

Sentosa

The State of Fun



Hackathon (Group 5)
21 July 2021

Meet Team 5



Amanda
Queen Mother



Jeff
Top Spy 008



Wai Ling
Editor in Chief



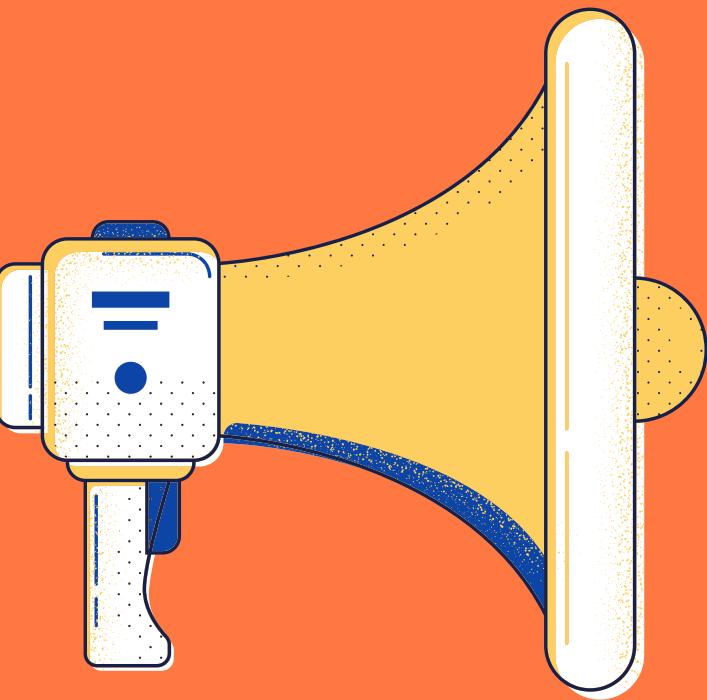
Kishan
Irreplacable



Tulip
Flower Fairy

SENTOSA FOR
Young Families





Mission

Create **seamless** customer journey of "planning-booking-experiencing", which is **consistent** across all channels, for **Sentosa attractions**

Situation

Sentosa is Asia's favourite playground, jam-packed with fun activities for families. From high-energy thrills to building sandcastles, Sentosa has something fabulous for all ages and budgets.

Complication

Individualised platforms used by Island Partners make for a very disjointed and disconcerting customer journey that is exponentially aggravated when there are multiple parties involved.

Lack of real-time information and the inability to change plans spontaneously have led to increased numbers of unhappy visitors and restless children. Way-finding around the Island remains a challenge for adults and children alike.

Solution

Hyperpersonalisation and **consolidation** of in-app **information, booking & map** features to cater to the **spontaneous needs** of young families, as well as the introduction of a separate play app to **increase customer engagement** during inevitable waiting periods.

Impact

Industrial data trends suggests that personalisation in experience can lead to a **15% increase in revenue** led by increased booking efficiency and customer satisfaction. By keeping the app simple, personal and functional, it can continue to be a vital channel of communication to ensure repeat visits.

Pain Points

Lack of Personalisation and Consolidation



PRE-VISIT



DURING VISIT

Planning and Booking

Experience

01

Multi-site bookings, Confusing
redemption process

02

Multiple Booking Parties
leading to lost tickets

03

Height and Age restrictions
not clearly stated

"Bookings are
disjointed and unsure
on which attractions
need to book a time-
slot"

"Sometimes we can't
remember who book and
cannot find ticket"

"Definitely can be an issue if
you're a family and unsure
what can be done with your
children "

Pain Points

Lack of Real Time Information, Customer Engagement & Interactive Map



PRE-VISIT



DURING VISIT

04

No realtime crowd info,
whiny restless children



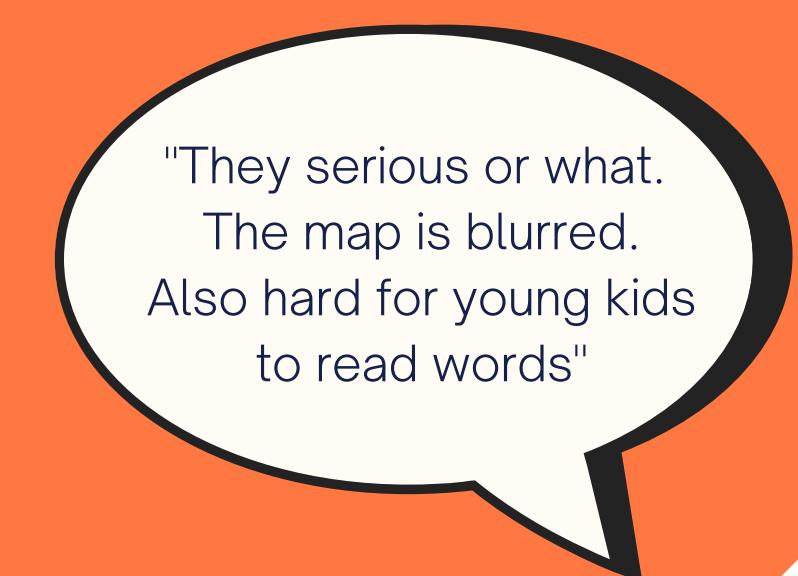
05

Unable to make additional
plans on same day



06

Map complicated for
children (and adults!)



“

PICK YOUR PLATFORM

Hub? Got Sentosa App Meh?

- 100% of people interviewed

85% of consumers use their phones to book travel activities¹

95% of visitors will spend more at a tourist attraction if on a dedicated attraction app

How Might We

A
A
A
facilitate the planning, booking and experiencing journey for young families so that they have a personalised experience at Sentosa?



→
Hyper Personalise and Consolidate
Touch Points to **increase efficiency**
during booking, planning and
experiencing

→
Provide real time and accurate
information on attractions to **reduce**
waiting time and facilitate
spontaneous bookings during family
outing at Sentosa

→
Increase customer engagement
during idle wait time to **improve**
customer experience satisfaction.
Happy kid, happy life

R
R
R
→
Redesign and Consolidate current
maps to **improve way-finding** within
Sentosa

→
Promote and **Market** Sentosa App
to **increase App downloads** and
increase mindshare



Frustrations

- **Bookings disjointed** and unsure which attractions require booking time-slots
- Ticket exchange process is messy and confusing
- **Unable to find ticket confirmations** as bookings are done by multiple parties
- **Attractions restrictions and closure not updated** which result in long wait time and fussy children

The Woo Family

- **Young family with 3 kids, aged 5 to 10**
- Little Princes & Princess are the centre of their world
- **Children are prone to meltdowns when they do not get their way**
- Parental tag team, both **mum and dad do booking** of attractions
- Loves the outdoors and exploring Sentosa!
- Staycation twice a year during school holiday

Needs

- Share bookings & itinerary among family members to minimise errors
- Book activities spontaneously on the go especially with fussing children
- Entertain children during waiting periods
- Information on activities suitable for children of certain age / height restrictions
- Interactive map to get around easily and quickly

Solution Concept

Simple. Personal.
Functional.



