

Dublin Dashboard Survey Report

Background Summary

Tool: Google Forms

Respondents: 40

Test Subject: Website Dashboard

Average Completion Time: 00:21:45

Goals:

- Ensure veracity of data e.g. age, source etc
- Logical navigation patterns
- Data meaning and usability
- Consistent thematic presentations of data

Demographics:

| User Profile | Quantity |
|--------------|-----------|
| Novice | 17 |
| End-User | 14 |
| Advanced | 9 |
| Total | 40 |

| Age | Quantity |
|--------------|-----------|
| 18 - 24 | 2 |
| 25 - 34 | 15 |
| 35 - 44 | 14 |
| 45 - 54 | 5 |
| 55 - 64 | 2 |
| 65 + Over | 2 |
| Total | 40 |

| Gender | Quantity |
|-------------------|-----------|
| Women | 15 |
| Men | 23 |
| Prefer not to say | 2 |
| Total | 40 |

| Dashboard Familiarity | Quantity |
|-----------------------|-----------|
| Not Familiar | 17 |
| Moderately | 12 |
| Very | 11 |
| Total | 40 |

Methodology:

Two forms of data were collected:

- *Qualitative*: Qualitative data including participant comments.
- *Quantitative*: Quantitative data including category ranking metrics as well as general frequency of similar terms used.

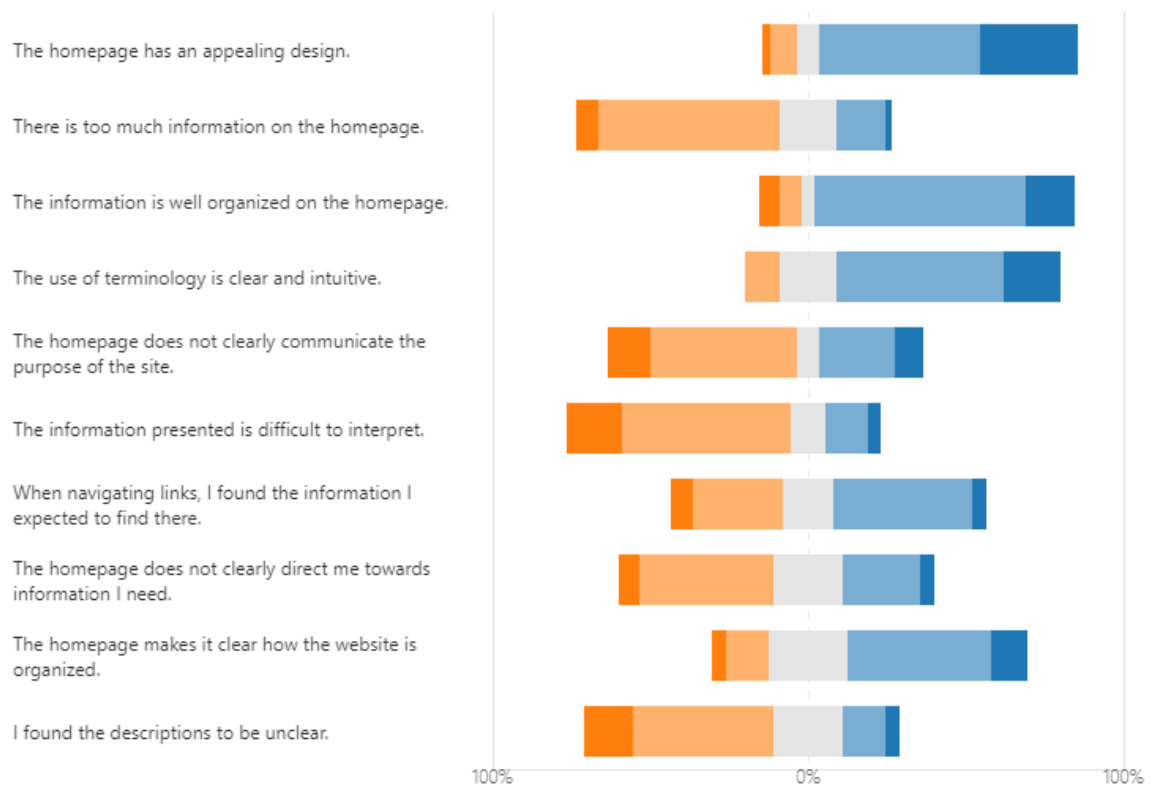
Test Results + Findings

Homepage Evaluation:

