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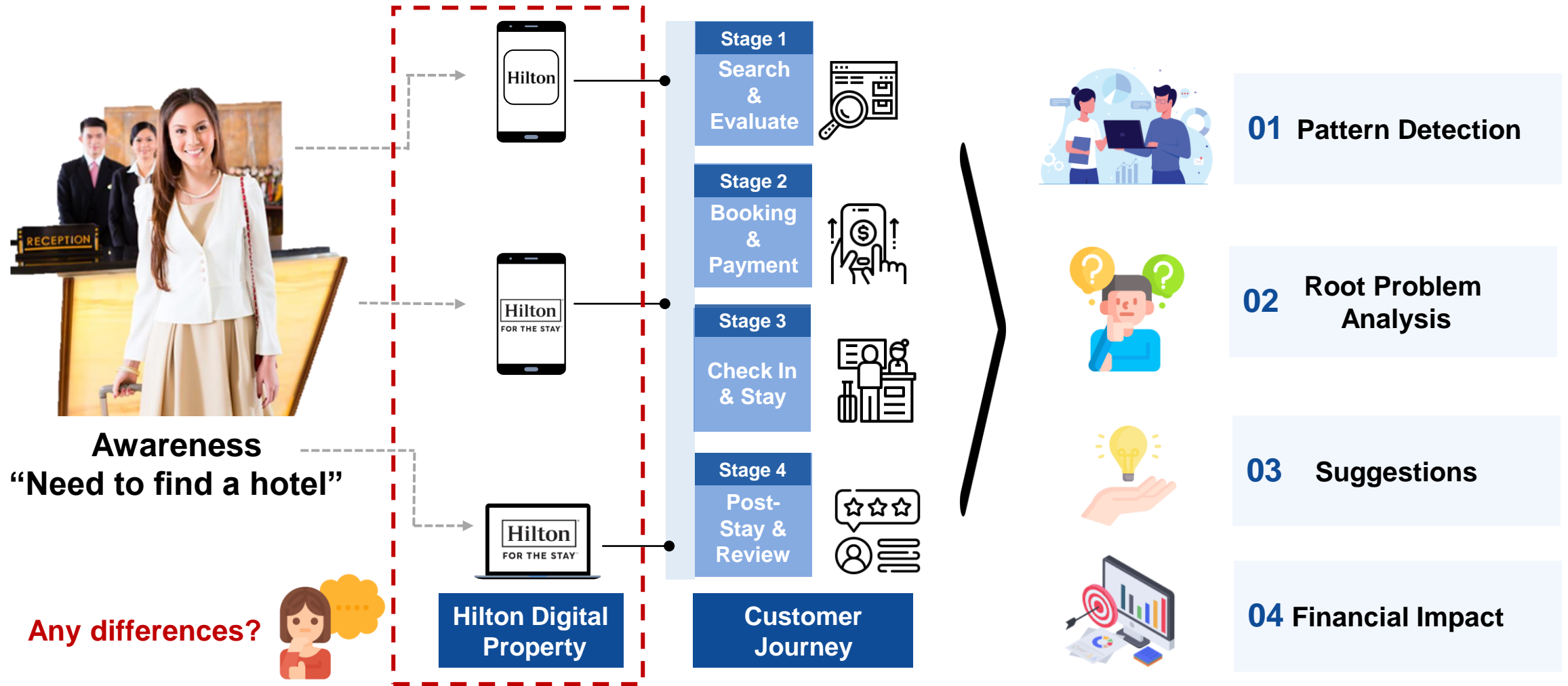
We Are
HILTON
We Are
HOSPITALITY