Key Features

Hyper Personalisation & Booking Consolidations

- Intelligent itinerary planner
- Collaborative booking wallet with Digital QR ticketing
- Personalised Child-friendly filters
- Next step: Predictive analytics for deals
- Digital room keys (Hotels)

Real-Time Information

- Date filters
- Spontaneous bookings
- Wait time visibility
- Next step: Advance order of food & merchandise

Pain Points

- Multi-sites booking, confusing redemption process
- Lost ticket confirmations
- Non-obvious Age or Height restrictions

Impact & Desirability

- Booking personalisation can increase revenues by 15%¹
- Less system complexity, higher customer satisfaction, higher revenue growth²

- 3 in 4 activities booked on same day or day before³
- 56% choose queue visibility as top choice of app function⁴
- 4x in-consumer spending if mobile apps can avoid queues

1. Industrial Trends outlook for 2021

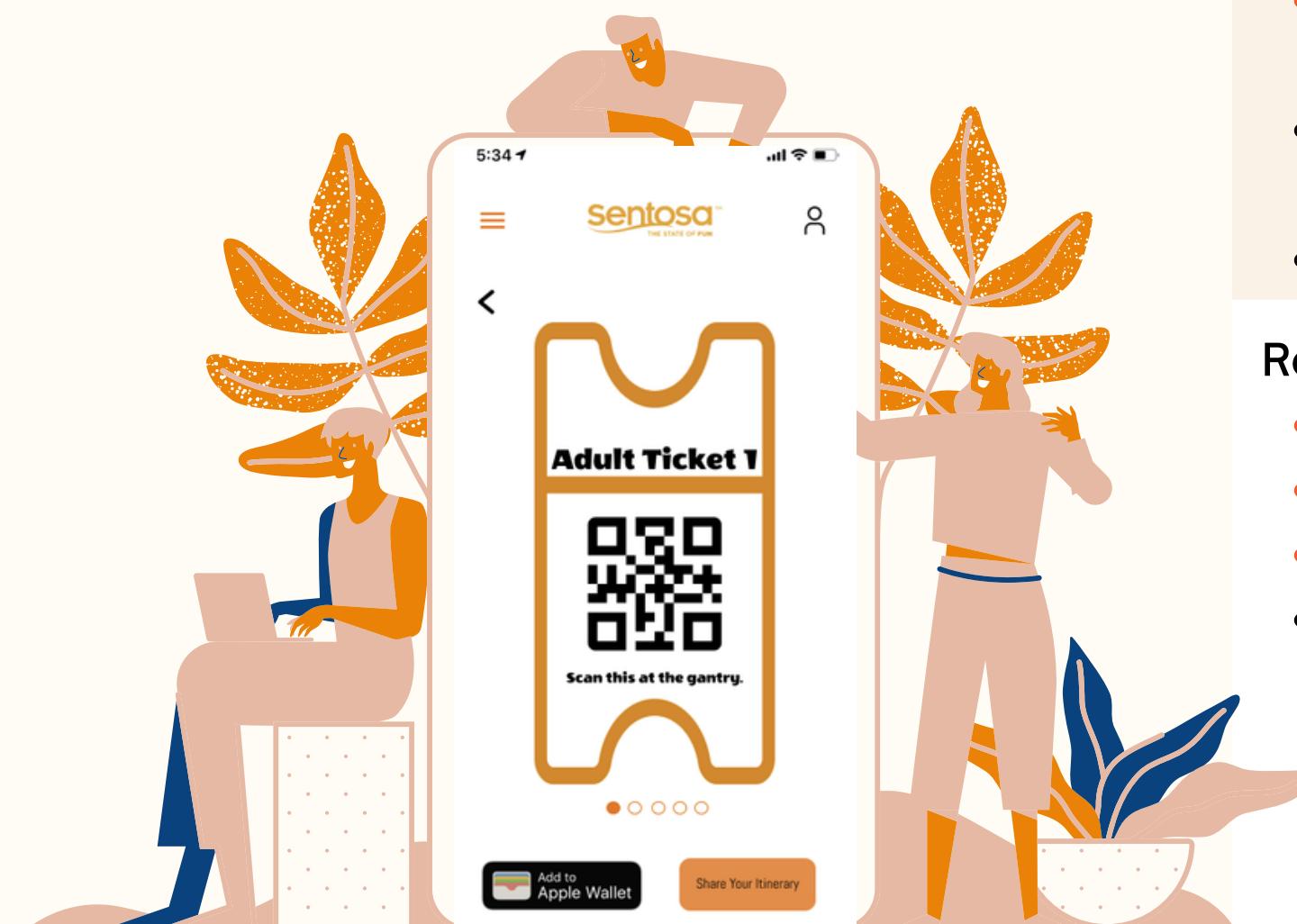
2. From Touchpoints to Journey

3. Travel and Tourism Stats 2019

4. Omnicom

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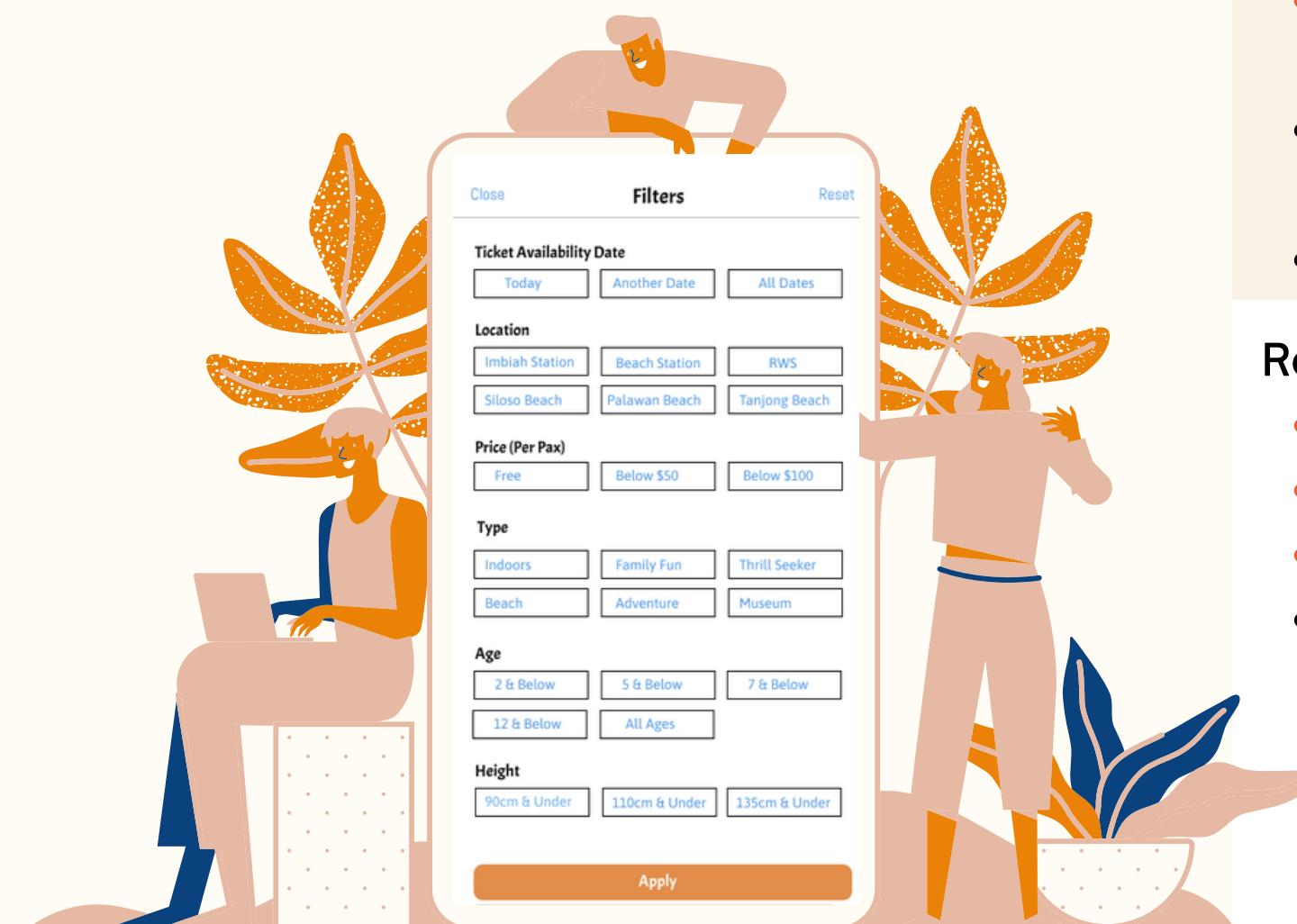
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Simple. Personal.
Functional.



Key Features

Increased Customer Engagement during wait

- Exclusive standalone game app for children
- Exclusive game access within Sentosa

Interactive Map

- Contextual landmarking & Coloured regions to aid way-finding
- Interactive Map to be available on website

Pain Points

- Children get restless while waiting
- Become unhappy and fussy
- In turn affects overall customer satisfaction and experience

Impact & Desirability

- Turn wait time into play time
- Games designed for family (multi-players)
- Increase anticipation before rides
- Probable increase in consumer spending

- Research suggests contextual landmarking¹ and colours² are useful in affecting visitors' alertness during way-finding
- 51% want an in-app interactive map³

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WHICH MAP IS BETTER?



Solution Concept

Simple. Personal.
Functional.



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WOE-LESS FAMILY FUN!

Our video walkthrough



Eyes on the Prize

Simple. Personal.
Functional.



Target KPIs

Sales:

- 15% ↑ on-app sales¹
- 15% ↑ in sales conversion rate from targeted ads
- 15% ↑ in repeat customers

Sign-ups:

- 50% ↑ app downloads and user count²

Retention:

- 20% day 1 user retention³

Functionality:

- 2% or lower crash rate for app⁴
- 50% ↑ in number of sessions when in/near Sentosa
- 25% ↓ in ave. user time spent booking/planning
