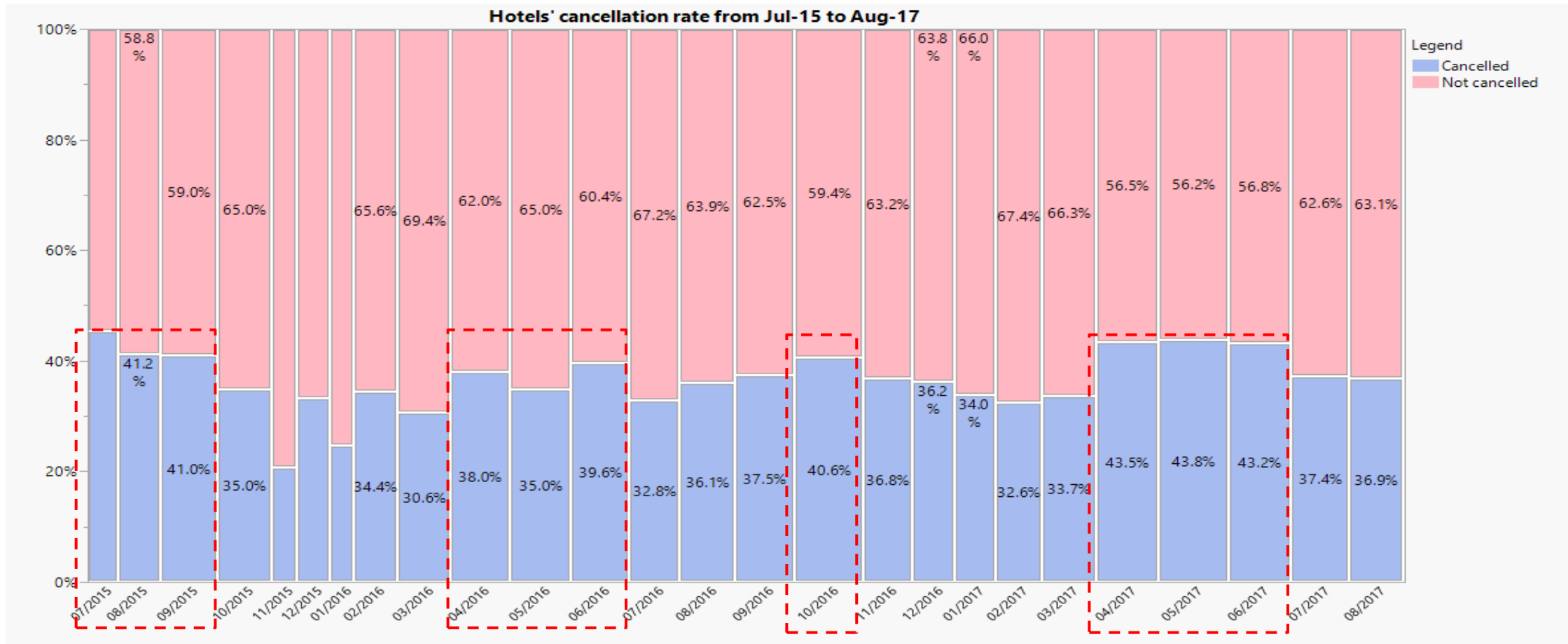*(Size of plot - proportion of bookings; % label - rate of cancelled / non cancelled bookings.)*

Portuguese couples and solo travellers make up 37% of bookings, with cancellation rate of 65% and 77%.

Table : Nationality by customer segment as % of total booking

Country 2	Customer segment				
	Couple	Day trippers	Families	Group	Solo
	% of Total	% of Total	% of Total	% of Total	% of Total
BEL	1.40%	0.00%	0.19%	0.16%	0.21%
DEU	4.43%	0.00%	0.31%	0.34%	1.03%
ESP	4.89%	0.00%	0.91%	0.46%	0.91%
FRA	6.36%	0.00%	0.77%	0.61%	0.99%
GBR	7.56%	0.00%	0.76%	0.50%	1.34%
IRL	2.19%	0.00%	0.19%	0.15%	0.30%
ITA	2.13%	0.00%	0.29%	0.31%	0.42%
Others	12.35%	0.01%	2.08%	1.34%	3.41%
PRT	27.05%	0.05%	2.32%	0.94%	10.32%

37.4%

When are they cancelling?
(Seasonality)

Hotels' cancellation rate from Jul-15 to Aug-17

How long are bookings made in advance? (Lead time)