Analytics for Digital Hospitality

Team: Fuquarians
From Duke University

Scratch beneath the surface of digital customer journey with Hilton

Hilton

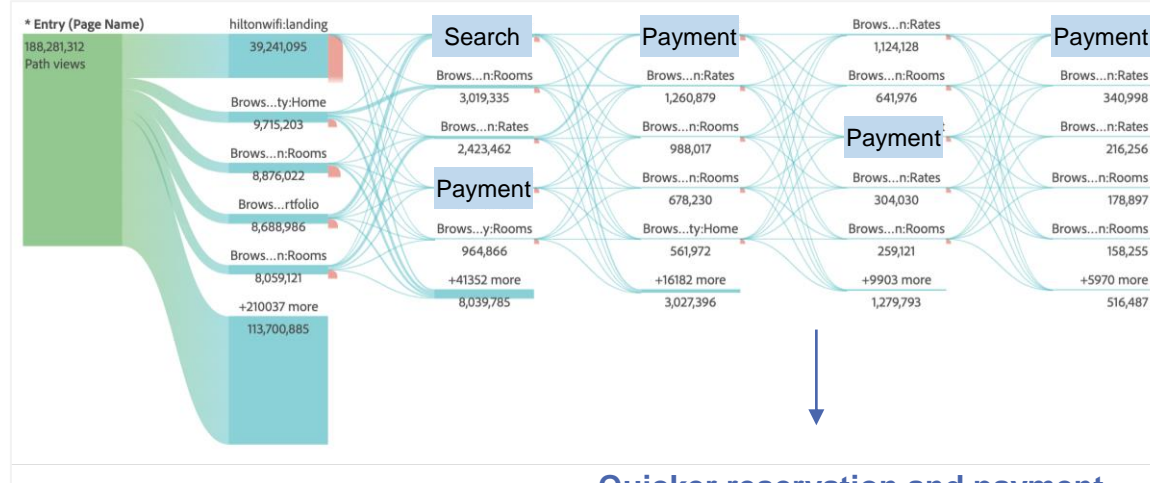


Customer behaviors vary on different device types and Hilton digital properties

Hilton



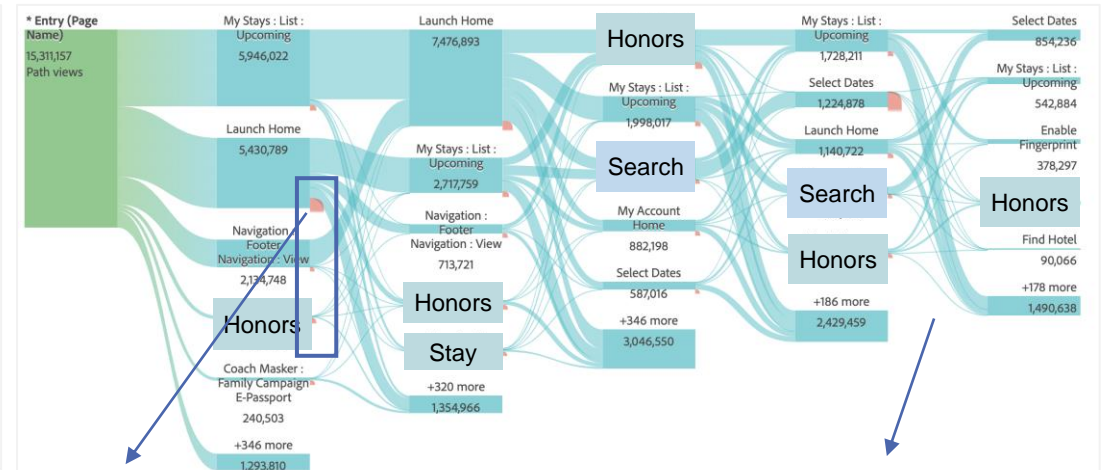
Desktop Website



Quicker reservation and payment



Mobile App

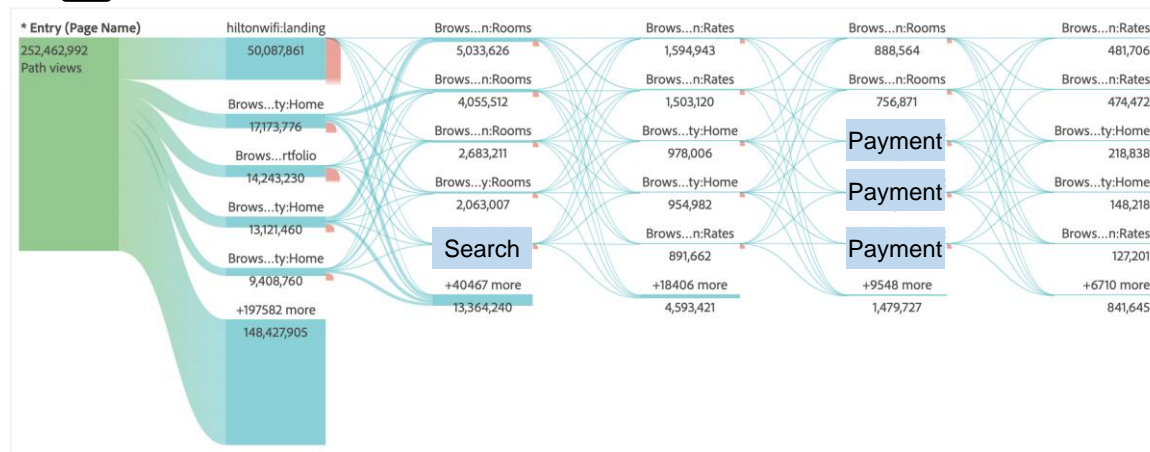


Fewer exits

More diverse experiences besides booking a room



Mobile Website



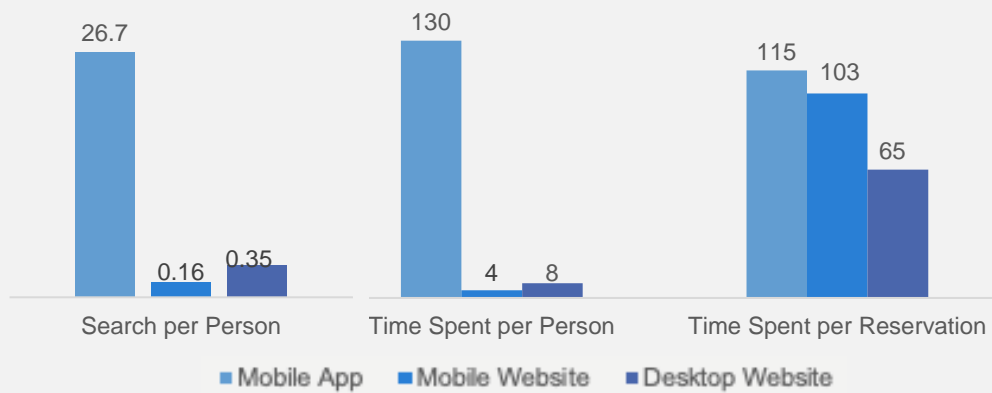
► Insights from comparison:

- Customers enjoy more **diverse** digital experiences on **mobile app**
- Digital reservation pattern is different by device: Reservation occur in **earlier stages** on **website**
- **Mobile app** have **fewer exits** at each stage of the flow

Mobile app users are more active and have higher booking demands

Hilton

User Engagement



Stage 1

Search & Evaluate



High User Engagement

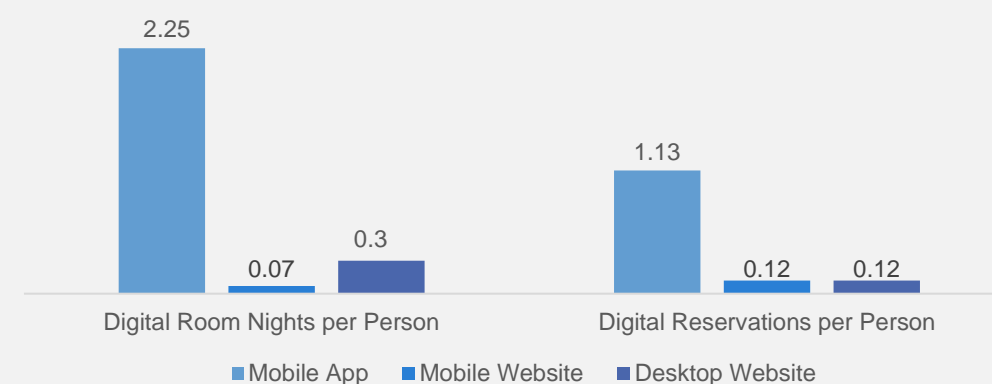
- Higher average search times
- Longer time spent