10. Please rank the following statements about the homepage.

[More Details](#)

Strongly Disagree Disagree Neutral Agree Strongly Agree



| | 1 - Strongly Disagree (%) | 2 - Disagree (%) | 3 - Neutral (%) | 4 - Agree (%) | 5 - Strongly Agree (%) | Median |
|---|---------------------------|------------------|-----------------|---------------|------------------------|--------|
| The homepage has an appealing design | 1 (2.5%) | 4 (10%) | 3 (7.5%) | 22 (55%) | 10 (25%) | 4 |
| There is too much information on the homepage | 3 (7.5%) | 23 (57.5%) | 7 (17.5%) | 7 (17.5%) | 0 (0%) | 2 |
| The information is well organized on the homepage | 2 (5%) | 3 (7.5%) | 2 (5%) | 27 (67.5%) | 6 (15%) | 4 |
| The use of terminology is clear and intuitive | 0 (0%) | 4 (10%) | 6 (15%) | 23 (57.5%) | 7 (17.5%) | 4 |
| The homepage does not clearly communicate the purpose of the site | 6 (15%) | 18 (45%) | 3 (7.5%) | 10 (25%) | 3 (7.5%) | 2 |
| The information presented is difficult to interpret | 8 (20%) | 20 (50%) | 5 (12.5%) | 6 (15%) | 1 (2.5%) | 2 |
| When navigating links, I found the information I expected to find there | 3 (7.5%) | 11 (27.5%) | 7 (17.5%) | 18 (45%) | 1 (2.5%) | 3 |
| The homepage does not clearly direct me towards information I need | 3 (7.5%) | 17 (42.5%) | 10 (25%) | 9 (22.5%) | 1 (2.5%) | 2.5 |
| The homepage makes it clear how the website is organised | 2 (5%) | 5 (12.5%) | 10 (25%) | 18 (45%) | 5 (12.5%) | 4 |
| I found the descriptions to be unclear | 7 (17.5%) | 17 (42.5%) | 9 (22.5%) | 6 (15%) | 1 (2.5%) | 2 |

Success Rates:

Task 2 (“What was the most recent annual population count for Dublin and when was it last updated?”) had the highest completion rate at 92.5% with only 1 error. Conversely, Task 5 (“How many social houses were built in Fingal in the last quarter?”) had the lowest completion rate at 82.5% and the second highest error rate of 5. The lowest error rate was found on Task 3 (“Which motorway is experiencing the longest delay and how long is the delay?”).

| | Task 1 | Task 2 | Task 3 | Task 4 | Task 5 | Task 6 |
|-----------------|--------|--------|--------|--------|--------|--------|
| Success | 34 | 37 | 34 | 35 | 33 | 36 |
| Errors | 1 | 1 | 6 | 4 | 5 | 3 |
| Completion Rate | 85% | 92.5% | 85% | 87.5% | 82.5% | 90% |

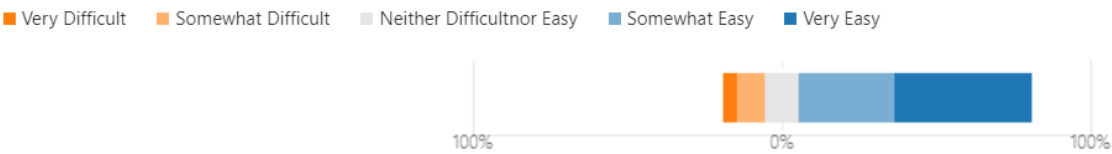
Section 3: Tasks 1 - 3

Ease of Completion:

After the completion of these tasks, participants rated the ease or difficulty of completing them across a 5-point rating scale. The scale ranged from 1 (Very Easy) to 5 (Very Difficult) and the median calculated across all answers.

