



2021 Spring

Intern Report

Nozomu Yoshida | TDD

— Proposal —

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2 | Persona

3 | User Research

4 | Solution

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6 | Competitive Analysis

— About Internship —

7 | What I learned



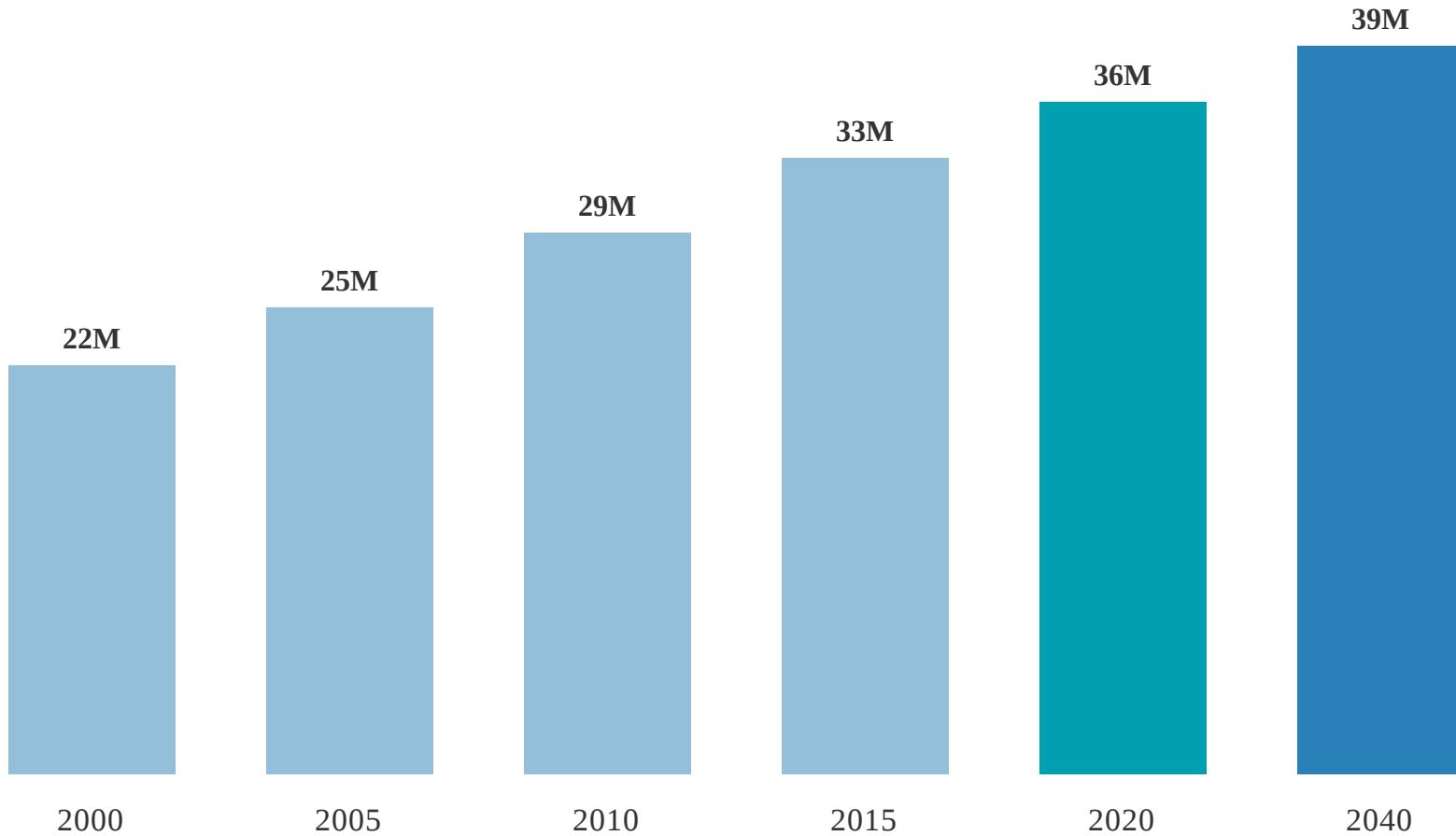
Market

Market

Physically disabled aged people



Number of aged people (65+) In Japan

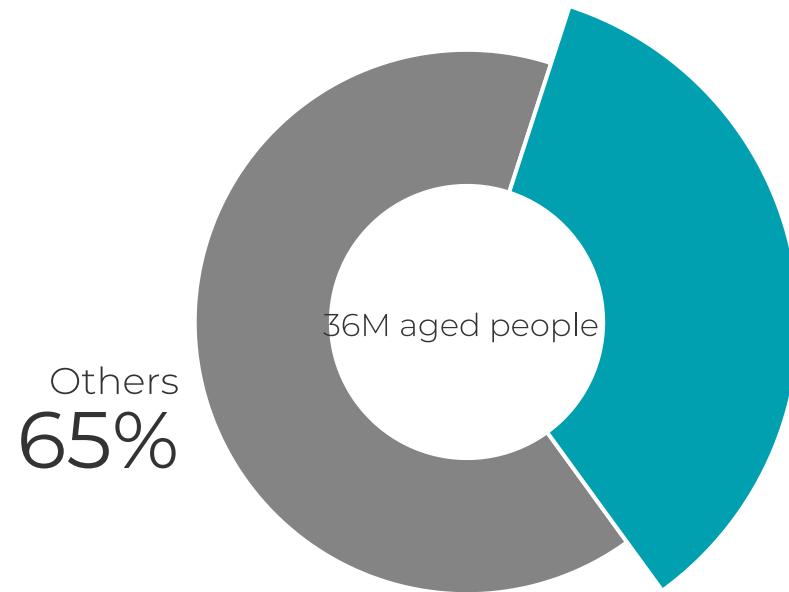


THE NUMBER OF AGED
PEOPLE IN JAPAN

36M People

The number is
expected to continue
to grow in the future

In the 36 M aged people...