Low User Engagement

- Lower average search times
- Quicker reservation

Booking Demands



Stage 2

Booking & Payment



High Booking Demand

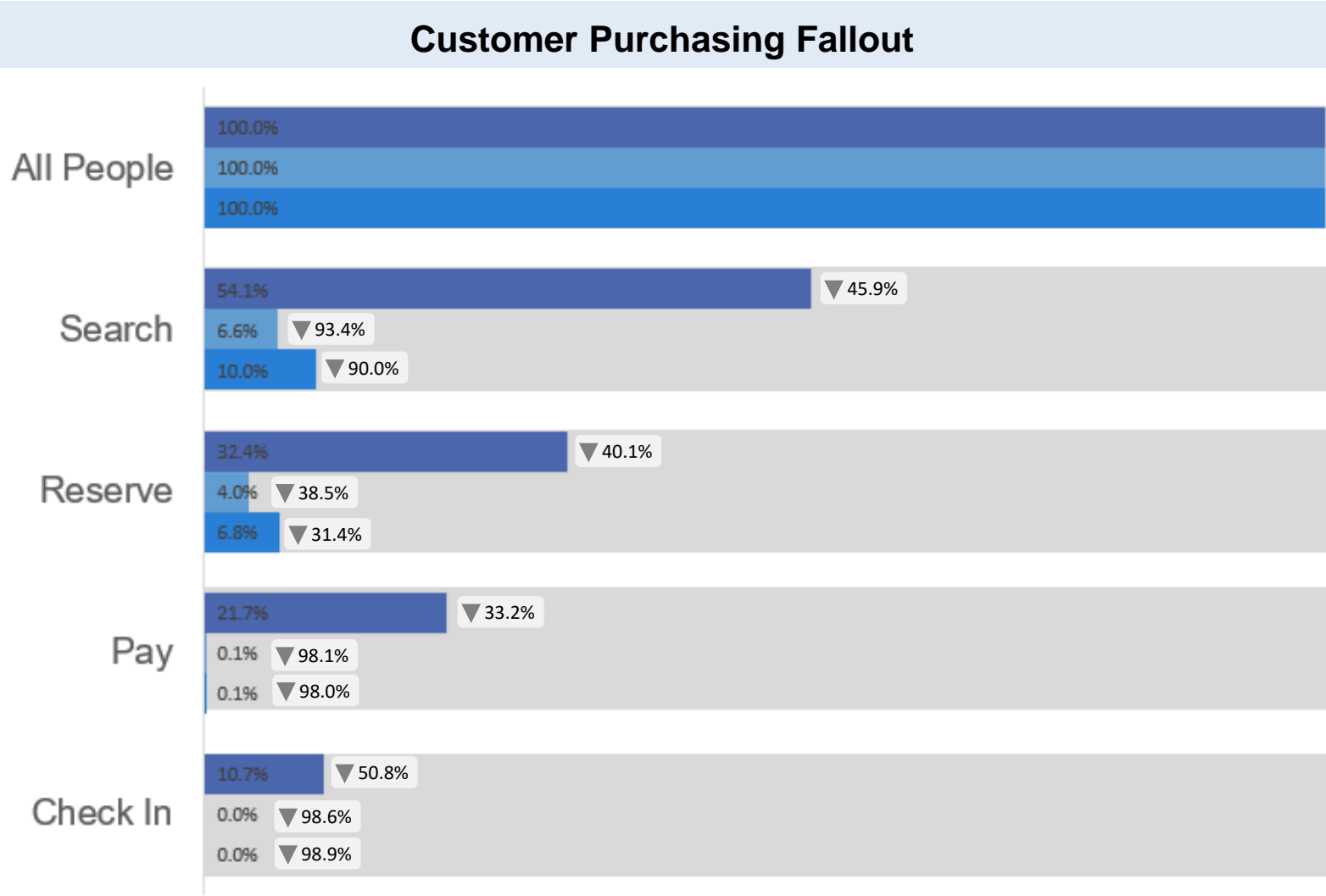
- Higher reservation frequency
- Higher average room nights booked