- 50% ↓ in clicks - to - book

Self Care & Satisfaction:

- 50% ↑ in experience satisfaction (NPS)
- 25% ↓ in calls for help with direction

Challenge & Mitigation

- App functionality is best when Island Partners are able to collectively centralise system.

- Mitigation: Internal API queries Partner's API for information. Use process optimisation to ensure minimal lag

- Users are not aware of app's existence

- Mitigation: Launch sideline marketing campaign to promote App downloads

1. [Industrial Trends outlook for 2021](#)

2. [Mobile travel trends 2020](#)

3. [Mobile app user retention rate worldwide 2020, by vertical](#)

4. [Mobile App Performance Metrics For Crash-Free Apps](#)

App Marketing

Target: 50% ↑ app users

Possible Campaign Roll Outs



- Offer rewards for app downloads
 - 64% will download app for exclusive deals/offers¹
- Poster marketing at touch points that require wait (i.e. bus stops/habourfront train station)
- Promotional collaborations with influencers promoting ease of Sentosa experience with App
- Promotional collaboration with car rental/sharing companies
 - Majority of young families surveyed found it inconvenient to travel around Sentosa without a vehicle: Car remains top choice during visits to Sentosa

¹. <https://cdn2.hubspot.net/hubfs/5898474/Omnico%20Theme%20Park%20Mobile%20Barometer%202019.pdf>

High Level Roadmaps

Grand Plan



Design Sprints



Sprint 1 Deliverables

- Child-friendly Filters with spontaneous bookings
- Collaborative Wallet & digital ticketing
- Map fixes
- Preliminary Game (50% rides)

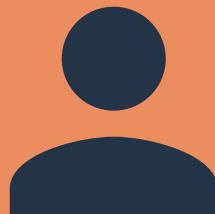
Sprint 2 Deliverables

- Intelligent itinerary
- Queue visibility
- Game App version 2 (100% rides)

Future Deliverables

- Personalised Predictive Analytics
- Product offerings like Food orders & hotel digital cards
- Separate zones for families

Collaborations



Stakeholders

- Island Partner collaborations
- Internal Management budgeting & Implementation duties

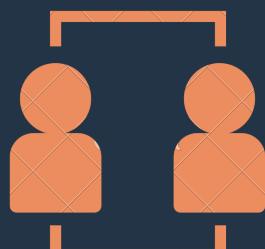
Stakeholders

- Continued Island Partner collaborations
- Influencer promotional activities to drive App download

Stakeholders

- Food, Merchandise & hotel partnerships
- Actual Physical separate zoning possibilities

User Research & Testing



Testing

- Deep User Profiling filters
- Individual Needs Analysis
- Map readability Analysis
- Feature testing
- Game testings

Testing

- Crowd optimisation
- Feature testing
- Game testings

Testing

- Continued Feature testing
- Upgrades for earlier releases
- Personalised Predictive testing

Logo

Why app?

