



22

Hilton Adobe Analytics Challenge

Rohan Choudhary



About the project

Hilton has been a leading global hospitality company. Abode analytics competition helps bridge data from web services of Hilton and guest experiences. Our project tries to link guest online behaviour and conversion rates while enhancing the overall booking and stay experience.

For The Stay

Agenda

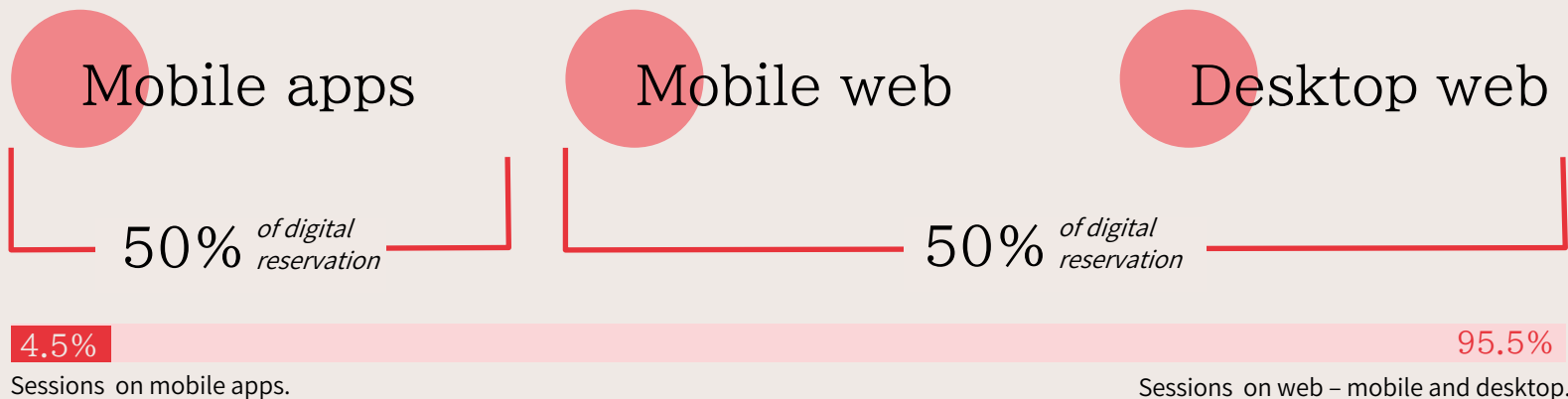
01/ Guests, Internet
and Hilton

02/ Business or
Leisure

03/ Hilton and
OAT

Guests, Internet and Hilton

91 % of users use search engines while considering to book a hotel to stay. Guests use primary these 3 digital experiences for interacting and availing services.



Guests, Internet and Hilton

Of all the digital reservations were honours members.

53%

Why Hilton Honours helps?

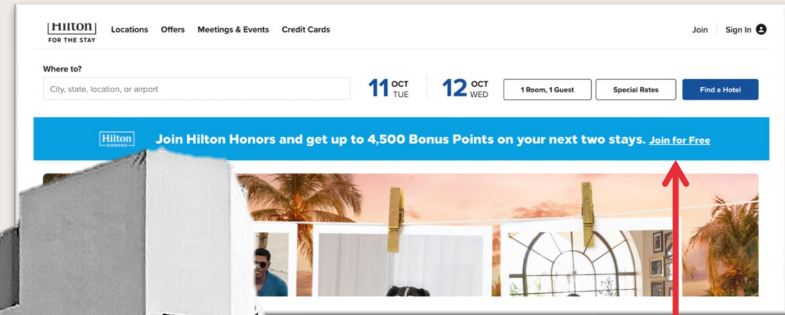
Consumer retention

App installation in devices

Consumers with apps twice as likely to make reservation.



Website screenshot of Hilton.com



"Join for free" is **NOT** a CTA button, research shows a non CTA buttons converts in less conversion rates. Suggesting to make it a **solid button**.

"Join for free" → [Join for free](#)

Guests, Internet and Hilton

The conversion rate is **2%**
(world average is 2.2%)

Mobile/ tablet Apps are responsible
for **50 %** of digital reservation

99% of users uses mobile devices
for digital experiences with Hilton.