14. Overall, how difficult or easy were these tasks to complete?

[More Details](#)



Most participants found it was easy to complete the tasks (median agreement rating = 2). 47.5% of respondents found the tasks very easy to complete while 15% found them either somewhat difficult or very difficult.

| | 1 – Very Easy (%) | 2 – Somewhat Easy (%) | 3 - Neutral (%) | 4 – Somewhat Difficult (%) | 5 – Very Difficult (%) | Media n |
|--------------------|-------------------|-----------------------|-----------------|----------------------------|------------------------|---------|
| Ease of Completion | 19 (47.5%) | 10 (25%) | 5 (12.5%) | 4 (10%) | 2 (5%) | 2 |

Upon completion of the tasks, participants provided feedback for why believed they found these tasks easy/neutral/difficult to complete:

Easy:

| Sample Comments | Summary |
|---|--|
| <ul style="list-style-type: none">• “The information is presented in clearly marked areas (widgets)”• “Had an easy user interface that I intuitively understood”• “The information is presented clearly, and it is possible to quickly interpret it.” | <ul style="list-style-type: none">• Clear indicators• Well organised• Intuitive• Visual rather than textual clues |

Neutral:

| Sample Comments | Summary |
|---|--|
| <ul style="list-style-type: none">• “The information is clearly presented but it is unclear how accurate the information is - would be good to know more about how the database is kept updated.”• “There is a lot of information, which took a little longer to sift through before I found what I was looking for. I like the darker look of the dashboard.” | <ul style="list-style-type: none">• Unsure of accuracy• More info about how database is updated• A lot of information on homepage, slow to find answers.• Liked dark look |

Difficult:

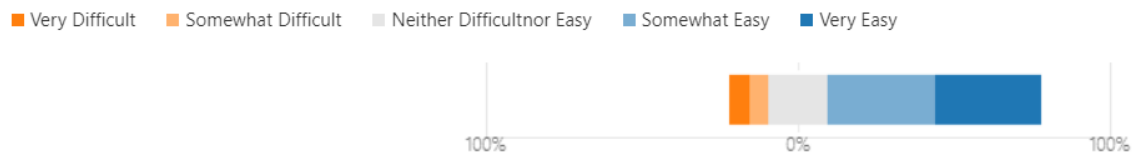
| Sample Comments | Summary |
|--|---|
| <ul style="list-style-type: none">• “The motorway delay was only found on the homepage. And I was unable to navigate beyond that (i.e. clicking into it, did not uncover modular/isolated stats)”• “I can’t find the information for the first 2 questions. It’s not clear at all where this information could be.”• “The titles are not always self-explanatory.”• “A description would help with each link as you hover over.”• “Very hard to navigate back and forth, design changes on each page.”• “Important info not apparent/differentiated”• “Needs query tools”• “The motorway question was hard because the dashboard is only displaying delays for one motorway. when I clicked on that tile for more information, it took me to the “Queries” page with a “What are my transportation options?” dropdown. when I click on the “Motorway” tile above the map, nothing happens.” | <ul style="list-style-type: none">• Titles are unclear• Navigation to further info unclear• Description on homepage cards not apparent• Design not cohesive across pages• Hierarchy of info not apparent• Search function not working• Real time Motorway data linked to queries not source |

Ease of Homepage Navigation:

After the completion of these tasks, participants rated the ease or difficulty of completing them across a 5-point rating scale. The scale ranged from 1 (Very Easy) to 5 (Very Difficult) and the median calculated across all answers.

16. How easy or difficult was it to navigate the Homepage?

[More Details](#)



Most participants found it was easy to complete the tasks (median agreement rating = 2). 34.5% of respondents found the tasks very easy to complete while 12% found them either somewhat difficult or very difficult.

| | 1 – Very Easy (%) | 2 – Somewhat Easy (%) | 3 - Neutral (%) | 4 – Somewhat Difficult (%) | 5 – Very Difficult (%) | Median |
|-----------------------------|-------------------|-----------------------|-----------------|----------------------------|------------------------|--------|
| Ease of Homepage Navigation | 11 (34.5%) | 11 (34.5%) | 6 (19%) | 2 (6%) | 2 (6%) | 2 |