Low Booking Demand

- Most are one-time purchasers
- Lower average room nights booked

Mobile app users have higher conversion rate than website users



 **Mobile App**

Higher Conversion Rate

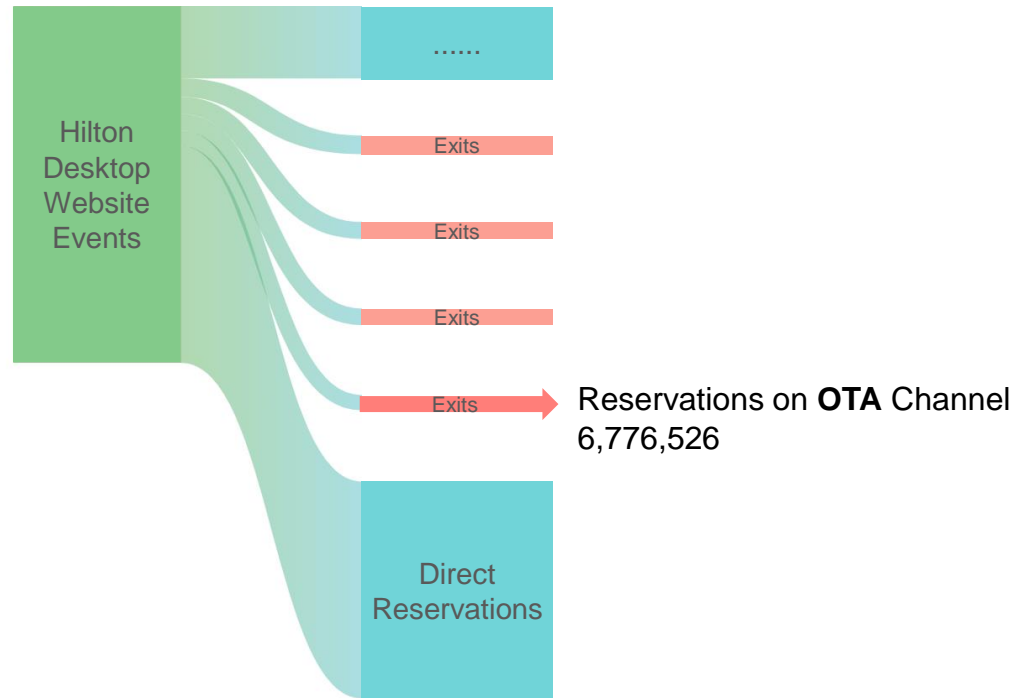
VS

 **Mobile Website**

 **Desktop Website**

**Large Customer Base
But Lower Conversion Rate**

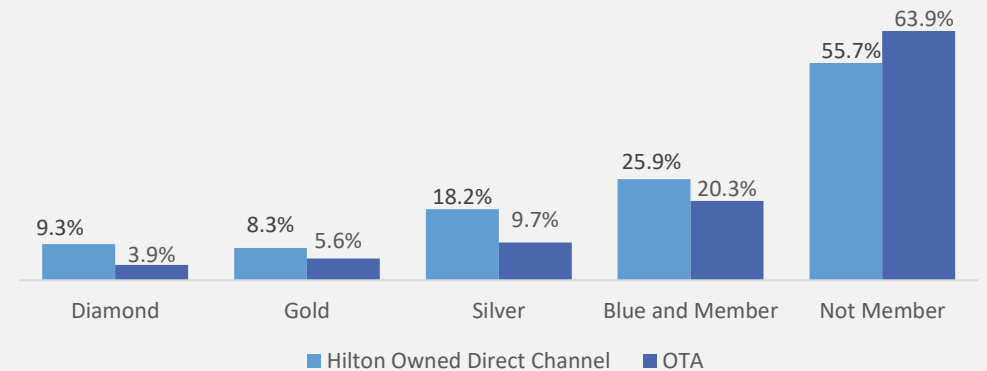
Less loyal customers may exit Hilton website and switch to OTA channels



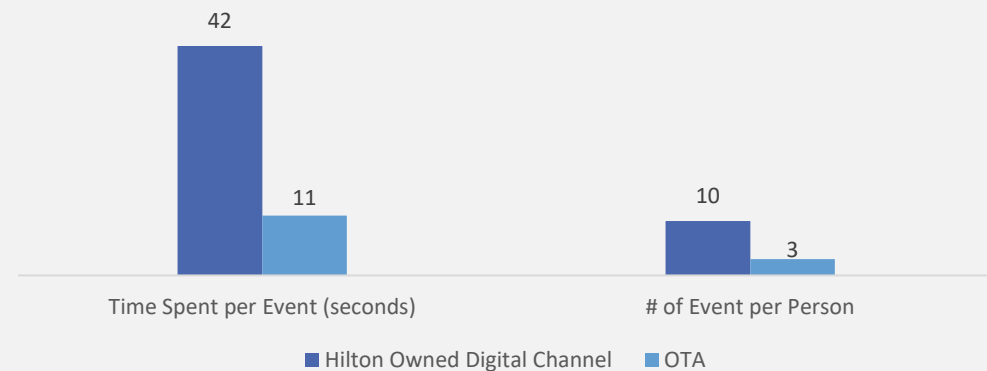
► Insights:

- Majority customers who use OTA are non-Hilton members
- OTA channel users are less active on digital platforms with shorter browsing time and fewer visits

Honor Tier Differences



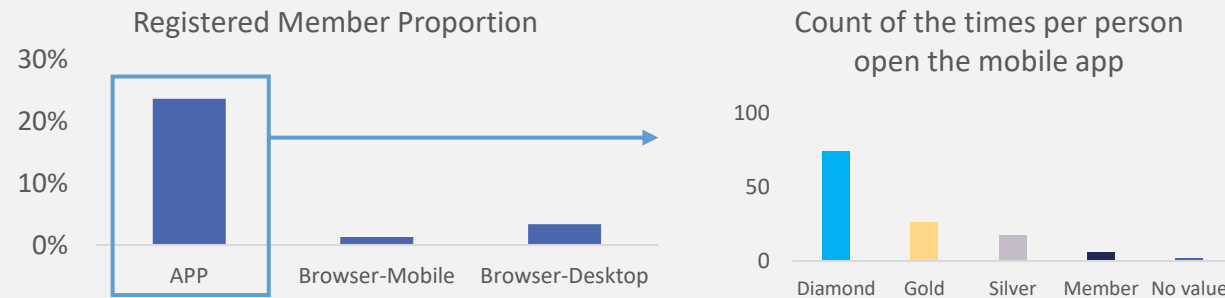
Digital Behavior Differences



Guest type drives digital activity differences across devices and experiences

Hilton

App/Web Usage & Customer Honor Tiers



Insights:

- Majority app users are registered Hilton members
- **Diamond-tier** members are the most willing to use app with highest number of times launching the app

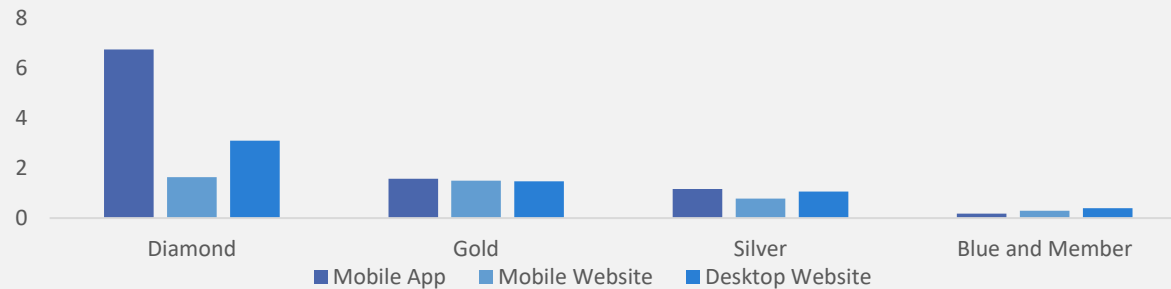
Customer loyalty

Device

Activity Differences

Customer loyalty is the root cause, and experience is the key solution!