77%

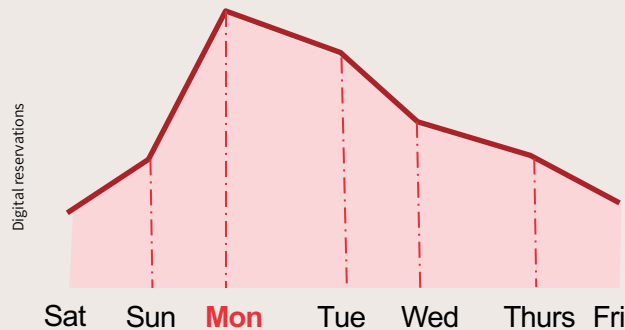
Consumer Loyalty

Strong consumer retention. With **30%** of reservation coming from Diamond (D) members.

53%

Occupancy Rate

414 new hotels added to Hilton in 2021
and a growth of 7%.



Monday accounts for maximum number of digital reservation. Page view remains constant throughout. Suggesting to implement purchase intention nudges and offers on Monday 7PM.

Guests, Internet and Hilton

The conversion rate is **2%**
(world average is 2.2%)

Mobile/ tablet Apps are responsible
for **50 %** of digital reservation

99% of users uses mobile devices
for digital experiences with Hilton.

Division of conversion rates (of new sessions) in different device types (mobile – tablet – desktop)

	Mobile	Tablet	Desktop
Feb-March	13%	14%	0.2%**
April-May	12%	13%	17%
Jun-July	11%	12%	20%
Aug-Sept	11%	12%	22%

Increase

Inference?

As covid restriction eases, guests explore hotel options.
Although web searches are mostly on mobiles, a increase
in conversion rates of desktop visitors means **new guests**
are twice as likely to book on desktop.

The 1% are potential guests, how?

0.001%

Of the total Digital reservations

0.01%

Of the total digital visitors
(**desktop**)

3

Sessions per person on **desktop**
(compared to mobile is 1.2.)

Guests, Internet and Hilton

The conversion rate is **2%**
(world average is 2.2%)

Mobile/ tablet Apps are responsible
for **50 %** of digital reservation

99% of users uses mobile devices
for digital experiences with Hilton.

Modifying desktop web experience.

We have established that
past Hilton guests **prefer
mobile (app and web)**

Mobile app are responsible
for half of the digital
reservations to Hilton.

Desktop web experience has
to be **tailored for new
consumers.**

Nudges to influence (new) consumers purchase behaviour.

1. Responsive website (*exists*).
2. High quality images (*exists*)
3. Website flow (*needs improvement*)
4. Automated suggestion (*required*)
5. Transparent membership process (*exists*)
6. Guest reviews (*required*)
7. **Commitment to causes (sustainability / Gender equity)**

Business or Leisure?

How to determine if the stay was for business or leisure?

There are some parameters that defines if the booking is for leisure or business. Almost all of them are established after the user has been through the digital experience, this allows little or no time to personalise content for our consumers.

Data that predicts the consumer behaviour

- 1 Number of days booked
- 2 Number of people booked
- 3 Time spend on device

Past data from these metrics indicate predictable consumer behaviour



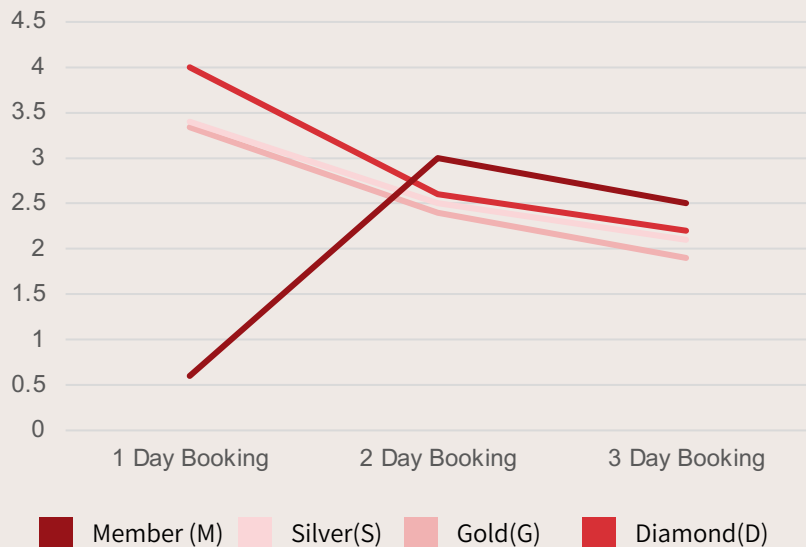
Business or Leisure?

Number of
days booked

Number of
people booked

Time spend
on devices

Relation of Hilton Honors and days booked



Inference?

M

Member makes
least 1 day
reservation

D

Diamond makes
most 1 day
reservation

G

Gold and Silver
follows linear decrease
in reservation

**Diamond (D),
Silver (S), Gold(G)**
honor tier is most
likely for business
stay.

+

Member (M) honor tier
is very likely for leisure
stay.