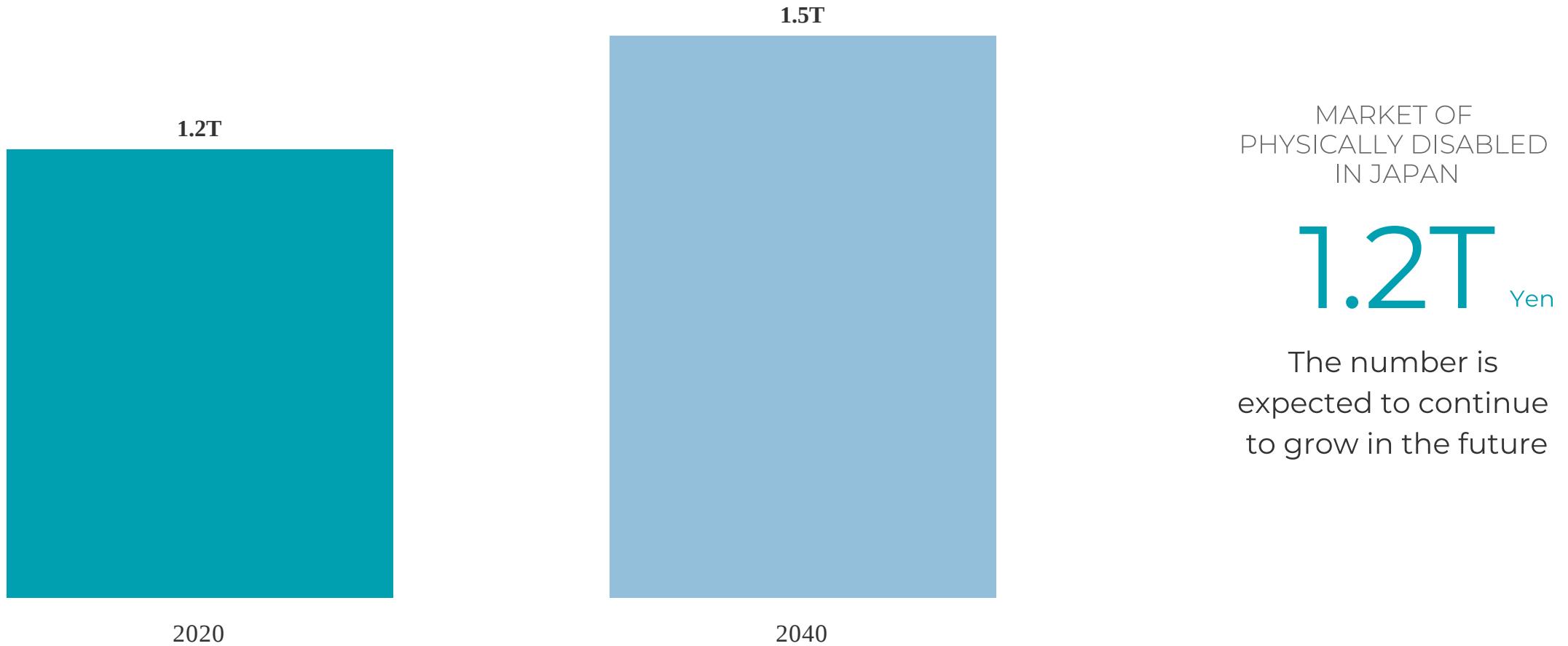
Physically Disable
35%

35%

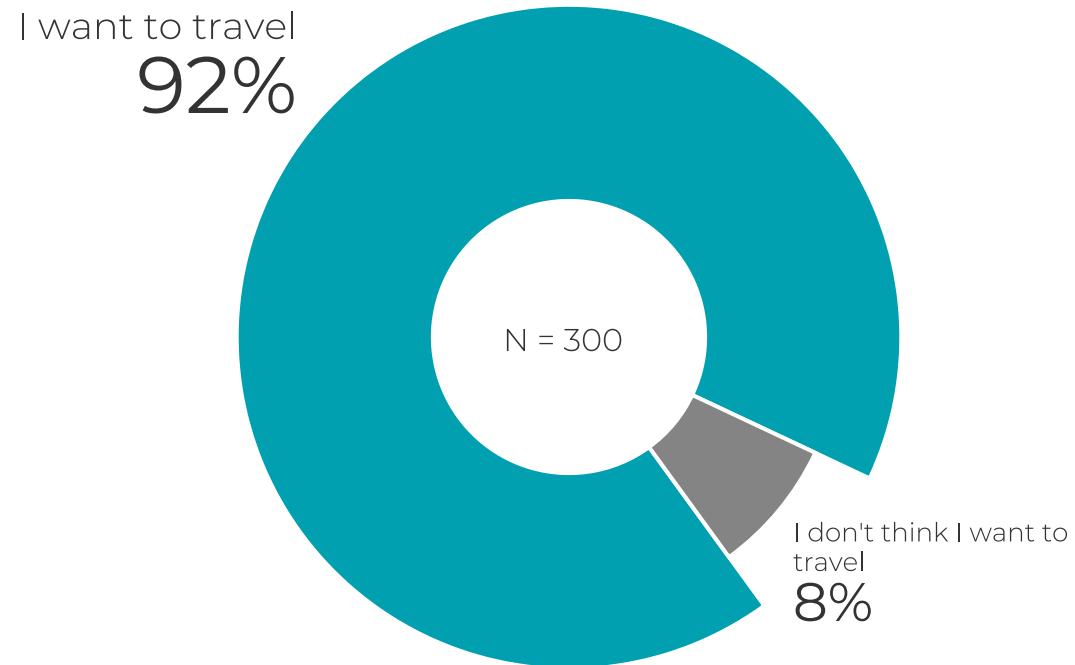
OF AGED PEOPLE ARE PHYSICALLY DISABLE

Equal to 12.6 M people

Market of physically disabled In Japan

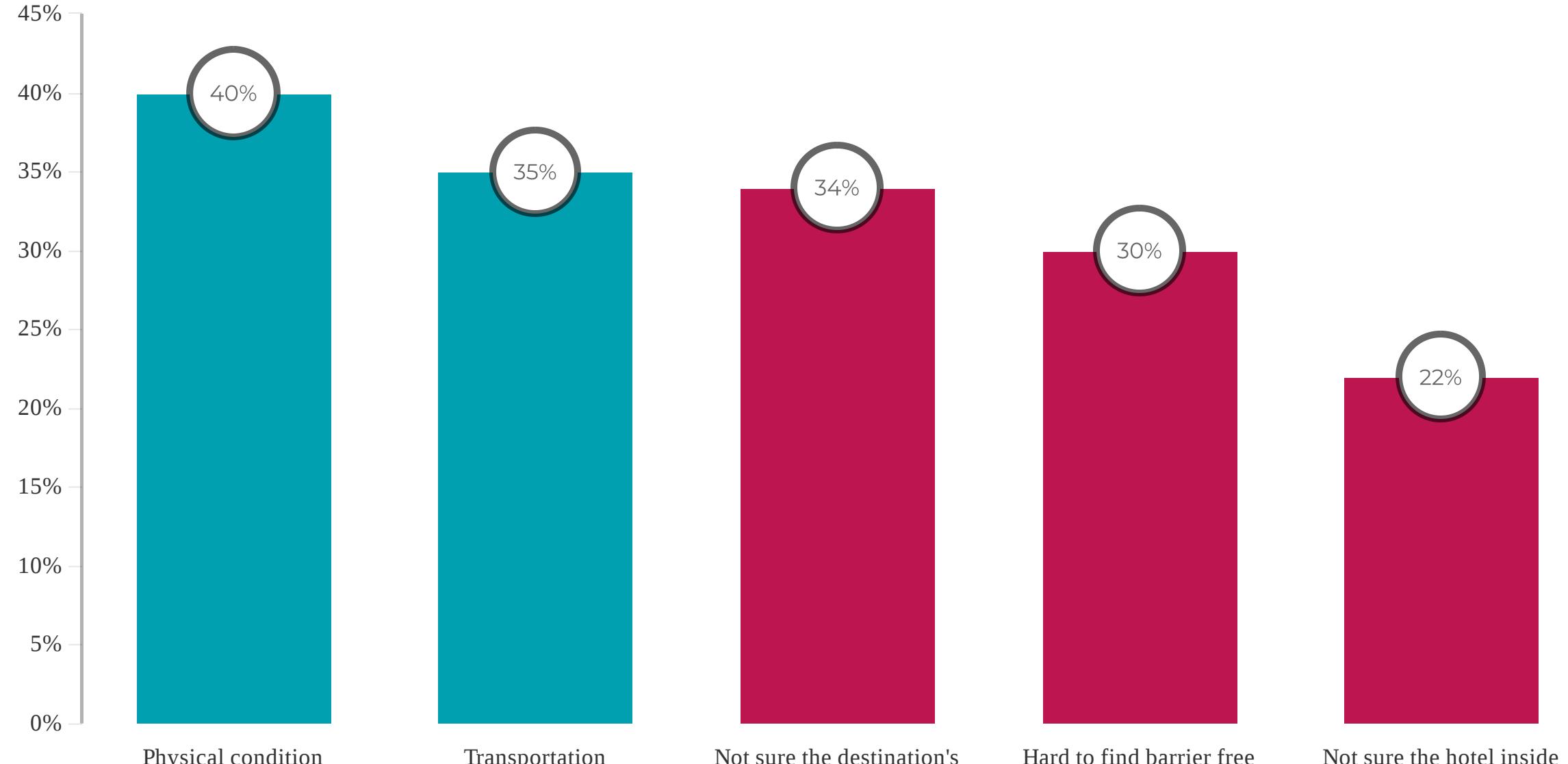


Do they want to travel?



92%
OF PHYSICALLY DISABILITY
THINK THEY WANT TO TRAVEL

What are the barriers to travel for physically disable?