Upon completion of this task, participants provided feedback for any other issues that they may have had when using the homepage:

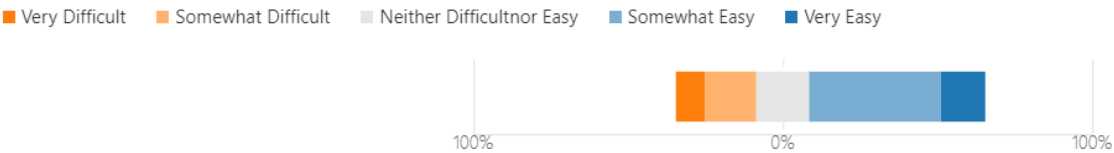
| Sample Comments | Summary |
|--|---|
| <ul style="list-style-type: none"> • “The word "Themes" is quite vague for the title of the data visualizations page.” • “Themes is a non-intuitive term, as its intention is not clear until the description is read. Similar for 'issues' used in the description. Alternative terms that come to mind are 'Topics' and 'Sections'.” • “The word "Queries" is needlessly technical” • “The lower portion of the home page doesn't have particularly structured information.” • “Unsure what a white arrow meant” • “When I click into Dublin Bikes, when I am finished with that Fingal Disabled Parking Bays comes up after it, but I think I should just get the information I want, with a link to further explore other options.” • “Slight issue of differentiating between the 4 LAs in Dublin, the blue shades are quite similar” • “Some widgets are not clickable, i.e. they do not behave as hyperlinks, e.g. Weather Forecast widgets.” • “In the 'About Dublin' section it seemed more logical to read from top to bottom rather than left to right so it appeared at first as though information was missing.” • “When I click on the Motorway Delays tile, the following page doesn't provide this information. I was expecting something like google maps but instead it only provides information on the bikes available.” • “It would be very helpful to have textual information as to what each image/link contained. It appears that there is lots of great information on the site but it is difficult to navigate and find.” • “Colour differentiators not used well to decipher importance.” • “Clicking the "stories" and "queries" doesn't really show you very much right now.” | <ul style="list-style-type: none"> • Title/Section names are unclear • Homepage content lacks structure • Icons not intuitive • Graph sections flow into each other • Hard to differentiate between the 4 LAs • Clickable cards not differentiated from static info on homepage • About Dublin section text is disorganised • Real time Motorway data linked to queries not source • Hard to navigate • Lacks textual information • Hierarchy of info not apparent • Lack of content on stories and queries pages |

Section 4: Tasks 4 - 6

Ease of Completion:

21. Overall, how difficult or easy were these tasks to complete?

[More Details](#)



Most participants found it was easy to complete the tasks (median agreement rating = 2). 40.5% of respondents found the tasks somewhat easy to complete while 30% found them either somewhat difficult or very difficult.

| | 1 – Very Easy (%) | 2 – Somewhat Easy (%) | 3 - Neutral (%) | 4 – Somewhat Difficult (%) | 5 – Very Difficult (%) | Median |
|--------------------|-------------------|-----------------------|-----------------|----------------------------|------------------------|--------|
| Ease of Completion | 6 (16%) | 15 (40.5%) | 5 (13.5%) | 7 (19%) | 4 (11%) | 2 |

Upon completion of the tasks, participants provided feedback for why believed they found these tasks easy/neutral/difficult to complete.

Easy:

| Sample Comments | Summary |
|---|---|
| <ul style="list-style-type: none">• “Data presented simply”• “I think it was relatively easy but I did have to scroll to find the information I needed to answer the question, so maybe some sort of index would be helpful.”• “It’s easy to find the information as everything is on the graphs and markers work well. The only exception of markers not working is the “Monthly House Unit Completions” graph under Themes: Housing, where I couldn’t see the month.”• “The extra info that appears when the cursor is hovering over the graphs really helps.” | <ul style="list-style-type: none">• Data is accessible• Scrolling without index was difficult• Graphs and hover pop ups are informative |

Neutral:

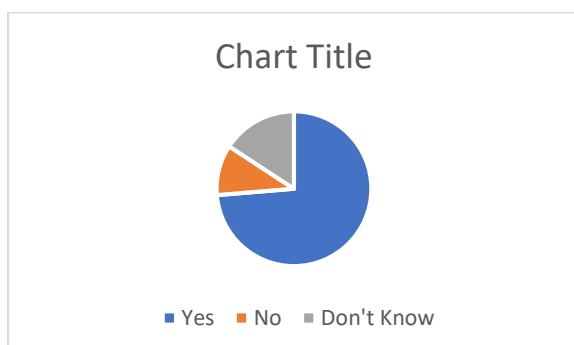
| Sample Comments | Summary |
|---|---|
| <ul style="list-style-type: none">• “Some searching about to do”• “Had to spend a bit of time checking to see if I was looking at the right section for each question” | <ul style="list-style-type: none">• Hard to keep track of place on page |

Difficult:

| Sample Comments | Summary |
|---|---|
| <ul style="list-style-type: none">• “Wasn't immediately sure where to look to find the data - it was hidden in 'themes' “• “Too much scrolling on Themes page”• “Some of the language is more technical than necessary.”• “A more obvious index could've made it quicker to access the relevant data.”• “A lot of data presented on the housing page in many visualisation formats.”• “More thought needs to be put into Interface Design”• “Floating boxes covered cursors on some, no hierarchy or shortened index of information blocks (like on homepage) so they are stacked one on top of the other and hard to find. Granular details unclear in charts” | <ul style="list-style-type: none">• Theme title not intuitive• Too much scrolling• Lack of index slows down navigation through data heavy sections• Graph pop ups obscured in places |

Was the information where you expected it to be?

The majority of participants stated that the information referred to in Tasks 4-6 was where they expected it to be.

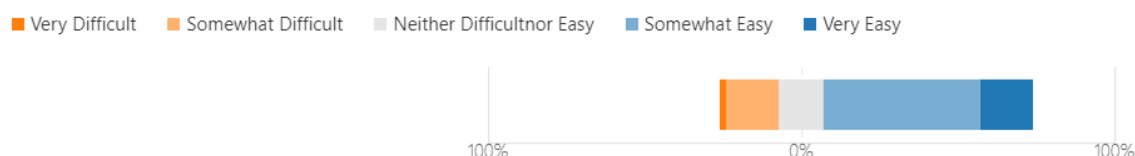


| Answers | Quantity |
|--------------|-----------|
| Yes | 28 |
| No | 4 |
| Don't Know | 6 |
| Total | 38 |

Themes page navigation:

24. How easy or difficult was it to navigate the Themes page?

[More Details](#)



Most participants found it was easy to complete the tasks (median agreement rating = 2). 46% of respondents found the tasks somewhat easy to complete while 21% found them either somewhat difficult or very difficult.

| | 1 – Very Easy (%) | 2 – Somewhat Easy (%) | 3 - Neutral (%) | 4 – Somewhat Difficult (%) | 5 – Very Difficult (%) | Median |
|-----------------------------|-------------------|-----------------------|-----------------|----------------------------|------------------------|--------|
| Ease of Homepage Navigation | 7 (18%) | 18 (46%) | 6 (15%) | 7 (18%) | 1 (3%) | 2 |

Upon completion of this task, participants provided feedback for any other issues that they may have had when using the Themes page:

| Sample Comments | Summary |
|---|---|
| <ul style="list-style-type: none"> “Sometimes pop-out info obscured the background data chart” “Explanatory summary at the top of the page was helpful for navigating the page but it was unclear who the information was aimed at.” “Too much textual information on the page, lots of scrolling, forgot what I was looking for.” “Looks different to the homepage. Text sits beside the graphs into the background and so hard to find the headline info needed. Spacing and alignment is off” “There were two different figures for the "Monthly House Unit Completions" question. It's written 552 for Feb-18 on the homepage, however, when I go into Themes: Housing, I find 111 on "Monthly House Unit Completions" graph” “I moved the tab over to another window and had to make it smaller, so some of the x-axis labels on the graphs started to run into each other.” | <ul style="list-style-type: none"> Graph pop ups sometimes obscured Too much scrolling Too much text Design not cohesive across pages Lacking hierarchy of info Monthly Housing Unit graphs possibly not updating |