Ability to span across all touchpoints in a Guest Journey

02 Arrive & Explore

- Transport options
- Way-finding
- Entry

01 Consider & Purchase

- Online Booking
- Visit Planning

03 Experience

- Queue times
- Food / Retail
- Events / Special Offerings

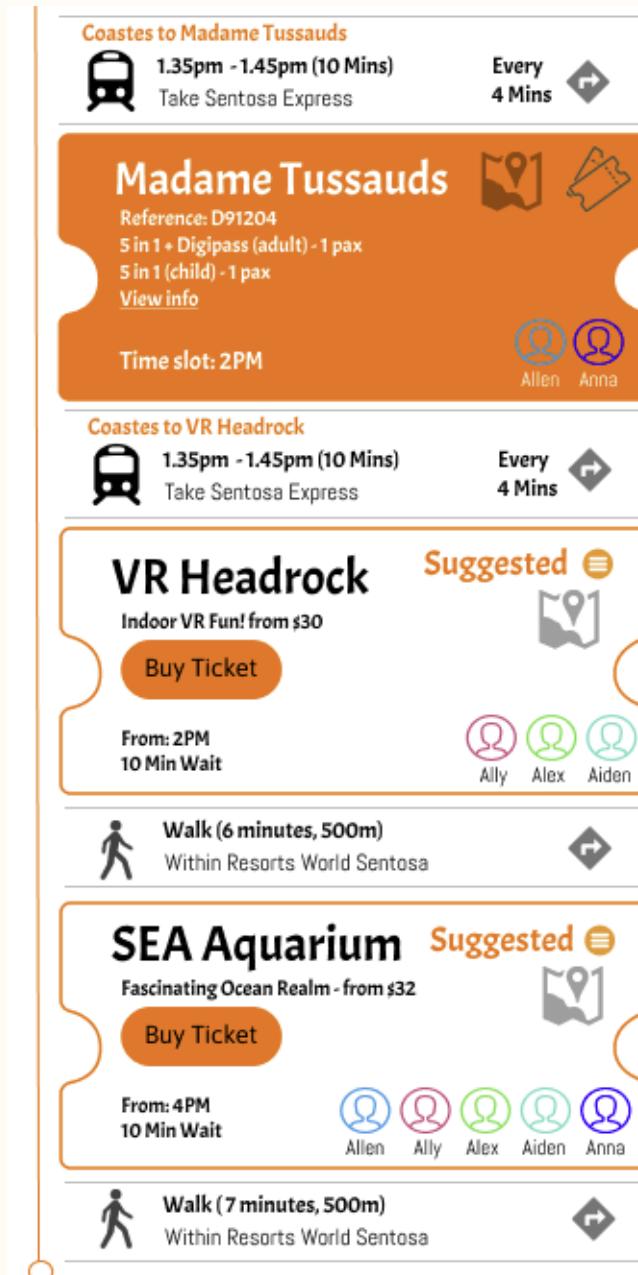
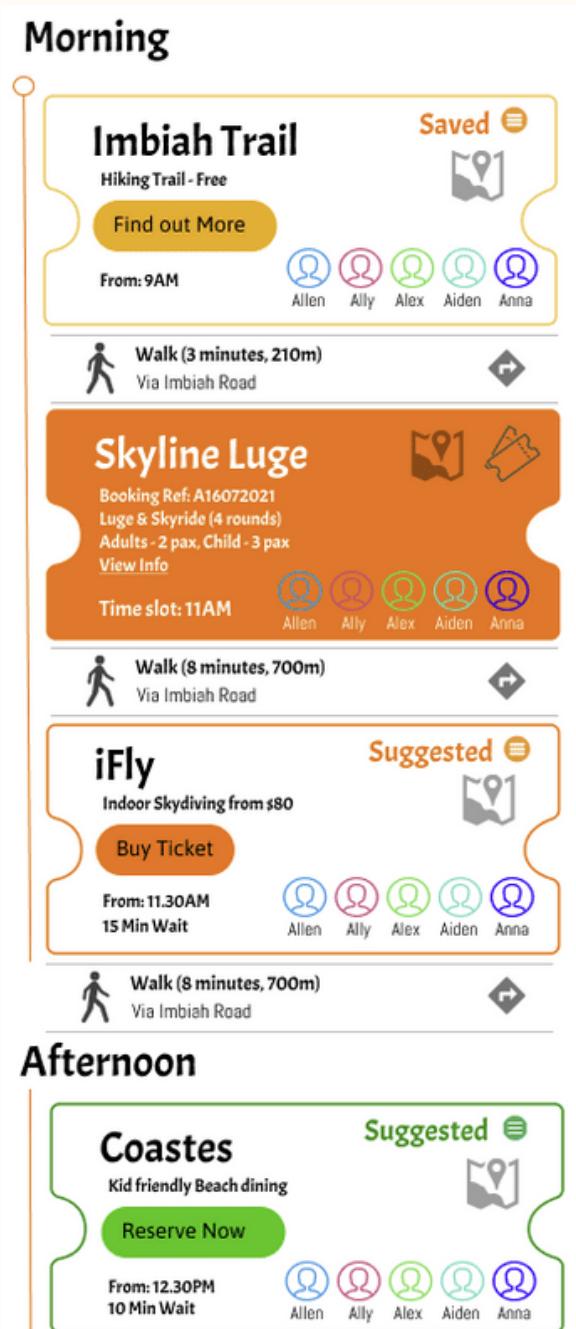
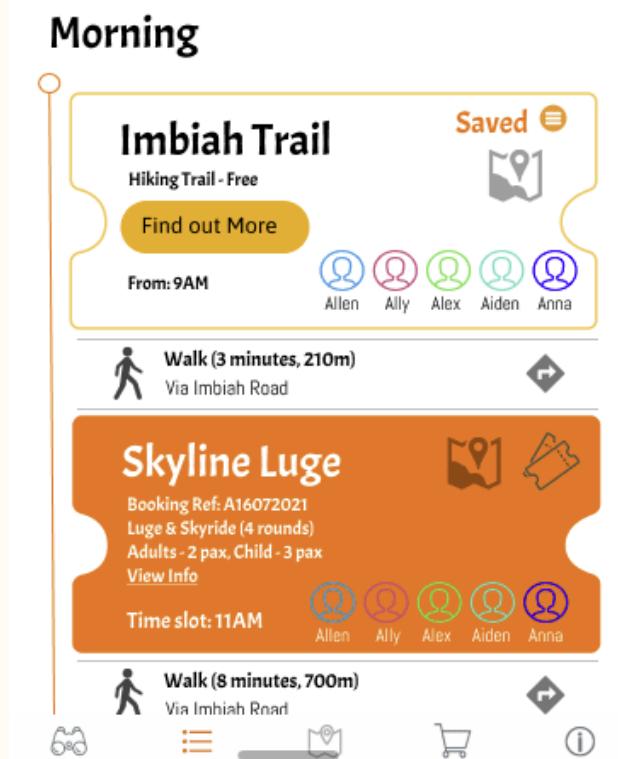
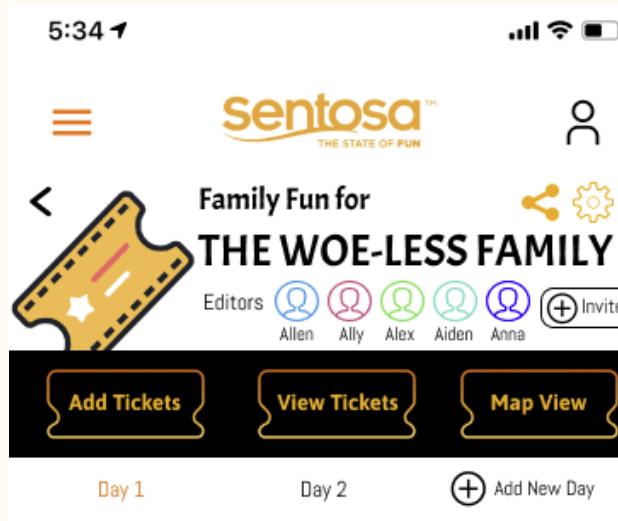
04 Stay