N=300

Survey on barrier-free support for travel destinations, RECRUIT, 2016 Nov

MADE WITH

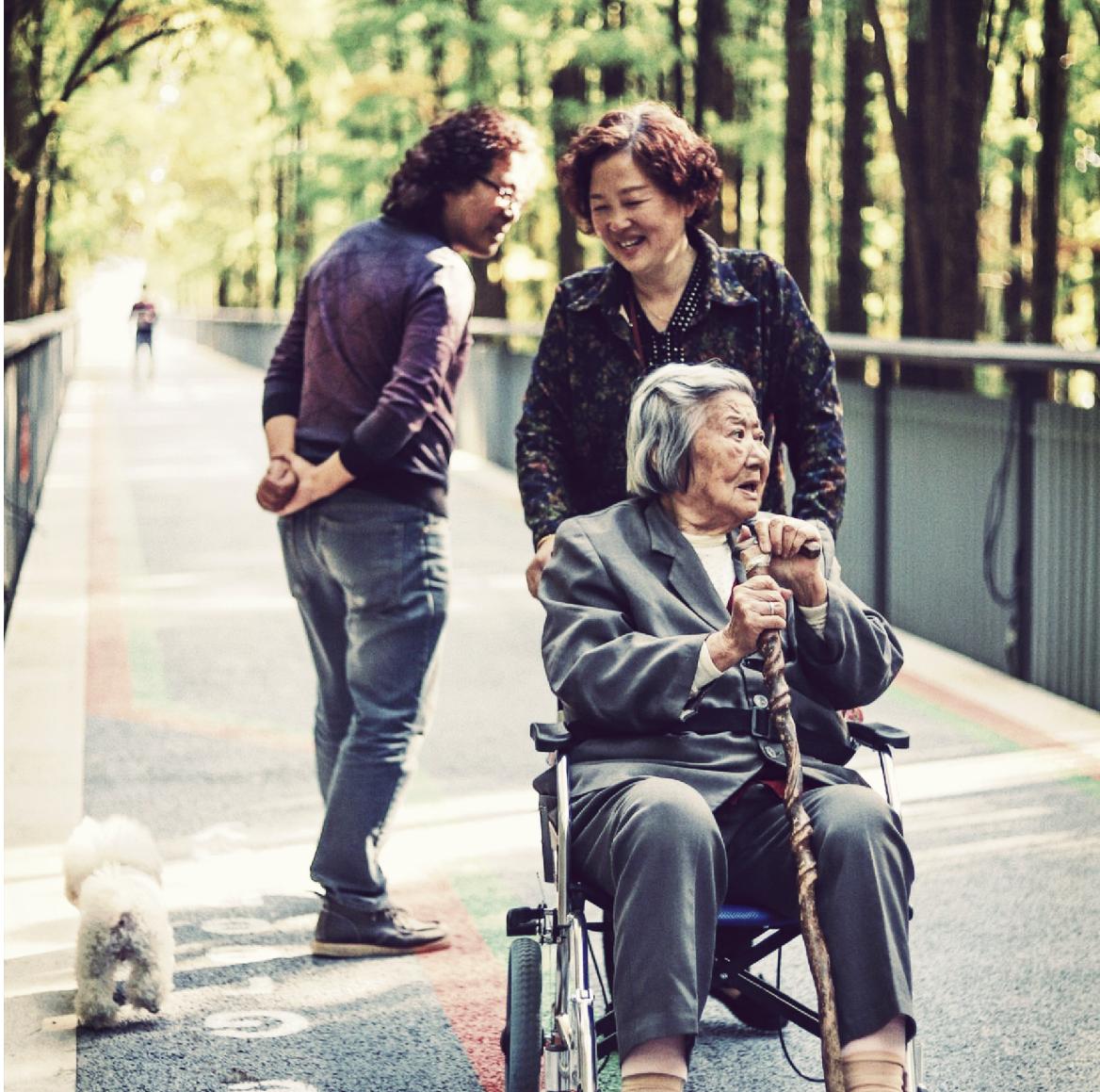
beautiful.ai

Market summary

- Market: 12.6M Physically disabled aged people
- They have the potential of 1.2 T yen market
 - The number is growing in the future
- 92% of them want to travel
 - 43% of them don't go or plan travel
 - Lack of accessibility detail in hotel is one of the main reasons



Persona



Yoshiko

- 76 years old
- Can't walk so that wheelchair user
- Her daughter takes care of her as a caregiver
- Dreams to visit onsen around Japan



User Research

User Research

How I conducted



Participants

- 9 aged and/or low-mobility people
- Aged (60+): 7 in total
- Low-mobility: 6 in total
- Including 3 wheelchair user