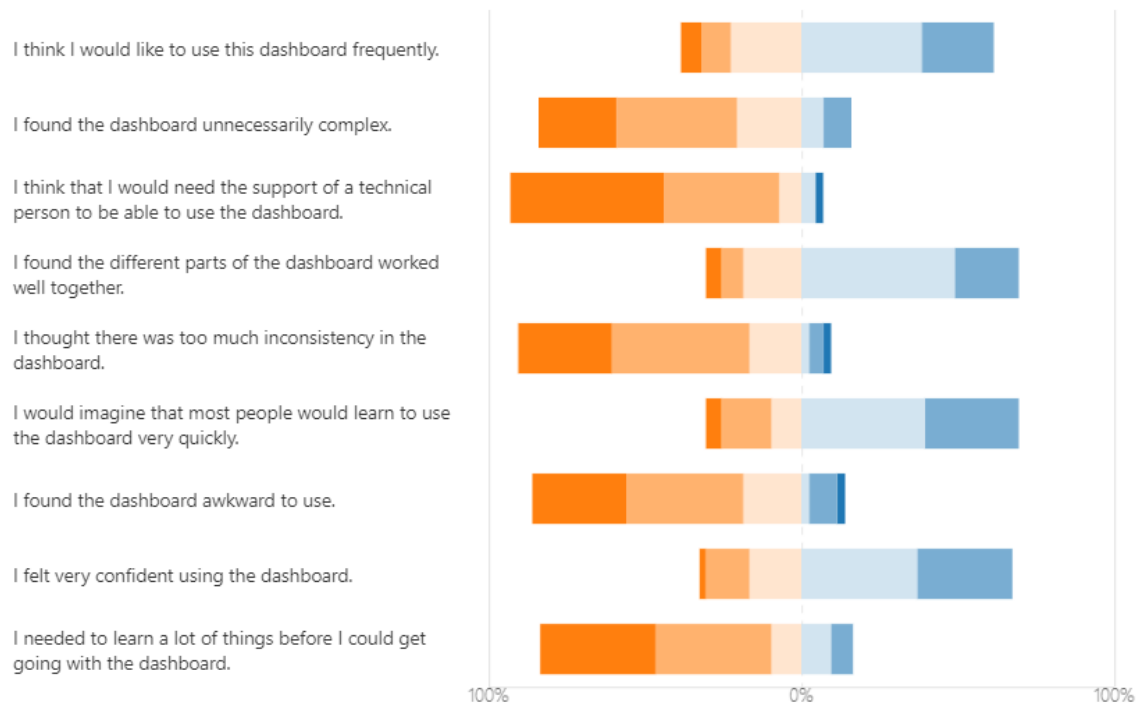
Section 5:

Ease of Completion:

26. For each of the following statements, mark one box that best describes your reaction to the tasks you completed today.

[More Details](#)

Strongly Disagree Disagree Neither agree nor disagree Agree Strongly Agree I don't know



Most participants stated that they would not need the support of a technical person to be able to use the dashboard (median agreement rating = 1). 45% of respondents agreed that the different parts of the dashboard worked well together. 42% disagreed to the statement that they would need to learn a lot of things before they could get going with the dashboard.

| | 1 - Strongly Disagree (%) | 2 - Disagree (%) | 3 - Neutral (%) | 4 - Agree (%) | 5 - Strongly Agree (%) | Median |
|--|---------------------------|------------------|-----------------|---------------|------------------------|--------|
| I think I would like to use this dashboard frequently. | 3 (8%) | 4 (10%) | 10 (25.5%) | 15 (38.5%) | 7 (18%) | 4 |
| I found the dashboard unnecessarily complex. | 9 (23%) | 15 (38.5%) | 8 (20.5%) | 3 (8%) | 4 (10%) | 2 |
| I think that I would need the support of a technical person to be able to use the dashboard. | 20 (54%) | 13 (35%) | 2 (5.5%) | 2 (5.5%) | 0 (0%) | 1 |
| I found the different parts of the dashboard worked well together. | 2 (5%) | 3 (8%) | 7 (18.5%) | 17 (45%) | 9 (23.5%) | 4 |
| I thought there was too much inconsistency in the dashboard. | 12 (32.5%) | 15 (40.5%) | 7 (19%) | 1 (3%) | 2 (5%) | 2 |
| I would imagine that most people would learn to use the dashboard very quickly. | 2 (5.5%) | 7 (18%) | 2 (5.5%) | 15 (39.5%) | 12 (31.5%) | 4 |
| I found the dashboard awkward to use. | 11 (29%) | 14 (37%) | 7 (18.5%) | 2 (5%) | 4 (10.5%) | 2 |
| I felt very confident using the dashboard. | 1 (3%) | 6 (16%) | 7 (18%) | 12 (31.5%) | 12 (31.5%) | 4 |
| I needed to learn a lot of things before I could get going with the dashboard. | 16 (42%) | 12 (31.5%) | 4 (10.5%) | 3 (8%) | 3 (8%) | 2 |

