Customer Insights

- Survey respondents are generally **neutral or satisfied** with their primary navigation apps (n=35), but among the reasons for dissatisfaction / further improvement, **about half** (5/11, or 45%) cited difficulty translating 2D map into 3D directions (selected C in Q4) - this is our product team's **1st JTBD**.

  1st JTBD: **When** I need navigation to Bryant Park, **I want to** turn on my phone camera to scan the surroundings and see clear directions on my screen, **so that I can** walk to Bryant Park in the most efficient way without going on a detour or in the wrong direction

- Our team initially hypothesized that this is a blatant problem, but among respondents who rated 4 or 5 for user experience improvement in Q5 (high level of UX improvement if a 2D to 3D mapping feature is implemented), **only 19%** (3/16) cited difficulty translating 2D map into 3D directions (selected C in Q4) as the reason for dissatisfaction / further improvement. Further, **69%** (11/16) of such respondents are actually **satisfied** with their primary navigation apps, suggesting that the problem is actually **latent**.

- Related to this, we further tested if a competitor's implementation of a similar feature (2D to 3D mapping using smartphone camera) would prompt respondents to switch (Q6) and **~14%** of respondents (5/35) rated the likelihood to be 4 and above (and **~9%** or 3/35 rated 5 - will definitely switch). Based on the estimated monthly active user (MAU) and annual revenue of 1B[1] and $11B[2] respectively, the **competitive threat** represented by this opportunity is **~90M MAUs** and **$990M** in **annual lost revenue** (estimated based on % respondents who will definitely switch) and could further create an opening for competitors to use Maps to attack other Google suite of products, especially for **~6%** (2/35) of users who are already neutral on Google Maps.

- Switching to our **2nd JTBD**, **51%** of respondents (18/35) rated 4 and above for UX improvement if camera scan to show store information is added to their primary navigation apps (Q9). This proportion is **slightly higher** than the **46%** (16/35) that we received when we tested our 1st JTBD (Q5).

  2nd JTBD: **When** I'm exploring the restaurant near my current location**, I want to** use my phone camera and point to the storefronts, **so that I can** get all relevant restaurant information popping up on my screen (rating, price range, reviews, etc.)

- Similarly, from the competitive dynamics standpoint, **~17%** of respondents (6/35) rated the likelihood to switch to be 4 and above (**~11%** or 4/35 rated 5 - will definitely switch) should a competitor build a feature that allows camera scans in navigation apps to show store info (Q10). Based on similar estimates, the competitive threat is **~110M MAUs** and **$1.2B** in **annual lost revenue** (estimated based on % respondents who will definitely switch). This analysis suggests that our **2nd JTBD** should be **prioritized** over the 1st.

[1] https://www.enterpriseappstoday.com/stats/google-maps-statistics.html
[2] https://www.businessofapps.com/data/navigation-app-market/

Survey Design

Q1. On a scale of 1-5, how often do you use navigation apps such as Google Maps or Apple Maps when you travel within a city (could be the one you live in or just visiting)?

A. 1 (never)
B. 2
C. 3
D. 4
E. 5 (always: I constantly refer to the apps for which subway stop to get off or which intersection to turn)

Q2. Which of the following navigation apps do you prefer/use the most?

A. Apple Maps
B. Google Maps
C. Waze
D. Other:____

Q3. How satisfied are you with the navigation apps when you travel within a city?

A. N/A: I never use them
B. Unsatisfied
C. Neutral
D. Satisfied

[Go to this section only if user answered B or C in Q3; otherwise jump to Q7]

Q4. If you are neutral or unsatisfied with the navigation apps, what is the primary reason? (select all that apply)

A. Low accuracy of the map info (location, traffic, public transportation, etc.)
B. Bad navigation route planning
C. Hard to find the right direction from the 2D map
D. Other:____

Q5. On a scale of 1-5, how much do you think an added function, which allows you to use your phone camera to scan your surroundings and shows the right direction / street to go to, would improve your user experience?

A. 1 (no improvement at all)
B. 2
C. 3
D. 4
E. 5 (significant improvement)

Q6. If your daily go-to navigation app (e.g. Google Maps) did not implement the function described in the previous question but another navigation app (e.g. Apple Maps) did, on a scale of 1-5, how likely are you to switch based on this function alone?

A. 1 (not likely at all)
B. 2
C. 3
D. 4
E. 5 (will definitely switch)

Q7. Switching to a different topic, on a scale of 1-5, how likely are you to explore the city you currently live in (i.e. no pre-planned destinations; explore new restaurants, bars, shops around your neighborhood or at completely new locations)?

A. 1 (never happens)
B. 2
C. 3
D. 4
E. 5 (always)

Q8. When you explore the city, on a scale of 1-5, how likely are you to use a navigation app for information (i.e. menu, price, rating, review, etc.)?

A. N/A: I never explore
B. 1 (never happens)
C. 2
D. 3
E. 4
F. 5 (always)

[Go to this section only if user answered C-F in Q8; otherwise conclude the survey]

Q9. If you use a navigation app for information, on a scale of 1-5, how much do you think an added function, which allows you to use your phone camera to scan the storefronts and shows the key information (menu, price, rating, review) on the screen, would improve your user experience?

A. 1 (no improvement at all)
B. 2
C. 3
D. 4
E. 5 (significant improvement)

Q10. If your daily go-to navigation app (e.g. Google Maps) did not implement the function described in Q9 but another navigation app (e.g. Apple Maps) did, on a scale of 1-5, how likely are you to switch based on this function alone?

A. 1 (not likely at all)
B. 2
C. 3
D. 4
E. 5 (will definitely switch)