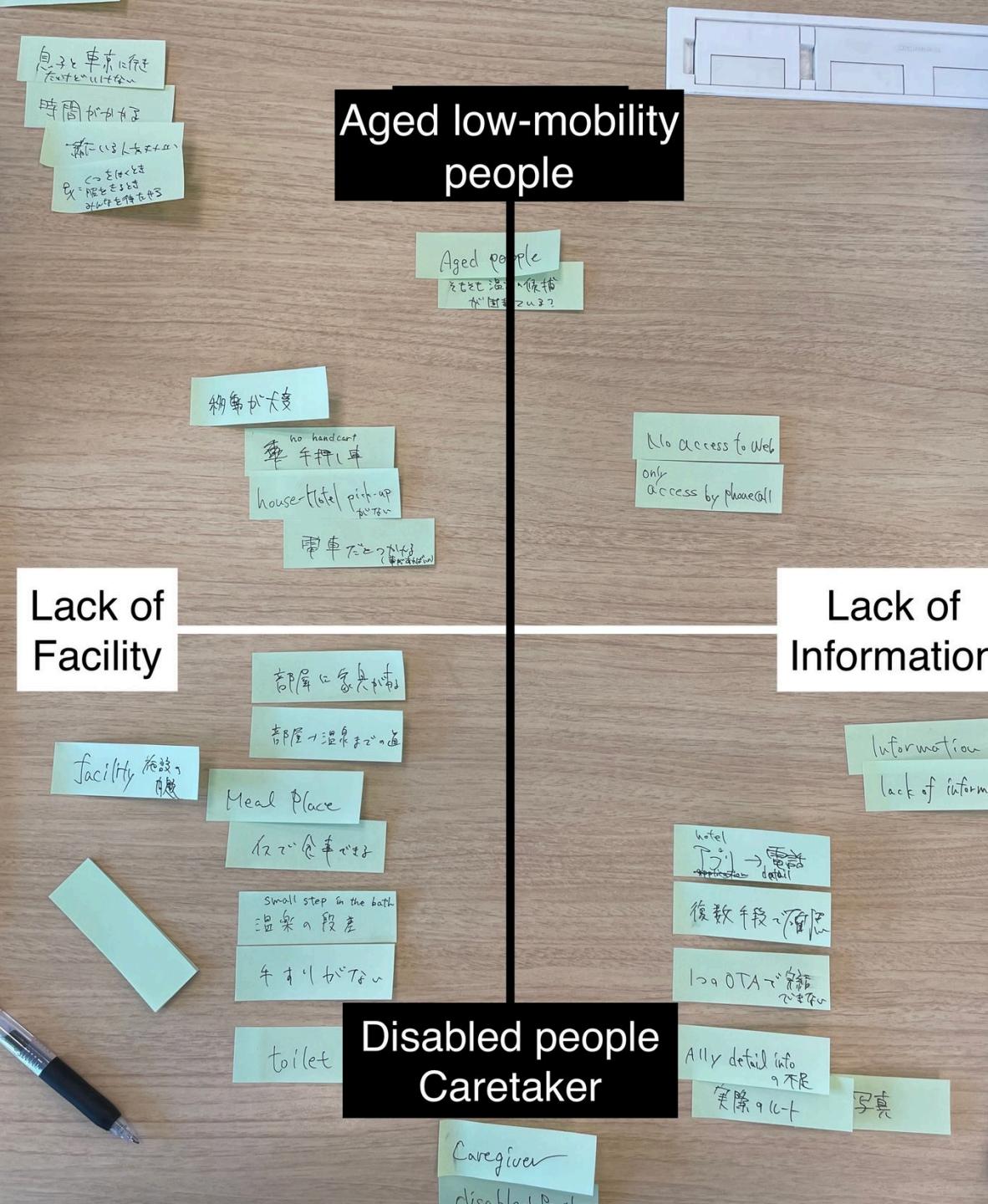
Method

- Phone Interview
- 30-60 min
- Emphasize as design thinking



Question

- Problem when travel
- How to plan travel
- Motivation to travel



User Research

The problem

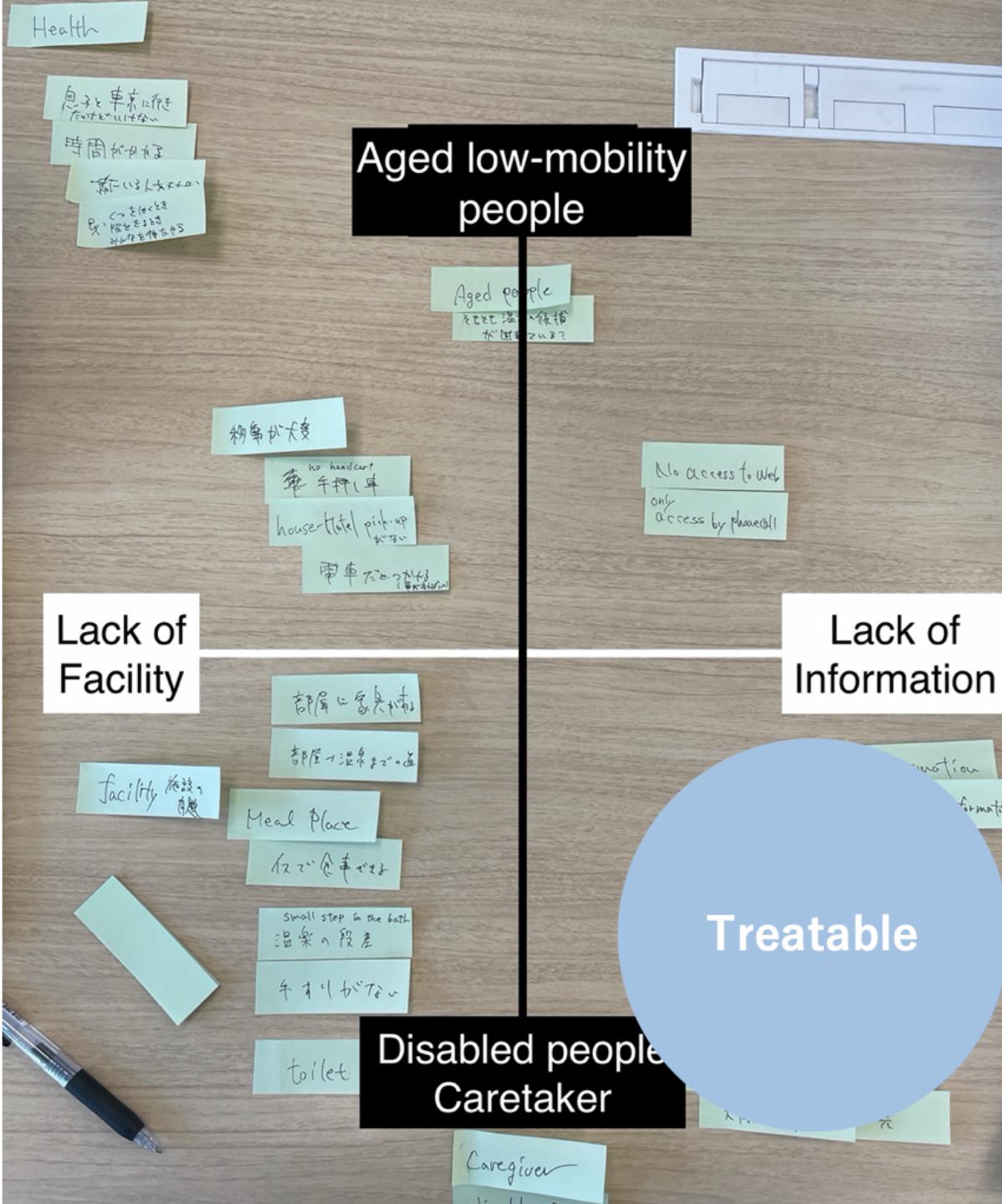


Lack of facility

- No handrail in the bath
- No handcart
- No pickup service

Lack of information

- Disabled person with low-mobility and caregivers simulate the end-to-end path during the travel
- But current domestic OTAs don't provide the detailed information on accessibility
- Which causing double check via both OTA and phone

**User Research****The treatable problem****Lack of information**

- Disabled person with low-mobility and caregivers simulate the end-to-end path during the travel
- But current domestic OTAs don't provide the detailed information on accessibility
- Which causing double check via both OTA and phone

When wheel chair users plan travel with OTA...

- Why they worry when planing travel via OTA? -



#1: Findability

- Displayed non-barrier free hotels
- Keyword search won't work sometimes



#2: Lack of Accessibility Information

- Attractive, but not accessibility-oriented picture
- Few picture of toilet, bath, and door of the room



#3: Not End-to-End

- They can't simulate end-to-end path in the hotel
- e.g., Entrance to room / room to bath

Issue

Disabled person with low mobility and caregivers of family members need to check precisely the hotel accessibility features and simulate the end-to-end path to the hotel facilities, but current online travel agencies don't provide the detailed information on accessibility, causing them a lot of worry and forcing them to spend a lot of time planning the trip.

Goal

Disabled person with low mobility and caregivers of family members can have peace of mind and save time when planning a trip by checking precisely the hotel accessibility features and simulating the end-to-end path to the hotel facilities.



Solution



Accessibility OTA

Don't worry anymore

Shibuya

9/24/2019

9/25/2019

2 guests, 1 room

Search

Filter

\$0 - \$250

Swimming pool + 1 more

4 - 5 stars

Wonderful 4.5 + 1 more

Pay at the hotel

Map view

Hotel + 1 more

Sort by Recommended

1,982 Hotels in Shibuya

★★★★★
Stream Excel Hotel Tokyu if text is so long as
Stream Excel Hotel Tokyu if text is so long as ...

4.58/5 (Reviews 130)

✓ Free cancellation Until 2019-12-13 19:00

🛏 Breakfast included ⚡ Free Wi-Fi

📍 10 minute walk from east exit of JR Shibuya station, in front of ...



-75% Today

\$176.66~

Per Room

2 Guests 1 Night

★★★★★
SHIBUYA HOTEL EN

3.98/5 (Reviews 1,511)

✓ Free cancellation Until 2019-12-13 19:00

🛏 Breakfast included ⚡ Free Wi-Fi

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-75% Today

\$176.66~

Per Room

2 Guests 1 Night



The Millennials Shibuya

3.54/5 (Reviews 120)

✓ Free cancellation Until 2019-12-13 19:00



\$102.12~

Per Room



Provider List

Filter

Provider List

9/24/2019

9/25/2019

2 guests, 1 room

Search

Filter
\$0 - \$250
Swimming pool + 1 more
4 - 5 stars
Wonderful 4.5 + 1 more
Pay at the hotel
Map view

Hotel + 1 more

Sort by Recommended ▾

1,982 Hotels in Shibuya



Shibuya Stream Excel Hotel Tokyu if text is so long as ...

4.58/5 (Reviews 130)

 Breakfast included  Free Wi-Fi

• 10-minute walk from east exit of I-80

10 minute walk from east exit of JR Shibuya station, in front of .



★ ★ ★ ★

SHIBUYA HOTEL EN

3.98/5 (Reviews 1,511)

✓ Free cancellation Until 2019-12-13 19:00

 Breakfast included  Free Wi-Fi

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The Millennials Shibuya

3 54/5 (Reviews 120)

1 Free cancellation until 2019-12-13 10:00



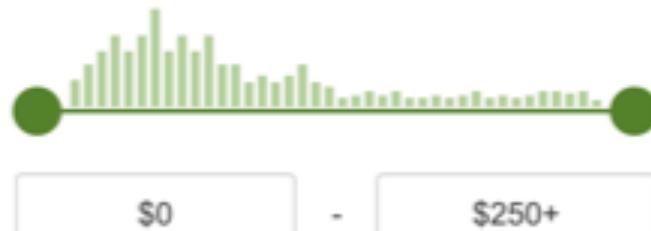
Sort & filter

Sort by

Recommended

Price Range

The average price per room is \$120



Suggested filters

Swimming pool

Breakfast included

Barrier free

Show more

Barrier Free

Star rating

5 stars

4 stars

3 stars

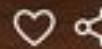
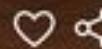
Show more

Filter
popup



Shibuya Stream Excel Hotel Tokyu

Grand opening on September 13, 2018 @ Directly connected to Shibuya Station (Exit 16B) Space with original design and functionality



Excellent

130 reviews from verified guests

[See more detail](#)

A creative atmosphere combining an interior with old and new items arranged in a fashionable and modern manner along with superior functionality. A creative ...