Section 6:

Do you want to tell us anything else about the Dublin Dashboard Homepage or Themes Page?

| Sample Comments | Summary |
|---|--|
| <ul style="list-style-type: none">• “Some graphs updated annually (e.g. annual population) are not very useful in the homepage. More practical information (e.g. transports, public works) would make more sense there.”• “I was expecting the link on the dublin bikes widget would get me to a map showing the bikes available in different places.”• “Background colour scheme was great, allowed me as a user to spend a lot of time concentrating on the data and graphs without getting sore eyes”• “It would be helpful to have an 'About Dublin Dashboard' section on the homepage explaining what the Dashboard is, who are the user groups that might find it useful, who is responsible for building it, and some other information about the scope of the project to contextualise the information for visitors.”• “The dashboard is clearly laid out and is easy to navigate but some of the information seems out of date/incomplete. I think it needs to be clearer that this is a work-in-progress and not a finished product.”• “The information box covers the graphs and obstructs easy access to what you're looking for in places e.g Monthly house unit completion. The Dashboard doesn't display well on Internet Explorer.”• “Images and text on home page are very large.”• “No real guidance as to where to find information. Very much taking a chance that the information you are looking for is contained behind a link.”• “Lacks a universal design throughout”• “ The info. boxes at the top of the Homepage do not seem to be responsive for smaller / mobile screens.”• “I would like to see current events announcements related to Dublin City, such as the 'boil water' notice.” | <ul style="list-style-type: none">• More real time, less historic data on homepage• Bike card sends to Theme graph not bike locations/queries• Dark colour scheme helped users concentrate on relevant information• Missing About Dublin Dashboard section• Incomplete/out of date data• Graph pop ups can obstruct elements• Doesn't display well on Internet Explorer• UI too large on homepage• Lack of navigation guidance• Design is not cohesive• Homepage cards don't appear responsive on mobile |

Do you have any other thoughts or comments to make about the Dublin Dashboard?

| Sample Comments | Summary |
|---|---|
| <ul style="list-style-type: none">• “There is too much information on the homepage and it's very hard to find what you're looking for.”• “Provides at a glance a picture of the city and information is easily accessible.”• “When I went to the motorway delays section, this information was not there and for this reason I would probably use google maps more frequently for this purpose.”• “I am working on social sentiment in the dublin region and i feel it would be an interesting addition to the dublin dashboard. I'm sure i'll be in contact with you in the near future or if you would like to have a look at the 15 global categories that we are tracking that would be of interest to you click here https://smartdublin.ie/dublin-beat/” | <ul style="list-style-type: none">• Homepage too content heavy• Information effective at a glance• Motorway delays not showing relevant data• Smart Dublin Link provided |

Recommendations

Outlined below are recommended changes and justifications driven by the participant success rate, behaviours, and comments. Each recommendation includes a severity rating. The following recommendations will improve the overall ease of use and address the areas where participants experienced problems or found the interface/information architecture unclear.

Severity:

Critical: If we do not fix this, users will not be able to complete the scenario.

Serious: Many users will be frustrated if we do not fix this; they may give up.

Minor: Users are annoyed, but this does not keep them from completing the scenario.