Digital Reservations Per Person By Honor Tier



Insights:

- **Diamond-tier** members make the most reservations per person on app
- Compared to Hilton's website users, app users are **more loyal** across Diamond, Gold and Silver tiers

Evolve customer loyalty in Hilton digital journey

Hilton

Objective

Increase User Traffic

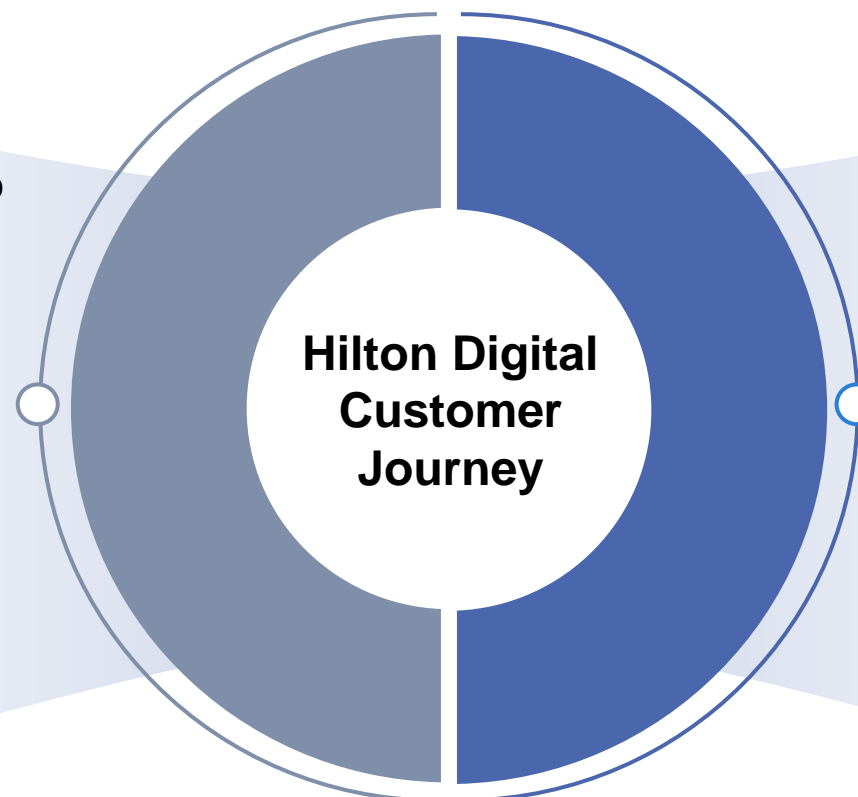
- More visits to Hilton app & web
- Reduce switching to OTA

Boost Direct Booking

- Increase conversion & lower attrition along the digital journey
- Encourage repeat booking

Raise Value Per Booking

- Increase number of rooms and nights booked



Solution

1 Strengthen Marketing Channels

2 Craft Personalized Destination Recommendation

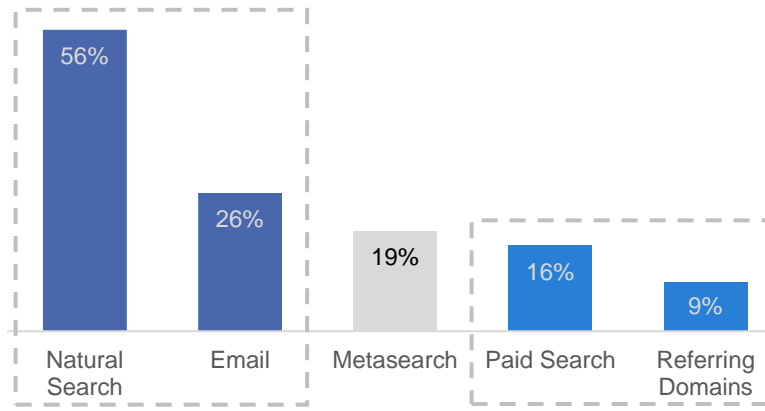
3 Provide Benefit-Added Travel Packages

1 Utilize effective marketing channels to attract more visits

Hilton

Identify Competitive Marketing Channels

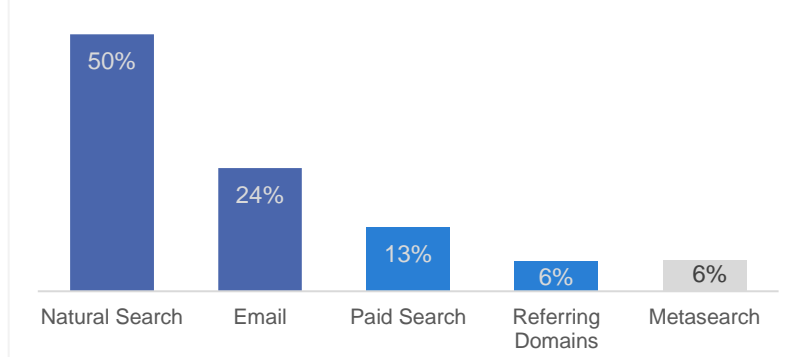
Hilton Owned Digital Channel Booking



Improve marketing effectiveness on Natural Search and Email

Increase investment in Paid Search and Referring Domains

Online Travel Agent



Natural Search

https://www.hilton.com > ...

Hotels by Hilton - Book the Best Rates Across All Brands

Explore **Hilton's** portfolio of **hotels** and distinct brands across the globe. ... **Hotel** residences offer a perfect balance between home-style comforts and ...

Visit Hilton Hotels & Resorts

Make hotel reservations for your next vacation or business trip ...

Explore Hilton Here! & Holistic

Enjoy exclusive benefits of Hilton : Enjoy Your Unique Personalized Journey with Hilton

Email Marketing

Hello Henry, Hilton is There For You!

henry_H@123.com



Unlock App Experience



- ❑ Improve natural search ranking
- ❑ Choose keywords and page content design that **attract the most clicks**
- ❑ Highlight **exclusive benefits** of Hilton