[See more detail](#)

Hotel facilities



Pool



Free Wi-Fi



Non-smoking



Restaurant



Bar



Parking

[See more detail](#)



3 Chome-21-3 Shibuya, Shibuya
City, Tokyo 150-0002

300m from Shibuya Station



[See all photos](#)

Choose your room



Check in:

9/24/2019



Check out:

9/25/2019



Guests:

2 guests, 1 room



[Filter](#)

2 Beds

Breakfast

Hotel
Information 1

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Hotel Information 2

Choose your room

Check in:
9/24/2019

Check out:
9/25/2019

Guests:
2 guests, 1 room



Filter

2 Beds

Breakfast

[Non-Smoking] standard twin room with great ocean view



1 Twin Bed
24m²
Max 2 Adults / 1 Child

Bath
Television
Non-smoking

[See room details >](#)

360° room viewer



360° interactive movie



Only 1 room left!
Breakfast plan

-75% Today

\$526.75

\$176.66

per room

Reserve

✓ Free cancellation until

04/22

⌚ Earn 300 points (JPY)

🛏 Breakfast ⏰ Early Check-In ✓ Late CheckOut

[Get 35% off coupon](#)

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna ...



[See plan details >](#)

Room only plan

\$185.24

per room

Reserve

✓ Free cancellation until

04/22

⌚ Earn 300 points (JPY)

🛏 Breakfast ⏰ Early Check-In ✓ Late CheckOut

You've successfully claimed this coupon!

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna ...



[See plan details >](#)

Breakfast and dinner plan

\$198.59

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Why Accessibility OTA?



Only Carefully-Selected Hotel

-> Filtering with “Barrier free”



360° Room Viewer

-> Never miss the tiny obstacle

[Demo](#)



360° interactive FPV movie

-> End-to-end path simulation in detail

[Demo](#)



Usability Test

Usability Test

How I conducted



Participants

- 2 wheel chair users interested
- Both interested in accessibility OTA



Method

- Zoom Interview
- 30-60 min
- Complete the task



Task

- Finish the reservation
- Start: hotel information page
- End: until they request to click 'reserve' button
- * *Not until reservation confirmation*

Usability Test

Result



It works

- They could finished reservation in hotel info page
- Both 2 tester used accessibility features and checked the accessibility detail



Limitation

- They control UI not directly, but through my screen
- Not until the reservation confirmation in the next page



Competitive Analysis

Positioning





What I learned

Daily Report

Daily report

一次面談

カジュアルに色々楽しく話せた

一次だけで来てくださいって言われて嬉しかった

プロダクトマネージャーという、今までやってきた中で一番スキルが広げかせそうな職種

とりあえず受けた

面談提出した

2/17 水曜

* セットアップ

* ジュリアンさんと顔合わせミーティング

* ジュリアンさんとTerriさんのミーティング

インターン初日だった。Viberでのやりとりが基本だった。セットアップで手間取ってしまった
ロダクトが、どうすればより多くの人に、より効率的に使ってもらえるようにできるのかを

Presentation finished. Filled attendance of this month. Trying to understand what's going on in the meeting. Prepared data for the persona. Microtask

3/8

- Add information to website
 - Academic info
 - My number
- Try to write PRD and wishlist with confluence
- Join IT training tool lecture on zoom

3/9

- User interview
 - Shingo
 - Fujita-san
 - Miyo-chan
- Join meeting
 - Everest SWH sync
 - Everest Status hearing

3/10

- Data & Box の My Folder IC
 - Analysis を見つけた
 - ↑ Tiffany にも分析してもううる
 - +その前にミーティングの予約をする
 - + Analytics meeting: they are taking definition: reservation_time and cancellation_time
 - * there are two bugs: PRD bug, technical bug
 - * Julian list up dimension name
 - PDM meeting
 - * Feedback from suppliers
 - * generally good
 - * Go to coupon create page is now available but don't create!
 - * Kaneko-san will leave Rakuten end of this month
 - * Introduction of Takahashi san
 - * Developing his own service related to Travel
 - * Likes car driving and traveling
 - * Speciality on computer vision

3/11

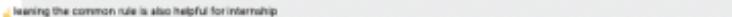
- Observation report by ppt with Tiffany ppt
 - survey data
 - reservation
 - Insights on Conferences-with-template
 - traveler-experience-forming-to-travel
 - PDM meeting for catch-up with Terri-san
 - * Everest: status hearing for the DRHUI related
 - * Status confirmation
 - * Data catalog の内容（サンプルデータもほしい）

3/10 Wed

- Dig the interview
- Join the meeting at Everest 面接 step確認

3/12

- Find insights
- Analytics NextStage Weekly meeting
- PDM Meeting
 - * Update from Kumagai-san, ITC lab on 2/19, OTA means Online Travel Agency? RC means for what? like RC 2.0!
 - * Web Design Rule that proposing installing the common rules, which saved 24% per month

 Planning the common rule is also helpful for internship

- Greeting with Tanmay
 - * Next week
- Insight report in catch-up
 - * They modified Data catalog, which added data-example, description, note, also confirmed the definition of the word, like "review"

3/15

- Office visit
- Meet with other interns

3/25

- Usability Test Demo by Steve Krug
 This video shows an example of a complete usability test. I created it originally for readers of Rocket Surgery Made Easy: The Do-it-Yourself Guide to Finding...
- <https://www.youtube.com/watch?v=tUDDQUBlaS8>

Usability test

- * With 2 persons
- * Separate the position state as A and B
 - * A: Not shown in the page, just appear when user click "see room detail"
 - * B: Shown in the page, just below the room pictures

Procedure

1. Explain the features like room-around-view and end-to-end path movie
2. Explain the position of the 2 features in the website mock up
3. Give them the situation; Let's make appointment from this page
4. Let them control the website by requesting me to scroll or click during my screen sharing

Result.1 (state A)

1. Check the room picture
2. Check the room-around-view (esp. Where he take off his shoes, bath, toilet)
3. Check the end-to-end path
4. Check the breakfast venue
5. Check enquiry form (not shown in the page, might be shown in the reserving page)

Result.2 (state B)

1. Check the hotel picture
2. Check the room picture
3. Check the room-around-view (esp. door size, bath, toilet)
4. Check the end-to-end path
5. Check the access map
6. Check the phone number, but she couldn't get (not shown in the page)

Feedback

As for the position of the accessibility features: room-around-view and end-to-end path, they both recommended state B (shown in the page).

P1: 50+ user maybe can not find that feature if state A

P2: It's easy to find the feature if state B. It should be appealed in front.

Limitation

They can't control the actual user interface, just requesting me to control it.
 The accessibility features were not implemented. I just explained it and ask them to imagine it, before the test.