Boxplot of lead time and cancellation, Jul-15 to Aug-17

	Cancelled	Not cancelled
Max	629.0	542.0
Q3	214.0	124.0
Med	113.0	45.0
Q1	48.0	9.0
Min	0.0	0.0
Mean	144.8	80
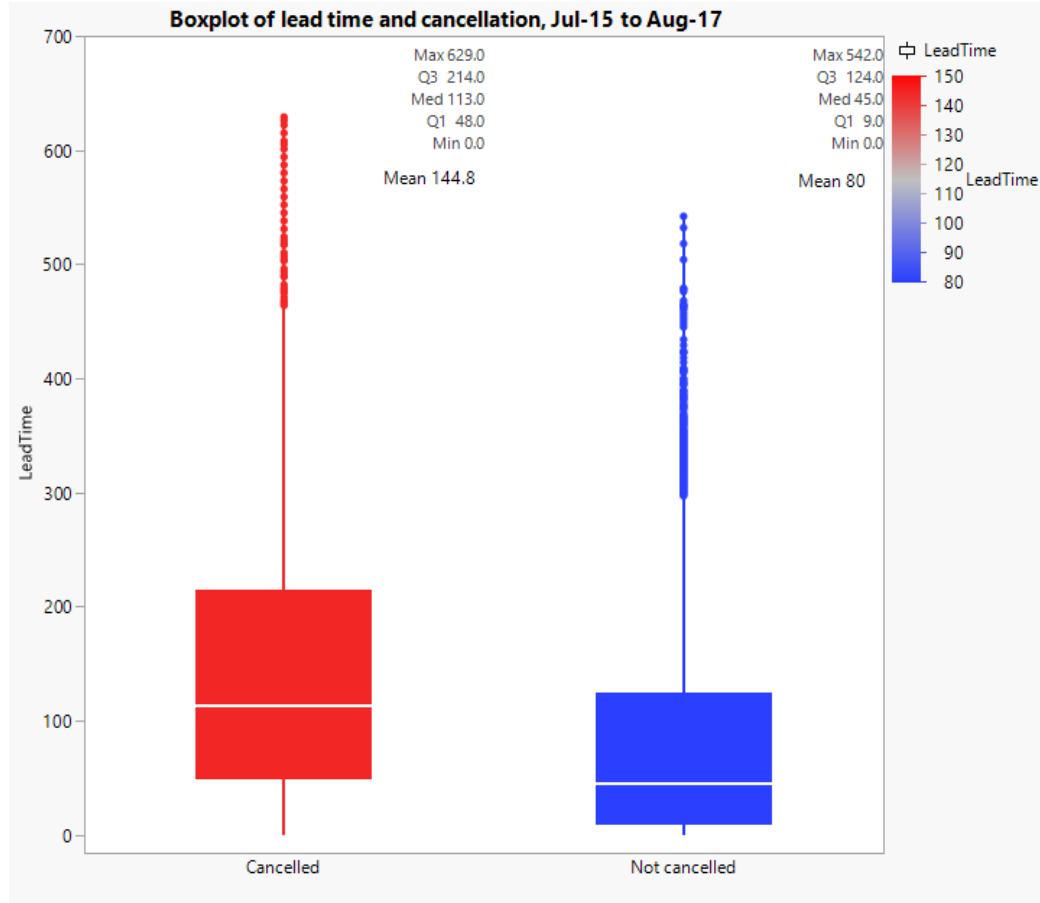
Average lead time for cancelled was 1.8 times of non-cancelled.

Average lead time :
Cancelled – 145 days
Non-cancelled – 80 days

Where are these cancellation from? (Distribution channel)

Relationship between distribution channel and cancellation rate, Jul-15 to Aug-17