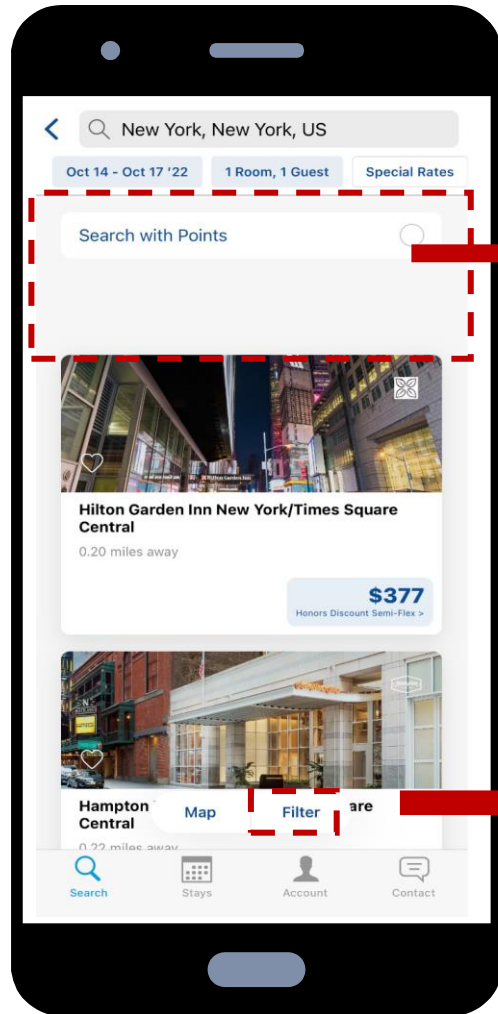
- ❑ **Accurate and personalized targeting**
- ❑ Mobile and user-friendly UI design
- ❑ Optimize landing page

2 Craft personalized destination recommendation to improve digital engagement Hilton

Reach

Search

Payment



“Here!” Personalized Destination Recommendation Service

Here!
Users who like place A also like B



Search with
“Here!” Link-minded Destination
Based on users with similar interests

Pick your love Here!

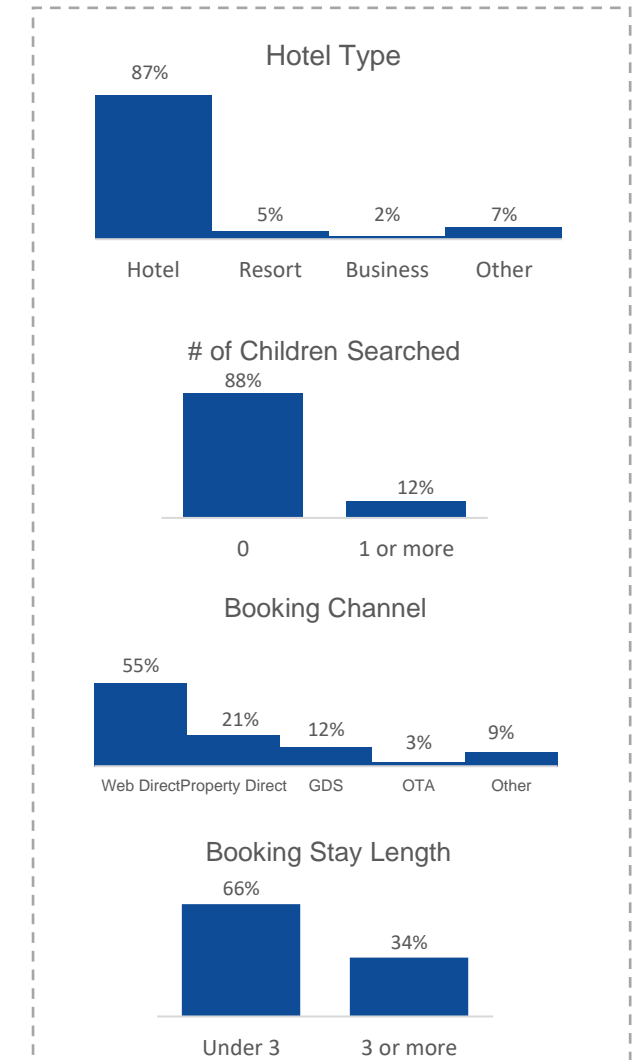
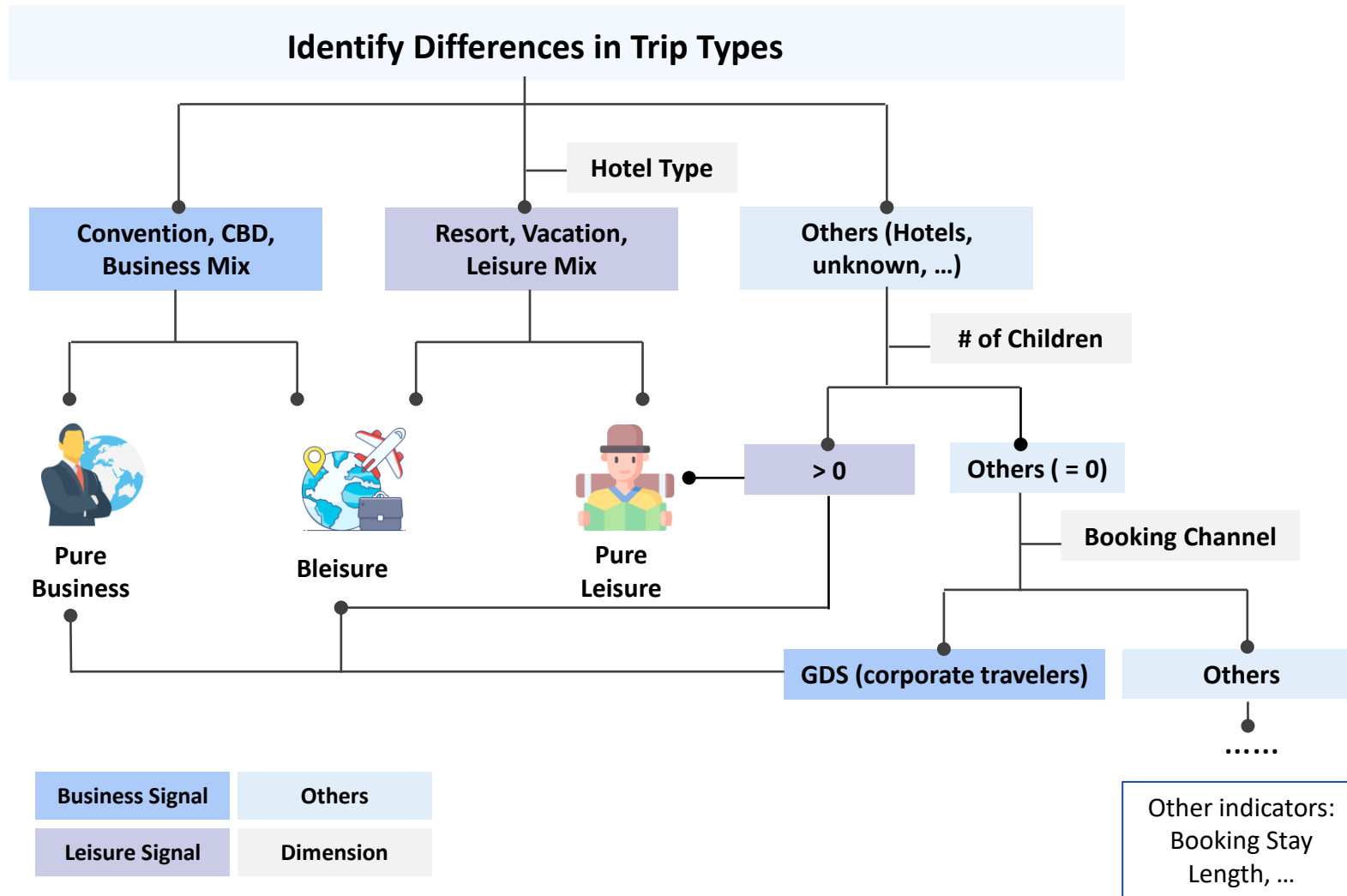