Usability test

3/26

- Presentation
- touch Beautiful.ai
- Sort out the data and upload to BOX
- user interview (add to the existing one)
 - user-feedback-for-SNS
 - user-feedback-3-(1 audio, 2 zoom)
 - usability-test-2-(2 zoom)
- Reflect the feedback from Julien
 - Add specific indicator
 - Refer the other intern's PRD

3/27

- Modify PRD
 - Add filtering feature
 - Make presentation

3/29

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COMPETITIVE_ANALYSIS
IT_TRAINING_LECTURE

ISSUE-DRIVEN

TORII-SAN JOHN ASAKAI

FIND_INSIGHT PAIN_POINT

PRD KUMAGAI-SAN LUXURY

USABILITY_TEST

PRODUCT_MANAGEMENT

PRIORITIZE

EXTRANET FIGMA TANMAY IMRAN CONFLUENCE CATCH_BOX

JULIENS MENTORING DESIGN THINKING USER_RESEARCH

REFRAME LANDSCAPE WISH_LIST

HENDRICK OFFICE_VISIT MANY_MEETING KWON TAKEI-SAN EVEREST

KANEKO-SAN

REFRAME OBSERVATION

MARC GO CRIMSON_BTB HOUSE REPORT KURI BEAUTIFUL.AI WORKDAY

DATA_CATALOG

SOLUTION_MAP

SCOPE

DWH DAN

CHRIS

DINNER_WITH_RYO&MIA

▶ Why PDM intern?

- ① Learn and know what PDMs do in Rakuten
- ② Utilize PDM skills for my own business / research

▶ What will I do in PDM intern?

- ① Join the meetings and learn how PDMs work
- ② Study PDM with article / book / previous PRDs
- ③ Write PRD ← ✓ Main Task!
- ④ Connect PDMs and other Rakuten members



Clear!
(Partly)

▶ Why PDM intern?

- ① Learn and know what PDMs do in Rakuten
- ② Utilize PDM skills for my own business / research

Go for it

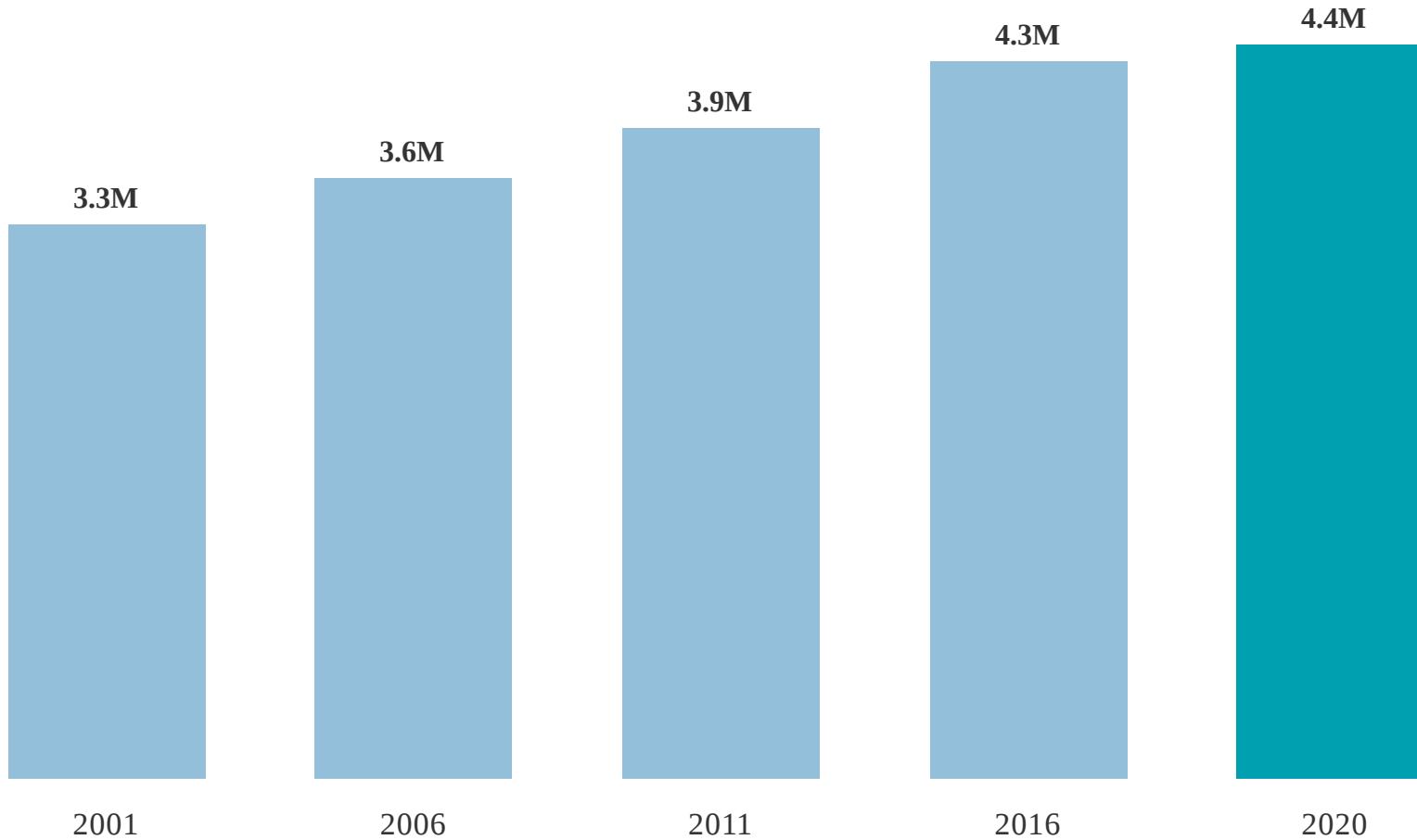
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Thank you!

Number of physically disable In Japan



THE NUMBER OF
PHYSICALLY DISABLE:

4.4M

The number is
expected to continue
to grow in the future

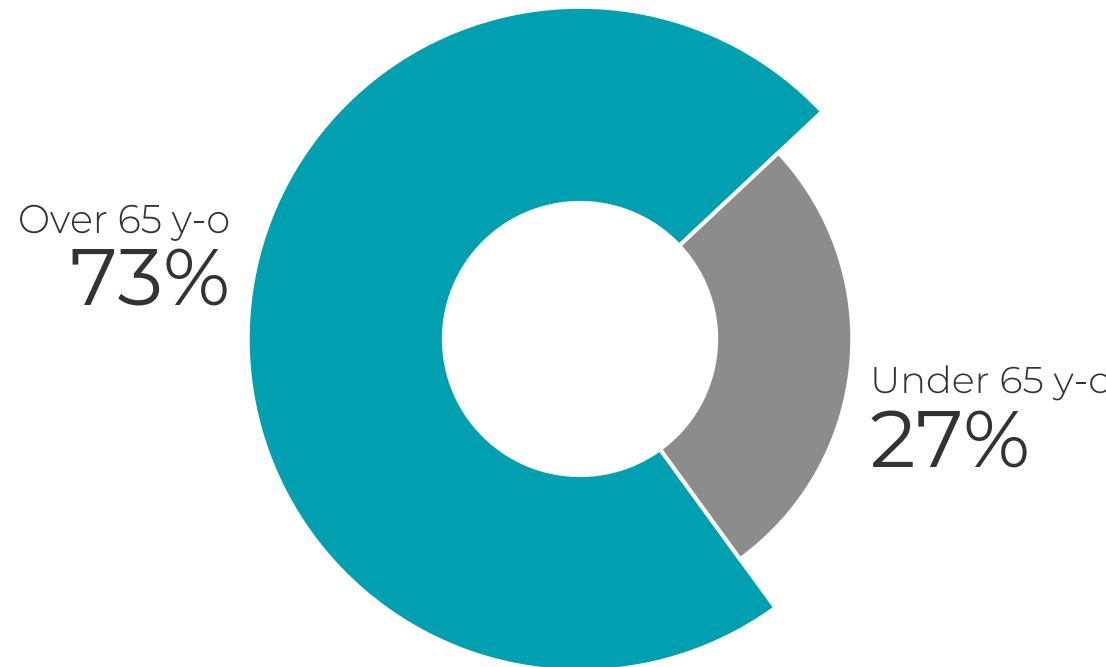
IF THEY COULD TRAVEL...