Legend
- Cancelled
- Not cancelled

- Corporate: 77.9% / 22.1%
- Direct: 82.5% / 17.5%
- TA/TO: 59.0% / 41.0%

(Note: TA – Travel Agents; TO – Tour operators)
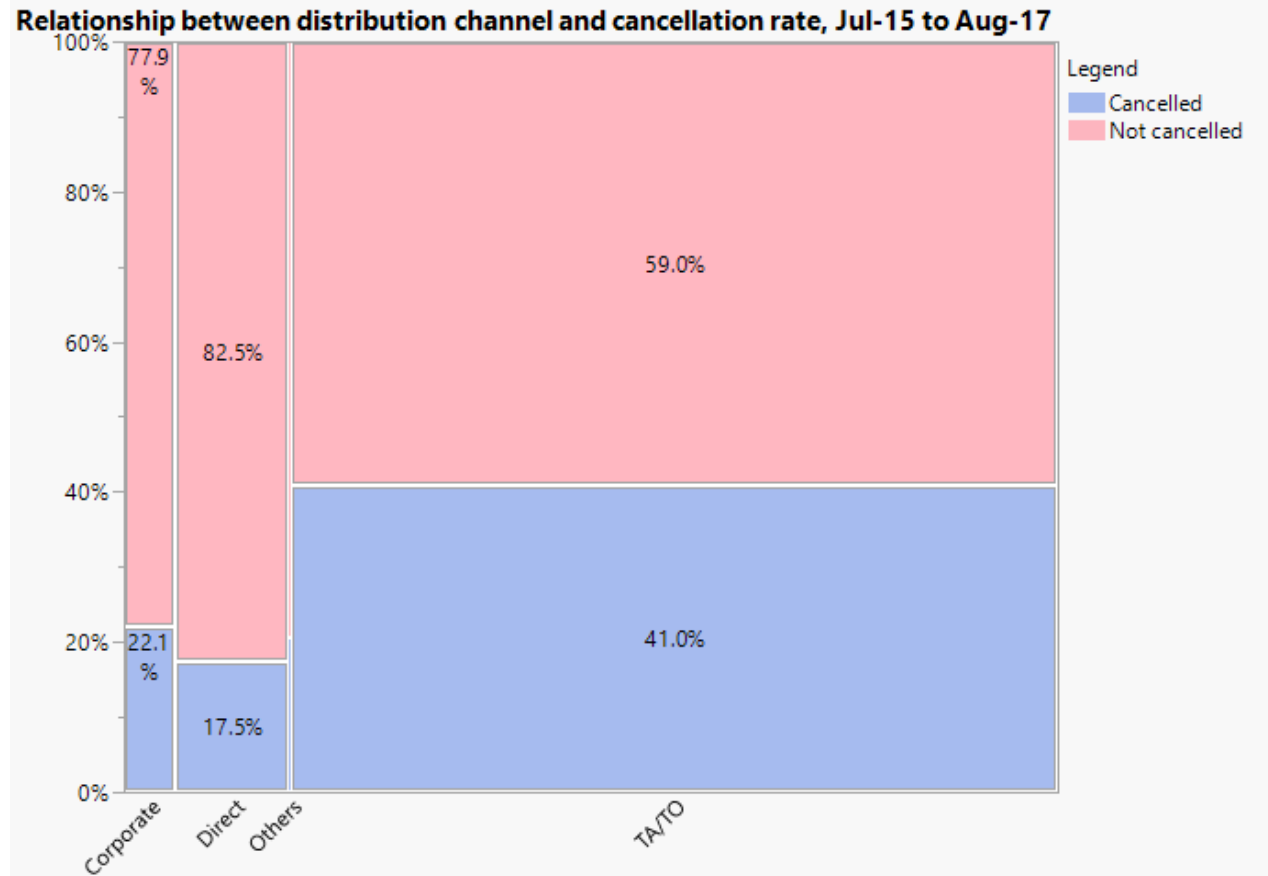
TA/TO appears to be the main drivers for cancellations.

Table: Distribution channel mix

DistributionChannel recoded	% of Total
Corporate	5.59%
Direct	12.25%
Others	0.17%
TA/TO	82.00%

Are my guests satisfied?
(Guests' satisfaction)

Cancellation rates for diff room
City : 6% ; Resort 5%
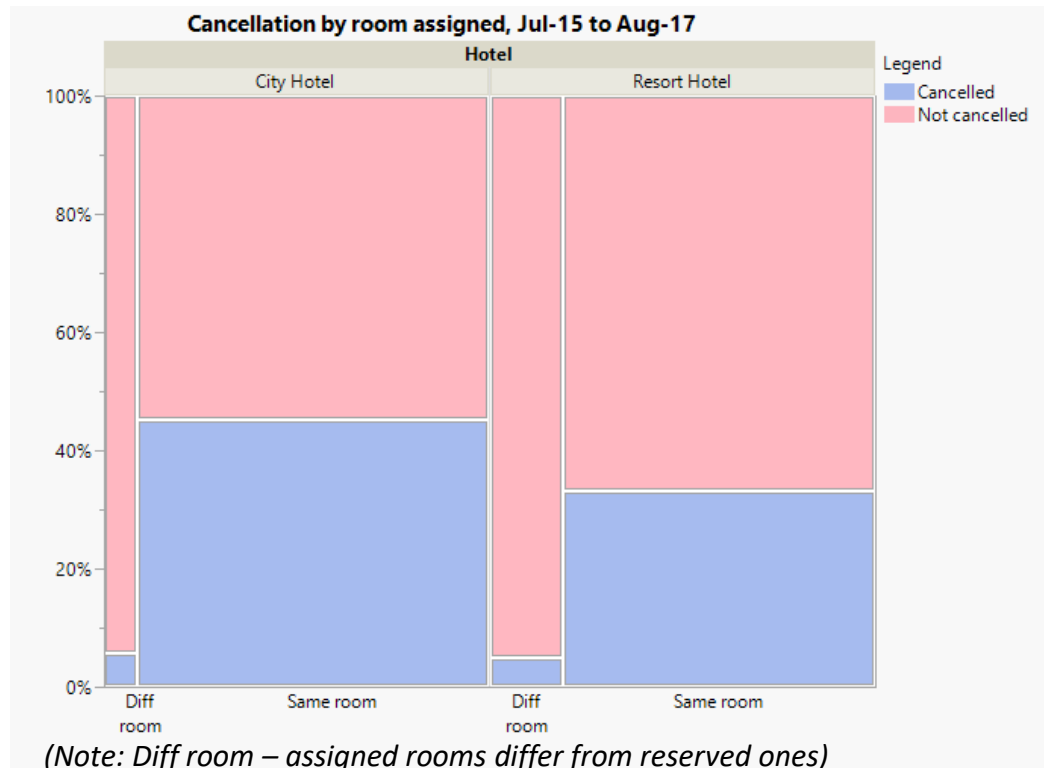
Cancellation rates for recurring
City 22% ; Resort 6%