- Multiday ticket offering
- Accommodation check-in
- Digital Room Key

05 Understand

- NPS
- Guest Feedback

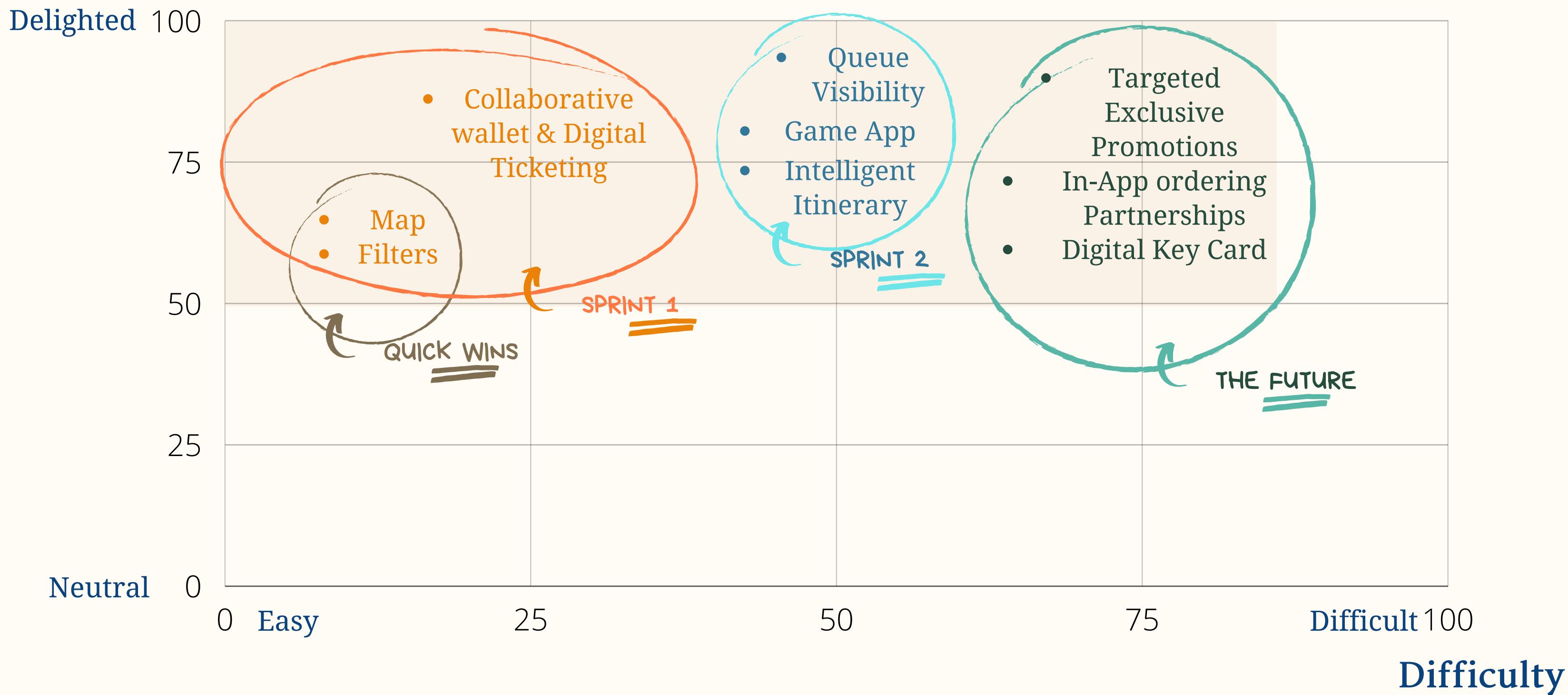
Intelligent Planner



- Mobile because it's easy for on the go changes
- similar to current one but suggestions are intelligent (weather dependent and child friendly)
- Tickets are synced based on login details (we don't insist booking directly on Sentosa app because of relationship with island partners)
- Suggestions are real time
- Free attractions are SAVED (can be amended)
- Booked attractions are in solid ticket blocks
- Itinerary frame is scrollable
- Swipe to delete suggestion for new suggestion

Feature Prioritisation

Impact - Customer Satisfaction, Simplicity, Increase Revenue



Our Research Methods

Why it was good

What we found



- Sentosa already has comprehensive user platforms
- Great for quick fixes/quick wins
- Especially for simple usability interface changes

- Filter Options for age, height, price, date
- Need for better map



- Great for understanding customer journey & touchpoints
- Good for mid-range fixes to improve efficiencies

- Multi-website bookings
- Messy Redemption
- Need for personalisation



- Good for non-existing high desirability recommendations
- To digitalise offline touchpoints if it speeds up efficiency
- Big picture tie in and understanding of pain points
- Better understand user-psychology

- Need for centralised collaborative platform
- Sentosa is weather driven and need to allow for spontaneous bookings



- Great for understanding simple navigational errors but not as useful as contextual inquiry

Efficiency Tests

The screenshot shows a travel website's homepage with a navigation bar at the top. The categories in the bar are All, Attractions, Beaches, Dining, Hotel & Spa, Celebration Packages, and Daycation. Below the bar, there is a section titled "ATTRACTIIONS" with three items:

- ADVENTURE COVE WATERPARK**: A person on a yellow tube in a green water slide.
- ARCHERY BY THE BEACH AT SOUTH SIDE**: People with bows and arrows.
- BUTTERFLY PARK**: A close-up of a butterfly on yellow flowers.