1.2
yen

Calculation:

33M: over 65 years old people * 0.35: rate of physically disabled in aged people
* 50000: average spent in travel in 70s * 2: assuming to have an attendant

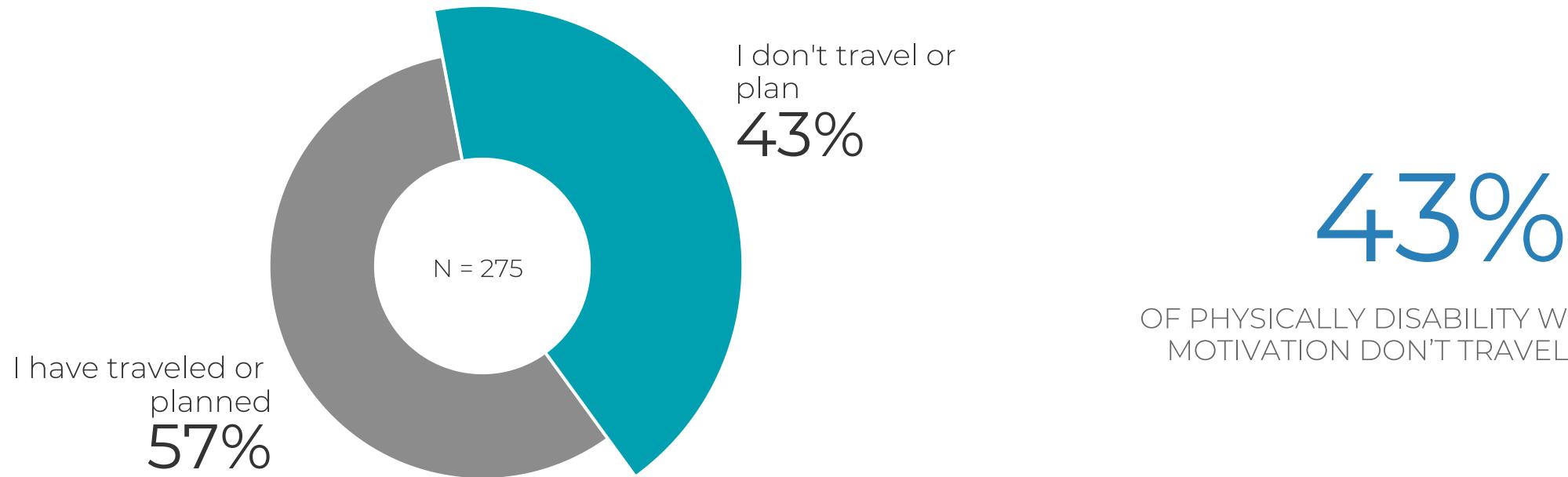
Age distribution of physically disabled



73%

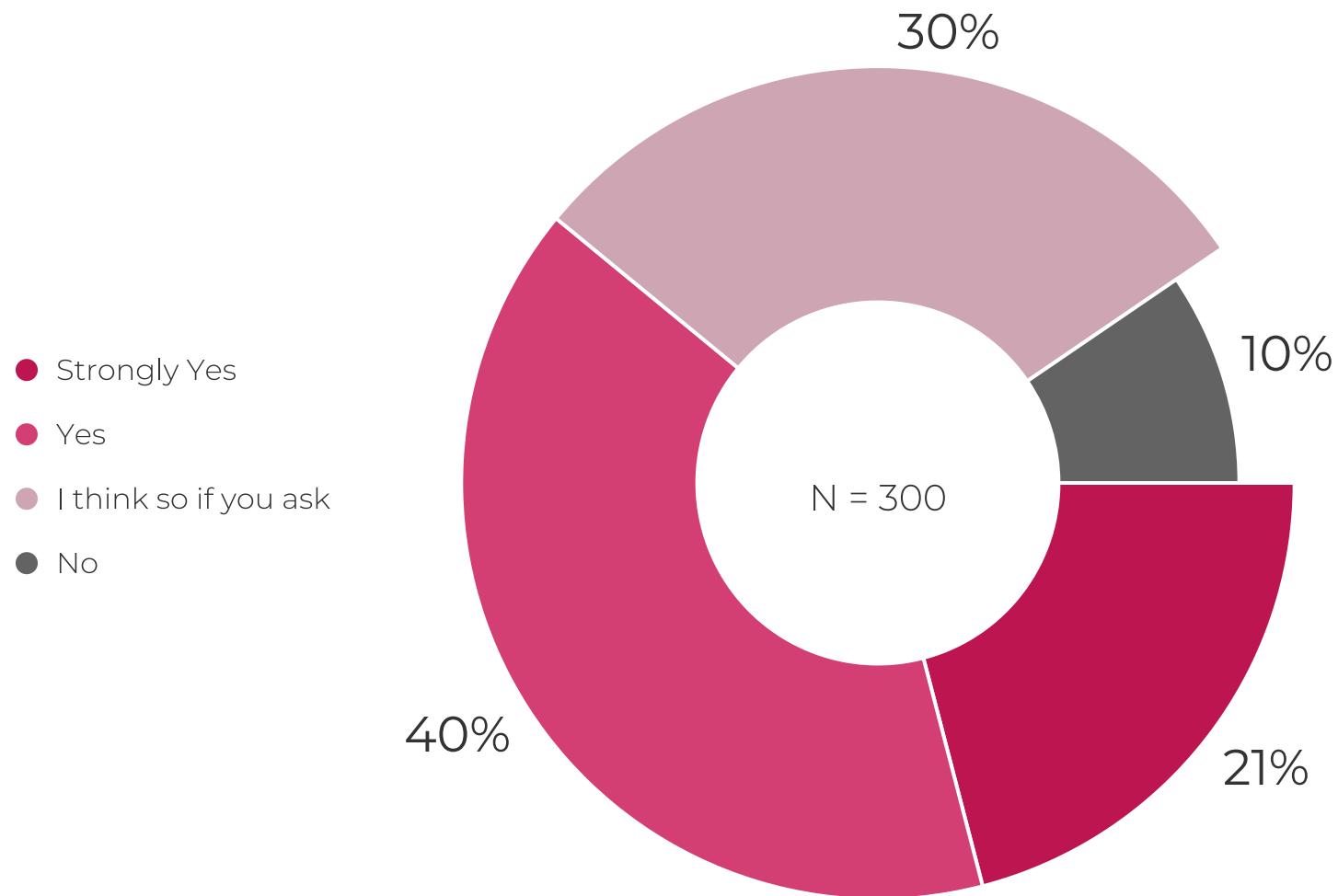
OF PHYSICALLY DISABILITY ARE OVER 65
YEARS OLD