Filter by
“Here!” Destination Category
Based on the user's travel history



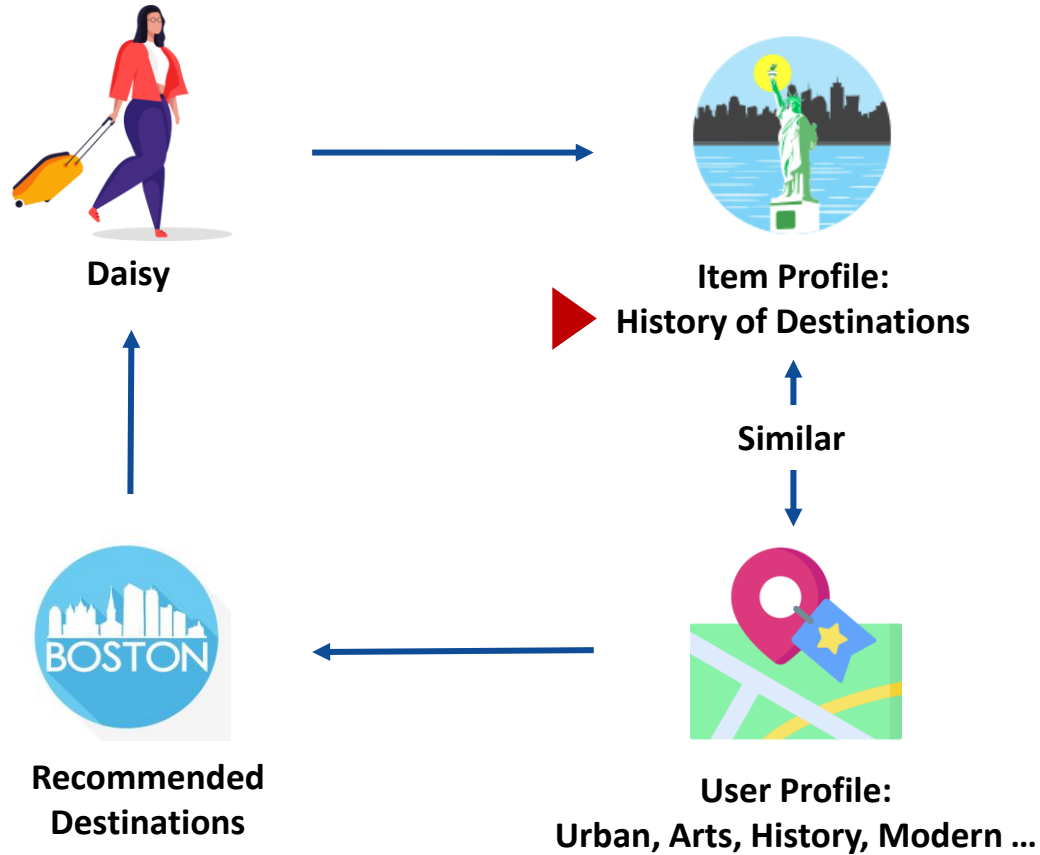
2 Leverage key signals to identify guest type and understand their features