** (Per reservation for Hilton)

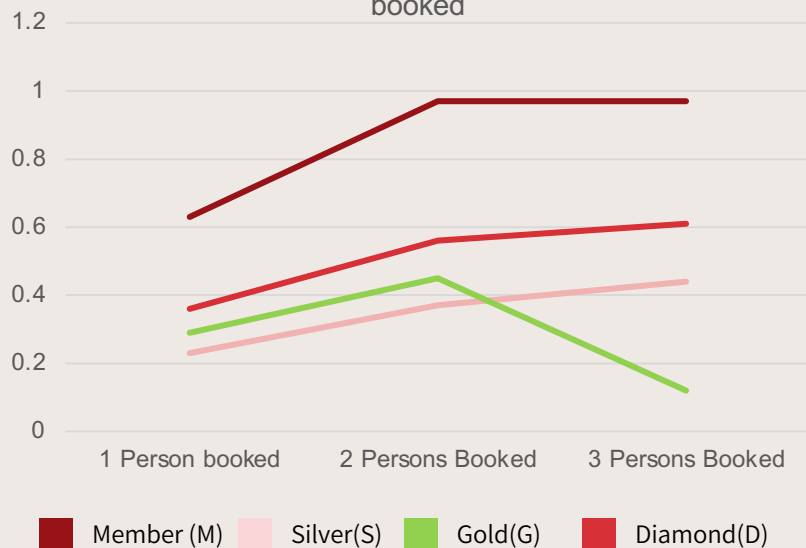
Business or Leisure?

Number of
days booked

Number of
people booked

Time spend
on devices

Relation of Hilton Honors and number of people booked



Inference?

Member (M) are booking rooms for 3 or more greater than other tiers, regarding these stays are family and leisure oriented.

Diamond (D) honor tier has both leisure and business booking intention.

Silver(S) and Gold(G) shows differentiating behaviour here, A Gold(G) member is more likely booking for business purpose in comparison to Silver(S)

Gold means business

Business or Leisure?

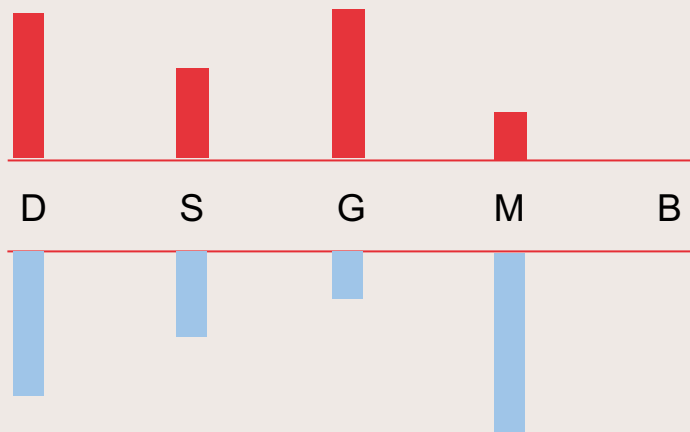
Number of
days booked

Number of
people booked

Time spend
on devices

Business

Inference drawn from time
spend on digital
experience.



Leisure

Inference?

There is a pattern in guests with honor tiers and preference for business or leisure stay at Hilton.

Gold (G) honor tier is more likely to stay for **business**, and **Member (M)** tier twice as likely for **leisure**.

Both **Diamond (D)** and **Silver (S)** honor tier guests are (almost) **equally likely** to have business and leisure booking.

Business or Leisure?

Roadmap to digital experiences

Home page Search for location/ hotel Dates of stay Rooms and people information Payments