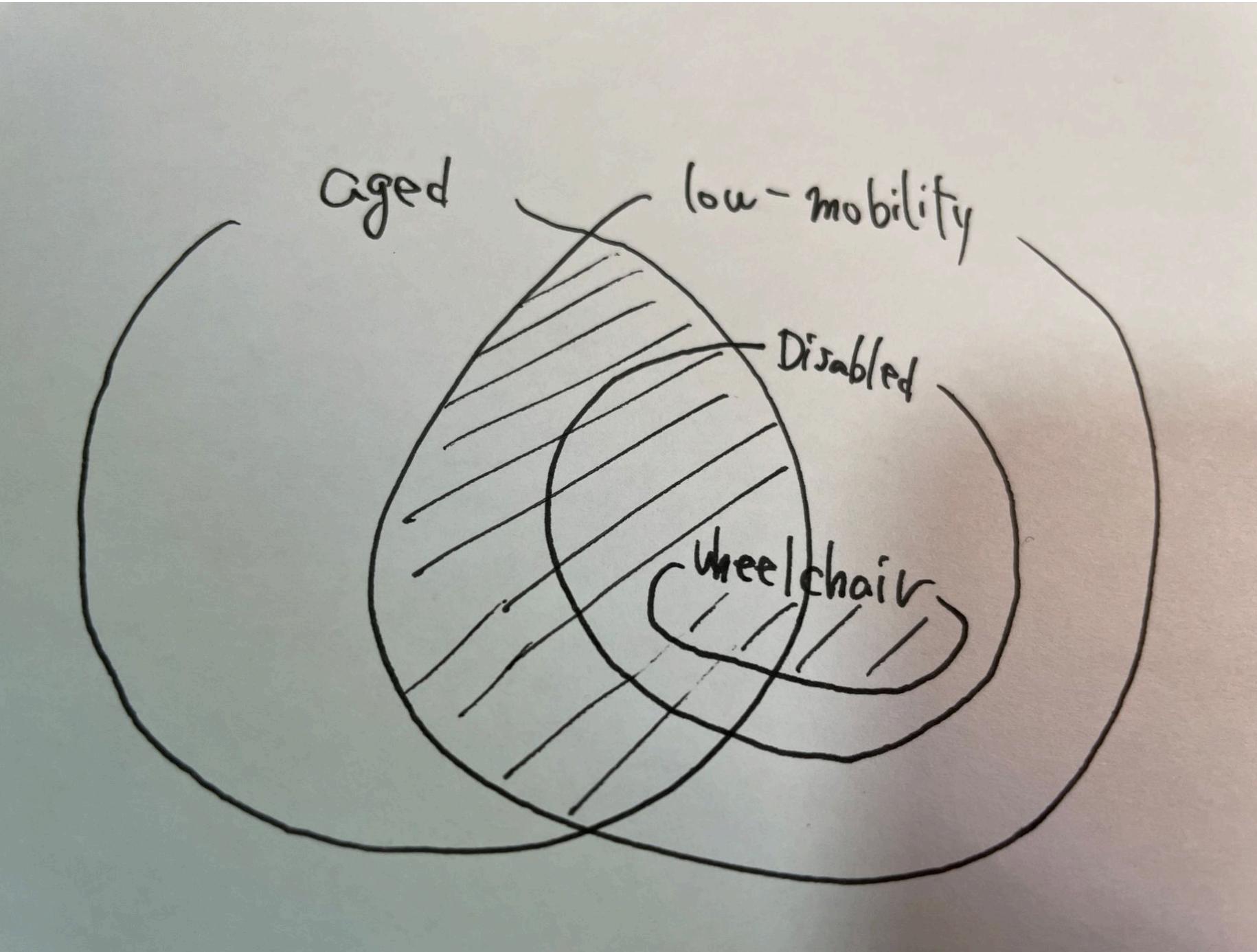
Have they traveled / planned a trip before?



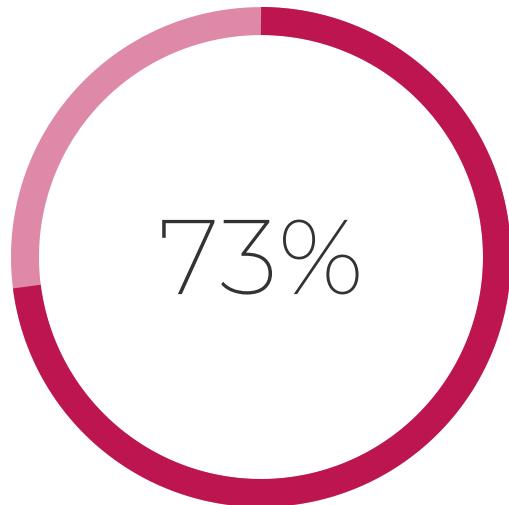
OF PHYSICALLY DISABILITY WITH TRAVEL
MOTIVATION DON'T TRAVEL OR PLAN

Do you think that the accommodation information provided online or in books is not enough?

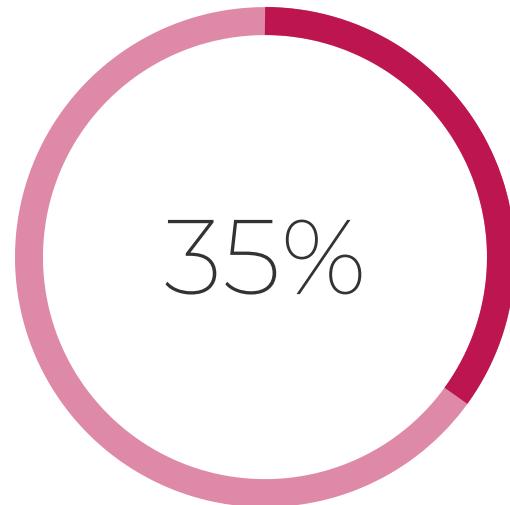




Statistics



73% of physically
disabled are 65+ years
old

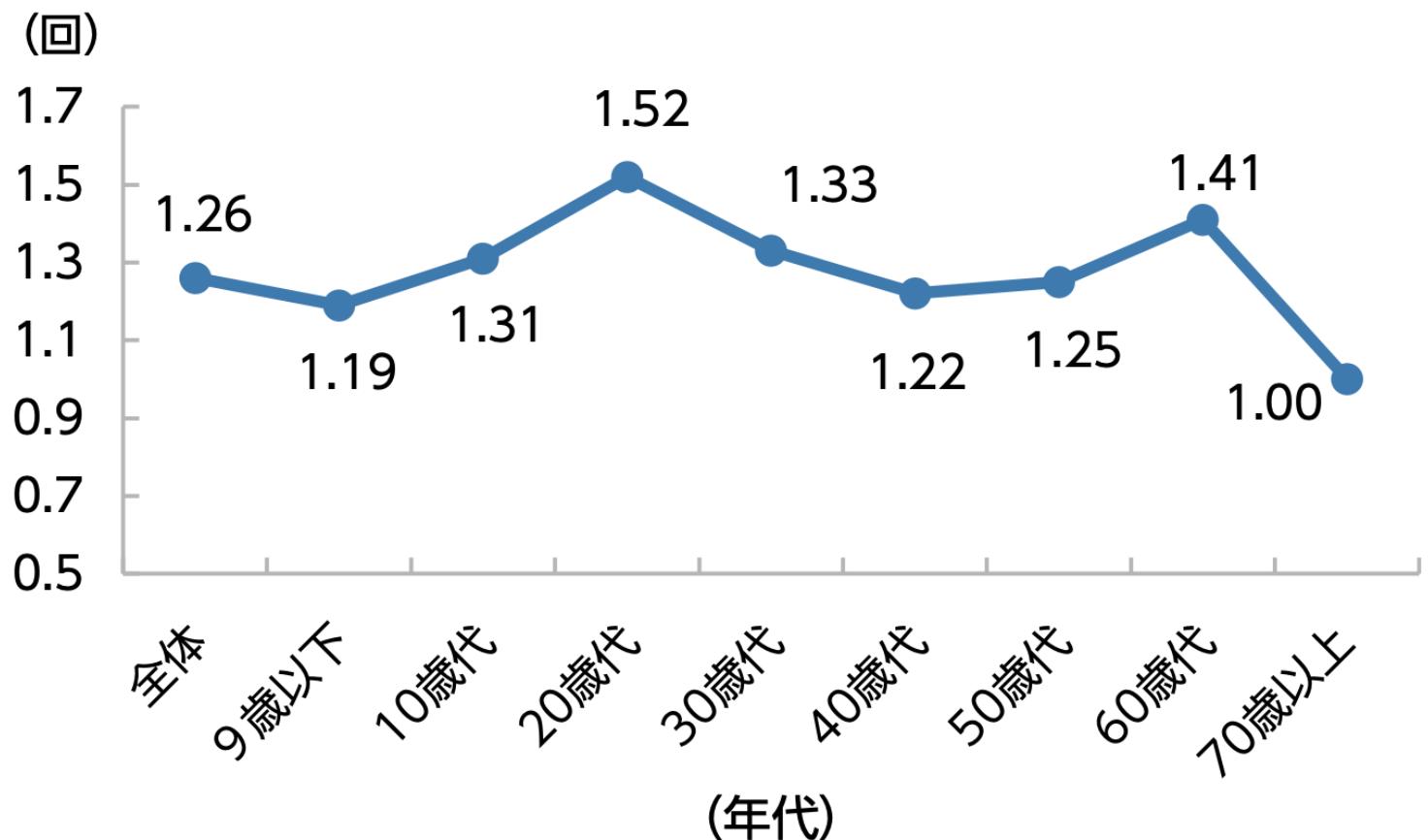


35% of 65+ years old
people are physically
disabled

図表1 一人当たり年間平均国内宿泊旅行回数

Plunge in 70s

The average number of annual trips drops sharply in the **70s**



https://www.fir.co.jp/fs_bk/201810/26-29.pdf

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