Hilton

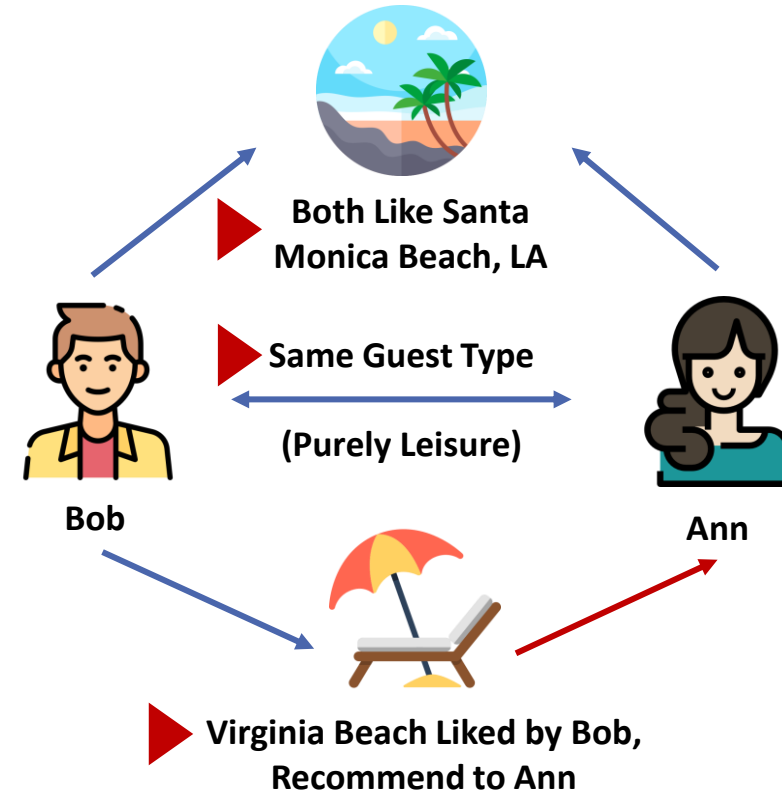


2 Build techniques that support premium recommendation experience

Content-based Filtering



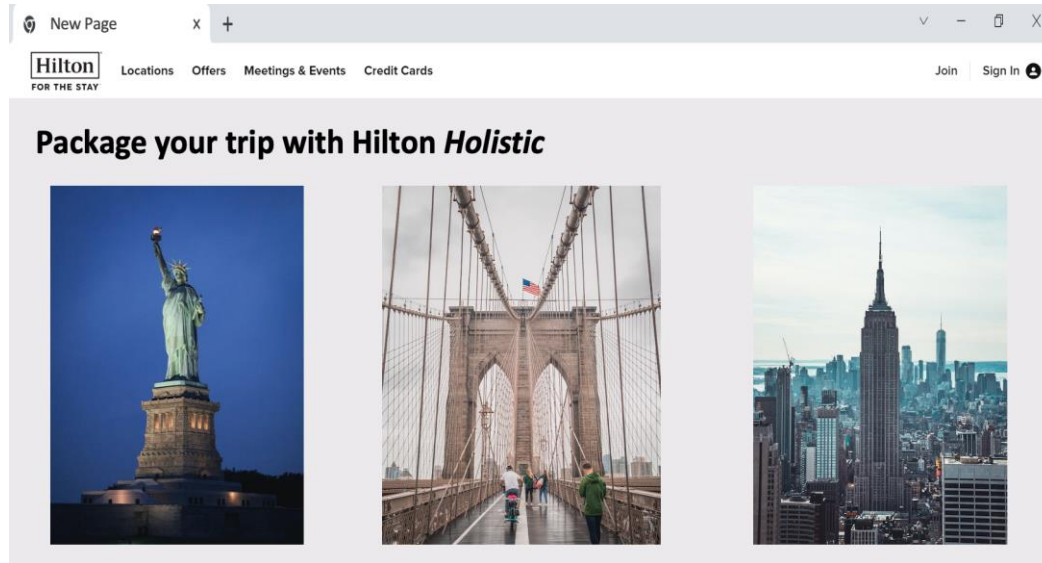
User-based Collaborative Filter



Information used to make recommendation

3 Offer travel packages to add service-led benefits and boost value per booking

Hilton



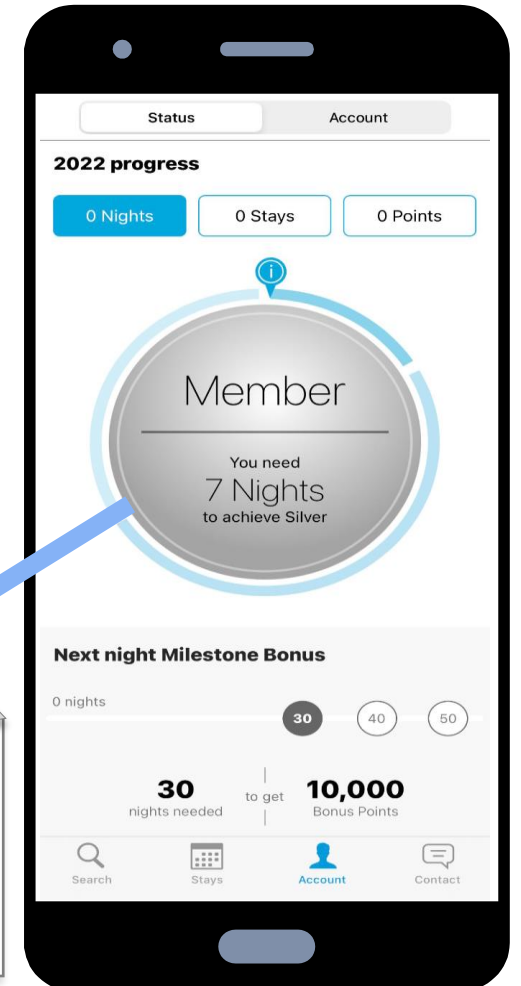
Product-Oriented ➔ Customer-Oriented

- ☐ Hilton Hotel Reservation
- ☐ Travel Route Planning
- ☐ Supporting Services: Transportation, Catering, Entertainment, ...
- ☐ Personalized, customized, targeted

Examples:

- 1 3 nights in Miami
2-4 Children
2-4 Adults
- 2 2 nights in Orlando
2-4 Children
2-4 Adults
- 3 Family Travel Planning
- 4 Hilton Travel Services

*“By purchasing 1 **Holistic package**, you can be upgraded to Silver member and earn benefits like ...”*



From Suggestions to Financial Impact

$$\text{Digital Revenue} = \underbrace{\# \text{ of Digital Bookings}}_{\# \text{ of Visits} \times \text{Booking Rate}} \times \text{Digital Room Nights per Booking} \times \text{Average Daily Rate}$$

1 Increase in # of Visits

1.8%

Increase in # of Visitors



\$78.9 million
Increase in Revenue

2 Increase in Booking Rate

1.0%

Increase in Booking rate



\$43.8 million
Increase in Revenue

3 Increase in Digital Room Nights

0.5%

Increase in Digital Room Nights



\$22.0 million
Increase in Revenue



We are Fuquarians.
We are glad to help *Hilton*
shape a better digital hospitality
using Adobe Analytics!

Appendix: From Suggestions to Financial Impact

$$\text{Digital Revenue} = \underbrace{\# \text{ of Digital Bookings}}_{\# \text{ of Visits} \times \text{Booking Rate}} \times \text{Digital Room Nights per Booking} \times \text{Average Daily Rate}$$

1 Increase in # of Visits

1.8%

Increase in # of Visitors



\$78.9 million

$$= 14,236 \text{ million} \times 1.8\% \times 0.14\% \times 2.2 \times \$100$$

2 Increase in Booking Rate

1.0%

Increase in Booking rate



\$43.8 million

$$= 14,236 \text{ million} \times 0.14\% \times 1\% \times 2.2 \times \$100$$

3 Increase in Digital Room Nights

0.5%

Increase in Digital Room Nights



\$22.0 million

$$= 14,236 \text{ million} \times 0.14\% \times 2.2 \times 0.5\% \times \$100$$

* Average conversion rate = cancel rate* total digital reservation / total events

* Average digital room nights per reservation = total digital room nights / total digital reservation

* Assume average daily rate ~ \$100