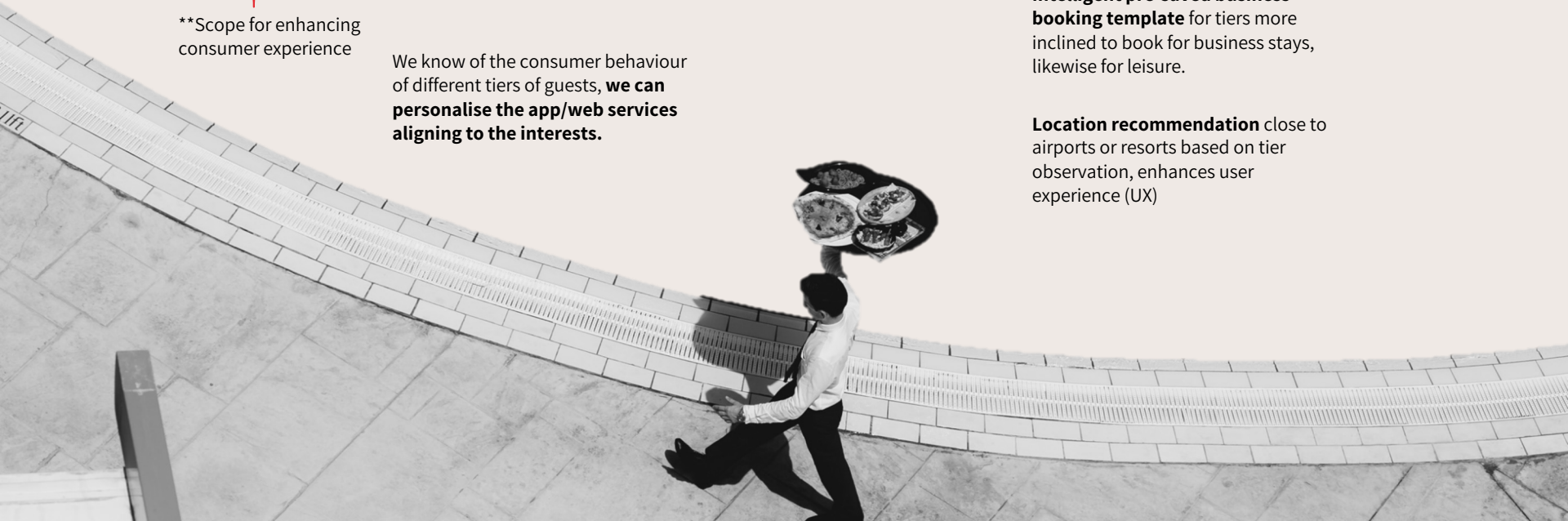
**Scope for enhancing consumer experience

We know of the consumer behaviour of different tiers of guests, **we can personalise the app/web services aligning to the interests.**

Images used in the digital spaces being either for business or leisure or a combination of both depending on user honor tier.

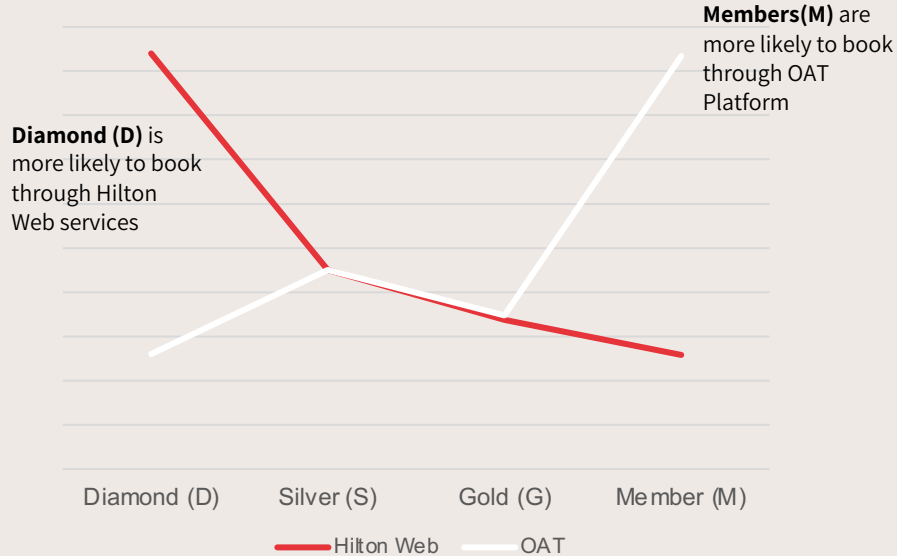
Intelligent pre-saved business booking template for tiers more inclined to book for business stays, likewise for leisure.

Location recommendation close to airports or resorts based on tier observation, enhances user experience (UX)



Hilton and OTA

Guests at Hilton comes from various digital and physical spaces. Here we see **stark difference** in honor tier digital behaviour on Hilton web services and OAT





Hilton and OTA

All other features and consumer behaviours are also aligned with guests booking their stay through OAT.

Diamond (D) makes most digital reservations

Guests irrespective of OAT or Hilton web serves prefers mobile for device.

Members(M) and Gold (G) are business focused stays.

Time spent (*follows similar pattern as last graph*) is more for members and less for diamond on OAT.

Recurring guests understand the benefits of Hilton Honours.

Action Needed?

Different consumers avail digital services differently, we cannot entirely equate dynamic benefits or ease/familiarity provided by OATs with honor benefits.

However we can easily nudge (through links on tickets) them to visit Hilton web services and acknowledge them about booking benefits.

Thank You!

Thank you