Cancellation by room assigned, Jul-15 to Aug-17

(Note: Diff room – assigned rooms differ from reserved ones)

Cancellation by recurring guest, Jul-15 to Aug-17
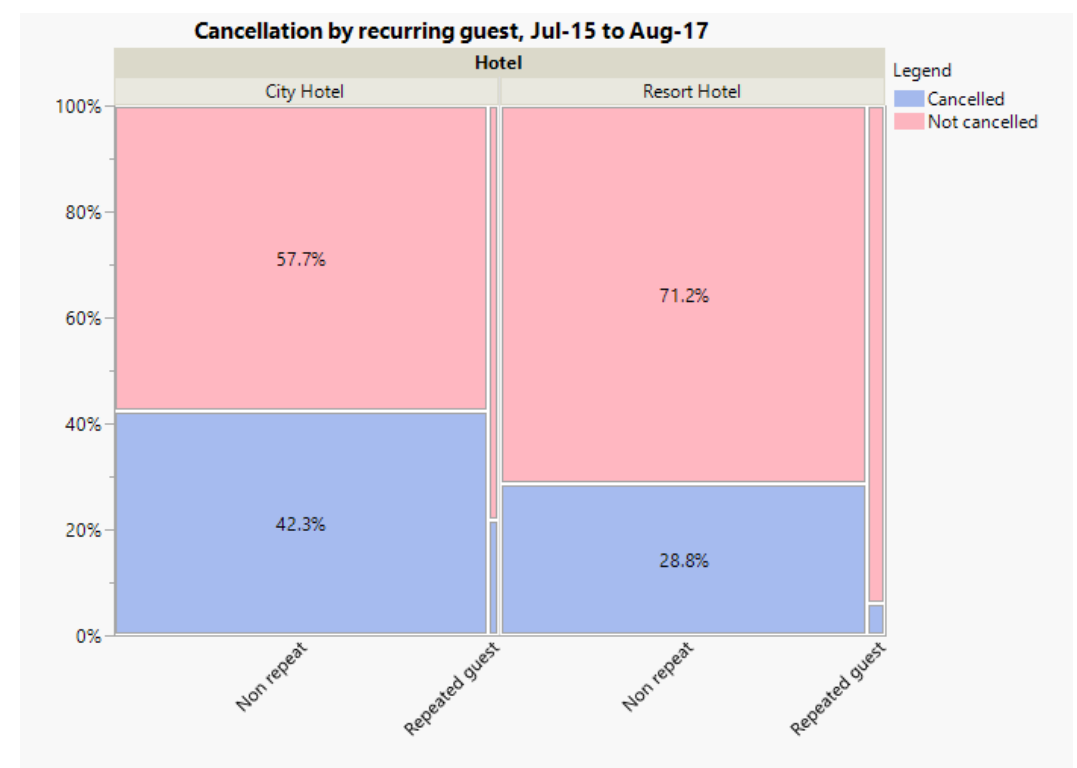
Recommendations – what can we do?

1) **Understand demographics better** - **capture more information about guests** such as age range, gender, etc. This would help understand reason for high cancellations by Portuguese couples and solo travellers.

2) **Reassess distribution channel mix** – obtain more details (i.e revenue, profit, pricing, cancellation policies) of each distribution channel for deeper analysis.

3) **Keep guests happy! –** follow up by getting guests to **rate their stay** on score of 1 – 10 and list reasons for dissatisfaction (if any).

4) **Hotel loyalty** – consider introducing **loyalty program** to entice recurring guests. (feasibility studies required)