Each attraction has a "BOOK NOW" button below it. A red circle highlights the "BUTTERFLY PARK" section. At the bottom left, there is a section titled "ALREADY CEASED OPERATIONS" with a circular icon.

Key Features

Original Version

Revised Version

Hyper Personalisation & Booking Consolidations

- Personalised Child-friendly filters
- Intelligent itinerary planner
- Collaborative booking wallet with Digital QR ticketing

- Average of 5-10 minutes per ride to search through multitude of T&C
- Average 3 - 5 minutes searching through email confirmation for ticket
- Need to search Chope to confirm if reservation required

- One Click Filter (>3 mins)
- One click ticket retrieval
- Signed in for one-click checkout
- Book timeslot directly when buying ticket
- Automated Digital ticketing

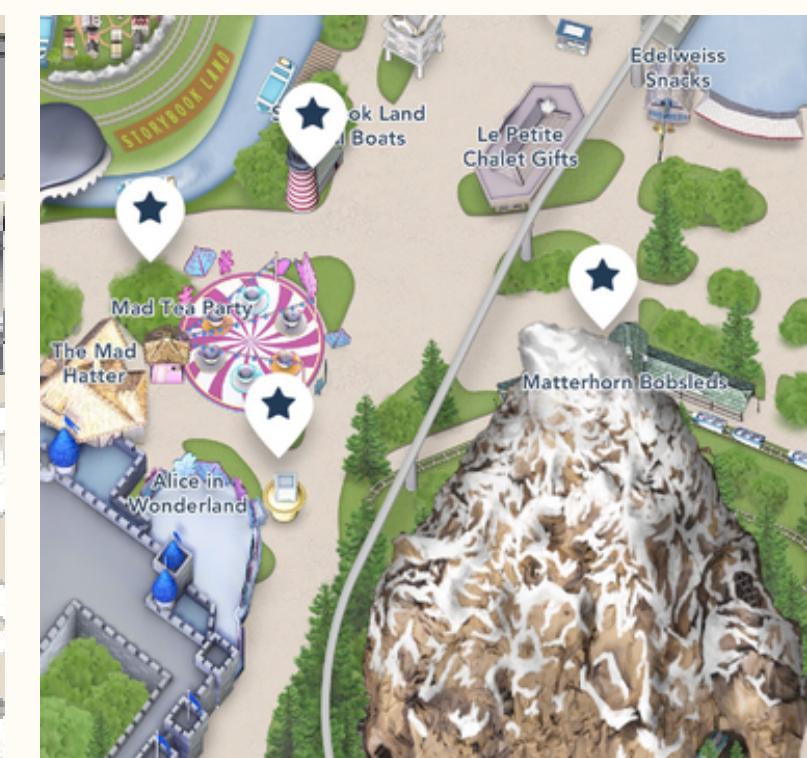
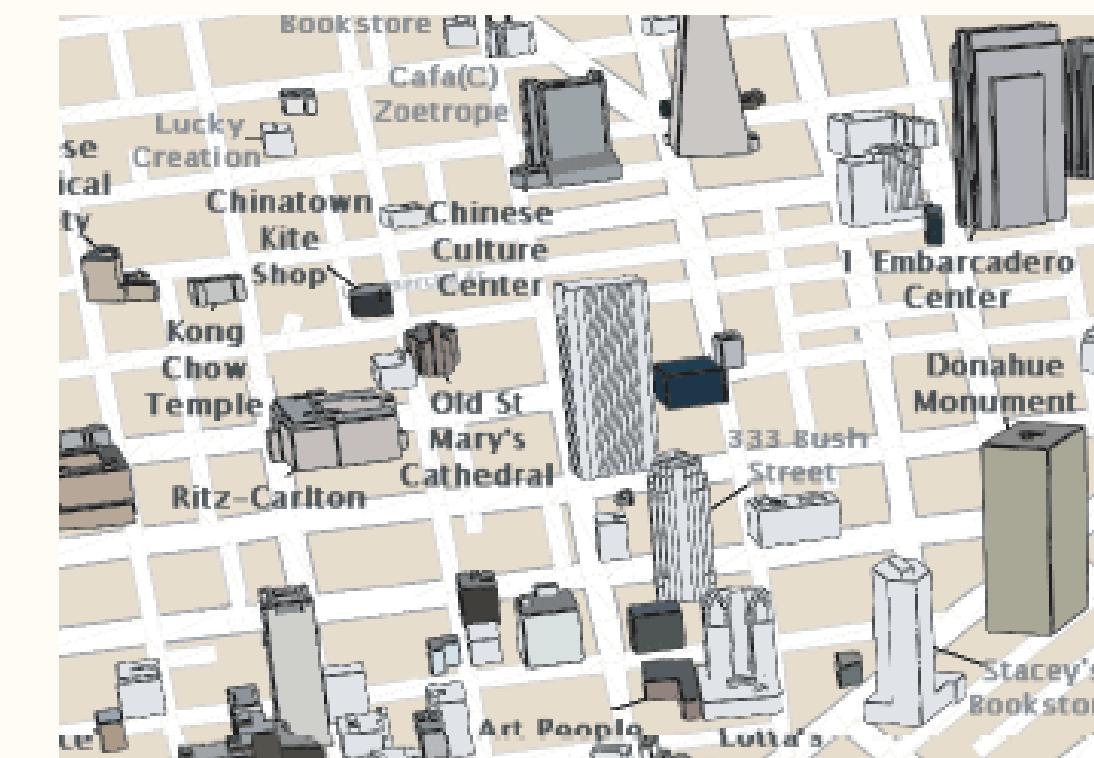
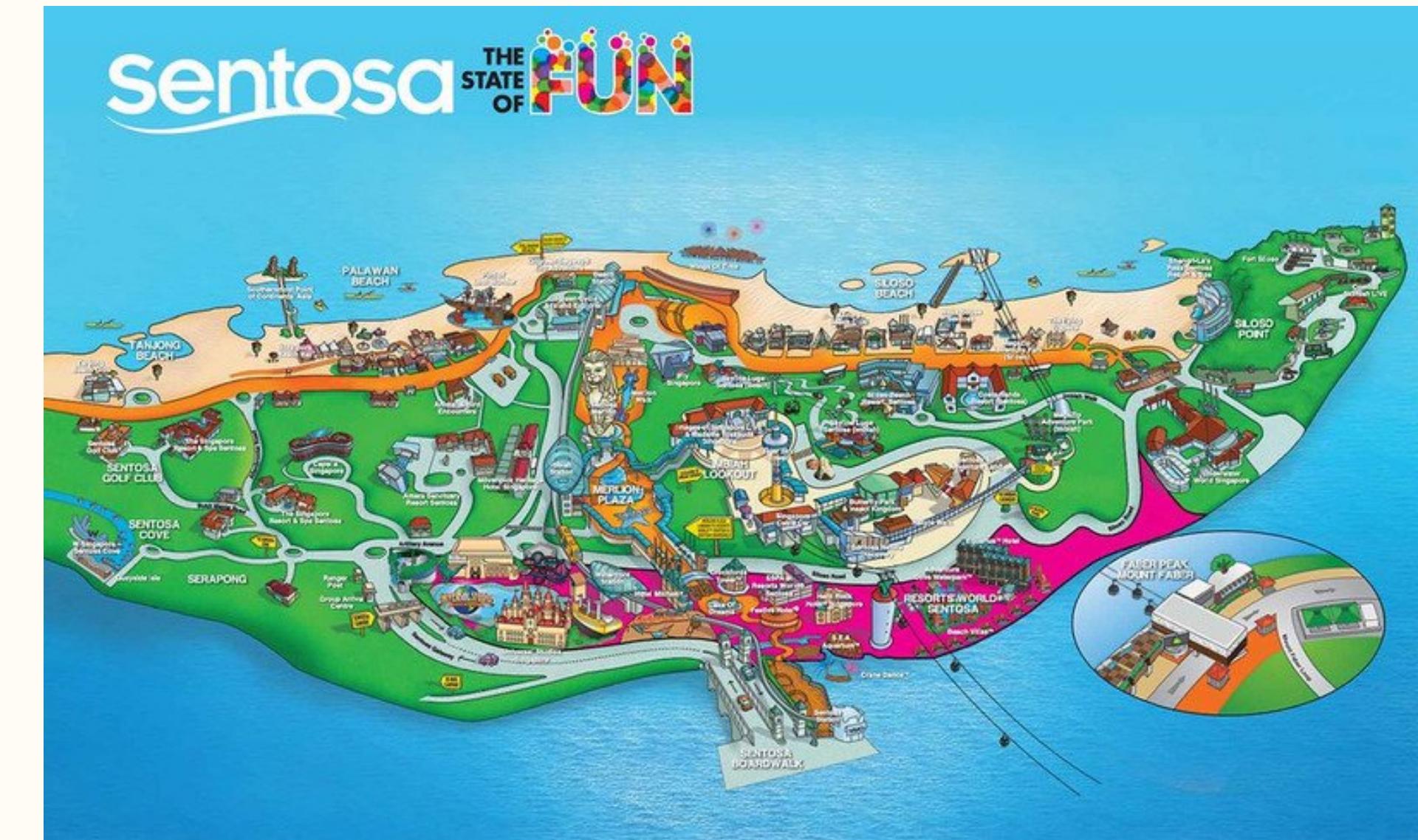
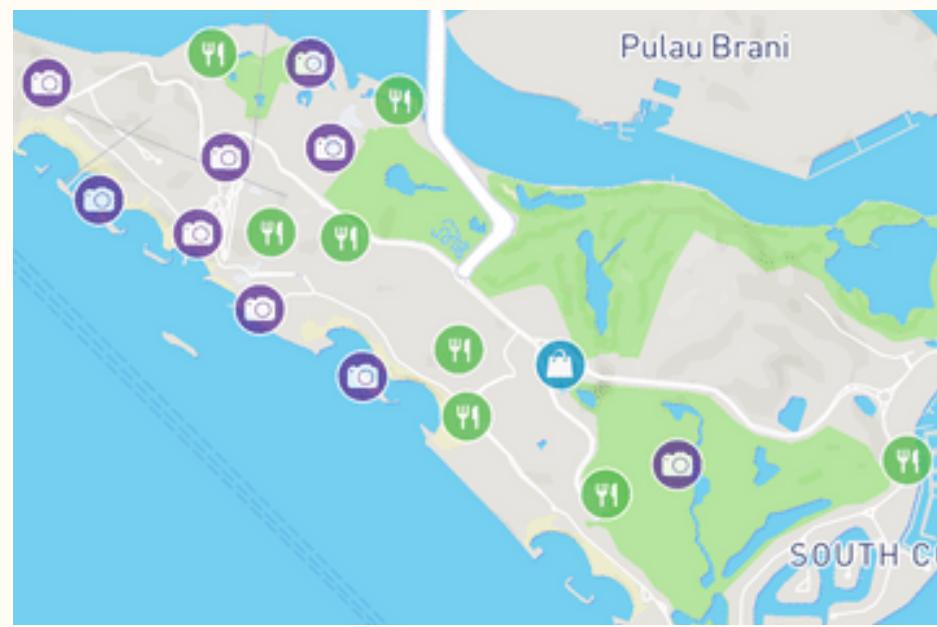
Real Time Information