Table of Recommendations:

| Task | Issue | Type | Recommendation | Severity |
|------------------|--|--------------------------|---|----------|
| Q.11, 15, 17, 27 | Difficulty finding information through navigation of links, lack of guidance | Navigation | <ul style="list-style-type: none"> Review nav icons + text Add homepage buttons UI | Critical |
| Q.15, 17, 18 | Section titles are ambiguous | Content Design - Text | <ul style="list-style-type: none"> Review/Change section titles | Critical |
| Q.15, 25, 27 | Design not cohesive across pages | UI - Global | <ul style="list-style-type: none"> Create global cohesive UI | Critical |
| Q.15, 17, 25 | Information hierarchy unclear | Information Architecture | <ul style="list-style-type: none"> Create colour hierarchy Review text sizes + design | Critical |
| Q.15, 17, 27 | Real time motorway data links to queries not source | Navigation/ Data | <ul style="list-style-type: none"> Review motorway card link Add motorway data to queries | Critical |
| Q.17 | Lack of content on stories and queries pages | Data | <ul style="list-style-type: none"> Add data stories Add real time queries data | Critical |
| Q.17, 18 (3), 25 | Too much scrolling on Themes page | Information Architecture | <ul style="list-style-type: none"> Re-design Themes structure | Critical |
| Q.18, 19, 25, 27 | Graph pop ups obscured in places | Graphs | <ul style="list-style-type: none"> Re-position graph pop ups | Critical |
| Q.26 | Incomplete + out of date data | Data | <ul style="list-style-type: none"> Review missing data | Critical |
| Q.15, 28 | Slow to find answers on homepage, cluttered | Content Design | <ul style="list-style-type: none"> Reduce content on homepage | Serious |
| Q.17 | Clickable cards not differentiated from static info on homepage | Information Architecture | <ul style="list-style-type: none"> Remove unclickable cards Add weather + time bars | Serious |
| Q.18 (2) | Can't keep track of place on Themes page | Navigation | <ul style="list-style-type: none"> Add navigation index | Serious |
| Q.25 | Monthly Housing Unit graphs possibly not updating | Data | <ul style="list-style-type: none"> Check Housing unit data | Serious |
| Q.26 | Missing section explaining the Dashboard | Content Design | <ul style="list-style-type: none"> Add About Dashboard section | Serious |
| Q.15 | Homepage card descriptions not apparent | UI - Cards | <ul style="list-style-type: none"> Re-design description hover | Minor |
| Q.15 | Search function not working | Functionality | <ul style="list-style-type: none"> Implement search function | Minor |
| Q.17 | Homepage content lacks structure | Information Architecture | <ul style="list-style-type: none"> Review/redesign homepage UI | Minor |
| Q.17 | Icons not intuitive (white arrows on homepage) | UI - Icons | <ul style="list-style-type: none"> Re-design icons | Minor |
| Q.17 | Hard to differentiate between the 4 LAs | UI - Colour | <ul style="list-style-type: none"> Add differentiating colours to 4 LAs | Minor |
| Q.17 | About Dublin section text is disorganised | UI - Cards | <ul style="list-style-type: none"> Add card for About Dublin text | Minor |
| Q.26 | Bike card sends to Theme graph and not bike locations/queries | Navigation/ Data | <ul style="list-style-type: none"> Review bike card nav link | Minor |
| Q.26 | Doesn't display properly on Internet Explorer | Browser | <ul style="list-style-type: none"> Review browser compatibility | Minor |
| Q.26 | Homepage cards don't appear responsive on mobile | Responsive | <ul style="list-style-type: none"> Add carousel arrows to cards | Minor |

Conclusion

Most participants found the dashboard simple, accessible and with a low learning curve. The dark colour scheme helped users concentrate on relevant information but felt there was a lack of design consistency throughout the site. There was also noted difficulty in clearly identifying whether components are dynamic or static and thus lengthening time on tasks. Having a clear and effective navigation through the site is especially key for digestion and organisation of information on the Themes page. A review of section titles is suggested due to ambiguity of meaning leading participants to have difficulty completing tasks. Incomplete and out of date data was flagged which could affect integrity of the site and user's return. Implementing the recommendations will ensure a continued user-centered website.