- Date filters
- Spontaneous bookings
- Wait time visibility

- Average of 5-10 minutes per ride to find date availability
- Cannot book on same day
- No wait time function

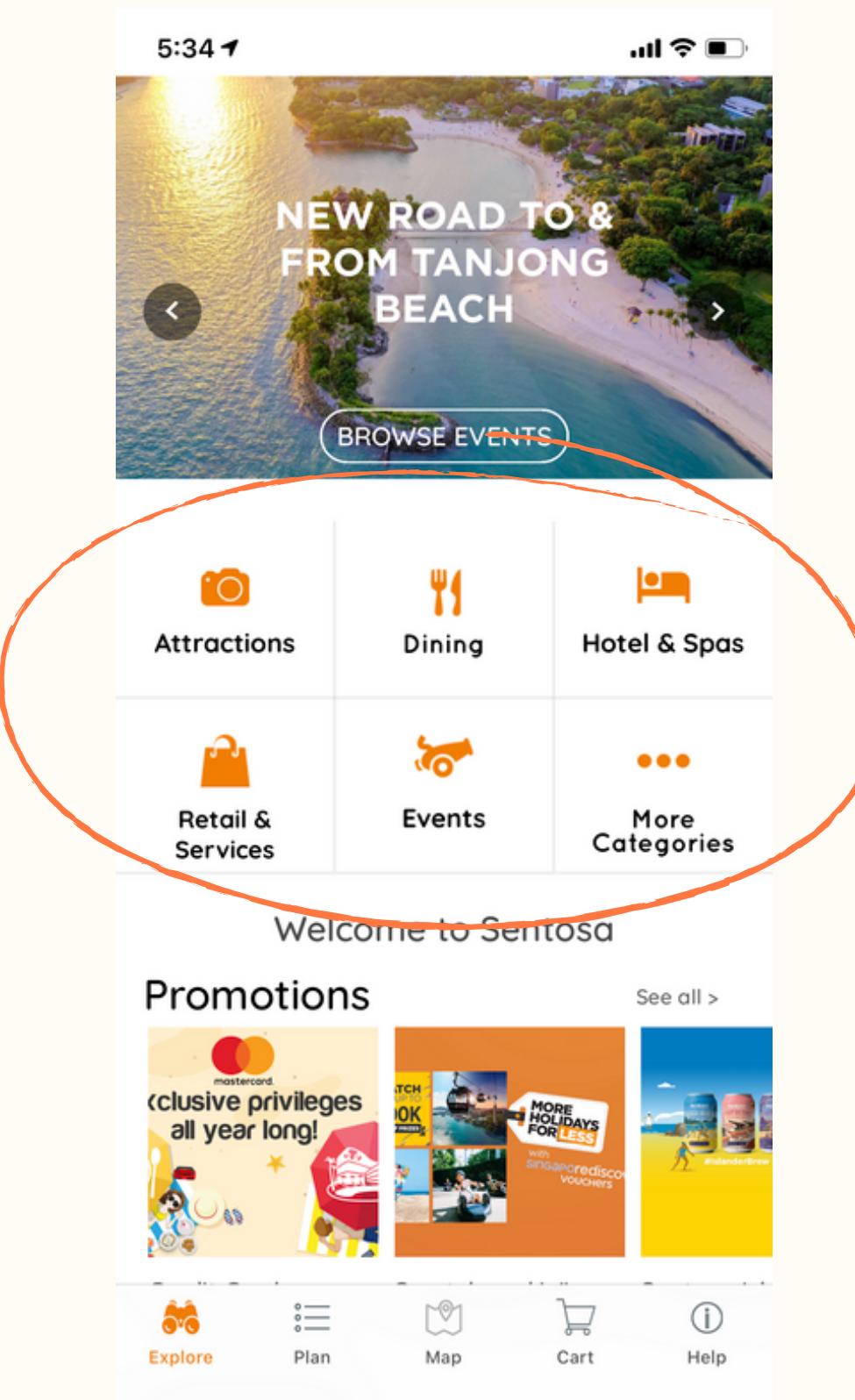
- Date Filter (>3mins)

Map Variations



Usability Tests

Original



Creation of Menu Bar for easy access

The screenshot shows the updated Sentosa mobile app interface. A red circle highlights the three horizontal lines icon in the top-left corner, which serves as the menu bar. The main content area includes the "sentosa THE STATE OF FUN" logo, a "Welcome Allen!" message, and a "View Profile" button. To the right of the main content, there is a sidebar with a close button ("X") at the top. The sidebar lists various categories: My Bookings, Attractions, Dining, Hotels & Spa, Retail & Services, Events, Promotions, and Covid-19 Safe Measures.

Additional Key Insights

Planning & Booking

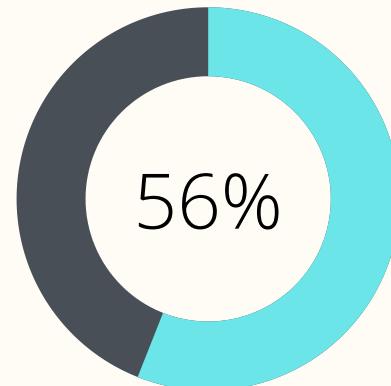
- Comprehensive but not up to date
 - Attractions that are closed are still visible (need to navigate further to find out that already closed)
 - Some are not bookable - users lose interest fast if need to use another touchpoint to make booking
 - Still need to redeem ticket and book timeslots for tickets booked directly with Sentosa
 - Not all tickets need timeslot - use CHOPE to find out
- Most users are savvy and will find best deals (not necessarily direct bookings) - we are not doing a price comparison due to potential conflict in interest
- Most users will want to see the weather before booking more attractions



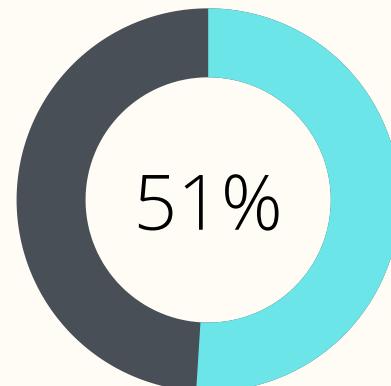
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Experience

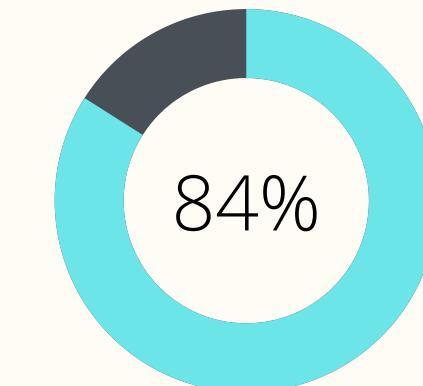
- Wasted time on waiting
- More Revenue Sales if an App is able to reduce queue
- Research shows visitors want massive amounts of app functionalities



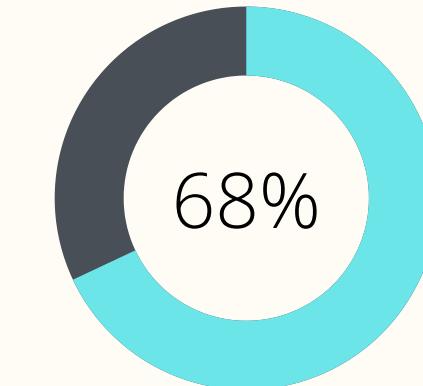
Wants an app to provide full visibility on queues for food and rides



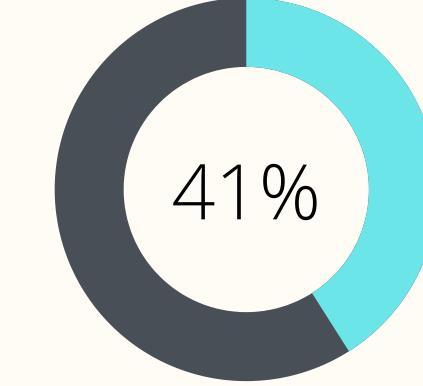
Wants an interactive Map



They are very or quite likely to use an app to order food and drinks ahead to avoid queuing



Download app to beat queues



Want apps to solve lack of information on queue length and waiting time

