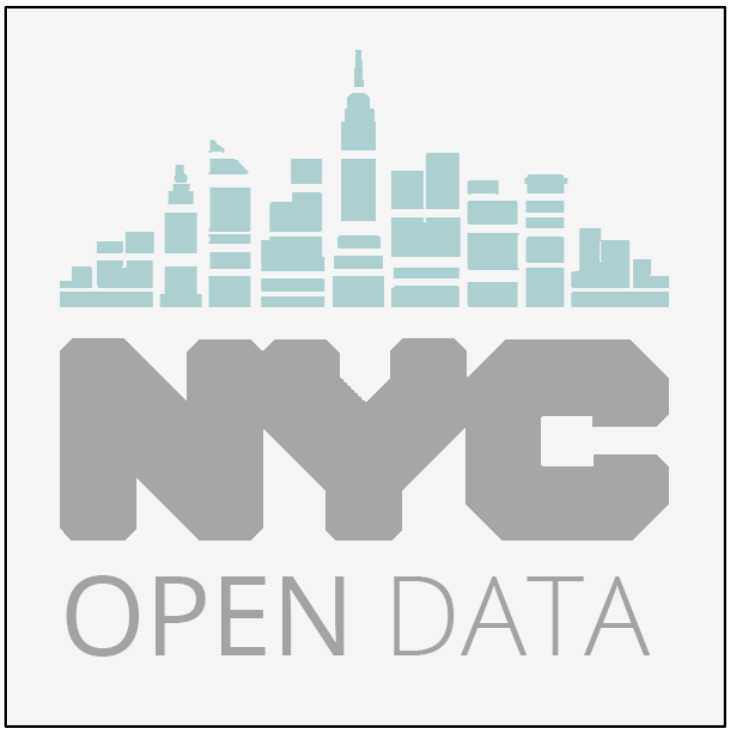
Usability Theory & Practice

User Testing Report

MODA's NYC OpenData Portal



Prepared for

The Mayor's Office of Data Analytics (MODA)

Prepared by

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Pratt Institute

Executive Summary

The New York City Mayor's Office of Data Analytics (MODA) promotes transparency and accountability of its data through its Open Data Portal at nycopendata.socrata.com. This portal provides access to more than 1,400 data sets from over eighty city offices and agencies. The site and data are most commonly accessed by members of community-based organization, who use the data in meaningful ways to shape their boroughs, districts, and neighborhoods.

While the site offers myriad discoveries and tools to manipulate, visualize, and export data, MODA is citing low usage of the portal and engaged a team of usability researchers from the Pratt School of Information to conduct a usability test in order to uncover potential usability issues. A study with sixteen users was undertaken by four researchers; collected data from each session was carefully analyzed. From these sessions, researchers identified four opportunities for improvement of the NYC OpenData Portal; these are listed below and expanded upon in the Findings and Recommendations section (see page 7) of this report.

1. **Introduce NYC OpenData Users to the Interface**: Providing introductory data sets with accompanying tours would give new users a place to learn how to use data sets. Selecting data sets that provide unique and valuable information to users, and displaying them prominently on the homepage, will ensure that these introductory data sets are utilized.

2. **Provide Textual Assistance to Users**: Non-technical users are frequently unfamiliar with data-set terminology. Providing users with textual assistance (in the form of labeling, prompts, feedback, etc.) would improve the usability and findability of data sets on the NYC OpenData website.

3. **Expand Data Set Categorization**: When browsing or searching data sets by category, users quickly become overwhelmed by the number of data sets returned; allowing for finer-grain categorization may help reduce this.

4. **Improve Visibility of "Find in this Data Set" Search Bar**: The "Find in this Data Set" search bar is underutilized because of its low contrast and placement among similarly low contrast icons. Altering the placement, size, and color of the search bar will increase its use.

These recommendations are made with the goal of increasing usability, and thereby usage, of NYC's OpenData Portal, which serves an important function for NYC residents and the community-based organizations that serve them.

Table of Contents

1.0 Introduction

The NYC OpenData Portal, part of the Mayor's Office of Data Analytics (MODA), houses over 1,400 data sets from more than eighty city agencies and offices. It makes these data sets freely available to the public in order to augment government transparency and accountability, as well as to advance technological opportunities to residents and members of community organizations who wish to make use of them. In addition to data sets, the NYC OpenData Portal provides tools for data manipulation and visualization in the form of graphs and charts, as well as elements that allow the public and general users to discuss data currently available and make suggestions for data which they wish to see in the future.

Citing low usage of the portal, MODA has engaged a team of UX Researchers at Pratt School of Information (Pratt UX Research Team) to conduct a usability study on the site. MODA has expressed that the site should allow users to easily and quickly find interesting and compelling data sets, and is particularly interested in targeting users with average, as opposed to advanced, technical skills. Of these non-technical users, MODA especially seeks to support members of community-based organizations.

This report covers findings from sixteen user tests and highlights recommended changes to the site in an effort to improve its usability and user experience.

2.0 Methodology

A Pratt UX Research Team consisting of four student researchers designed and implemented a usability study in order to identify potential usability issues with MODA's NYC OpenData Portal at nycopendata.socrata.com.

After an initial meeting with a representative from MODA, the research team began by developing an ideal user profile whom they wished to participate in the study. For the purposes of this study, the target user was deemed to be an average web user—i.e., someone who is familiar with technology and web searching but not technically advanced to the point where they would call on the portal's API to access data. Age, gender, and other demographic information were deemed to be insignificant in determining user participation, although this information was collected for later analysis. While the professions of study participants would ideally fall within the realm of community organizations or community activism, this filter was deemed difficult to implement and secondary to a potential user's level of technological proficiency.

The study consisted of sixteen participants. Four of these user tests were conducted in person and captured via Lookback software. Twelve user tests were unmoderated and conducted via UserTesting.com. Due to constraints from UserTesting.com with regard to time and question format, the two groups were tested slightly differently. Test structure for each group is described below.

Moderated (In-Person) User Tests

A brief pre-test questionnaire was developed in order to capture basic demographic information about users, including their level of comfort with technology, familiarity with the concept of open data in general, knowledge of NYC's OpenData Portal specifically, as well as their attitude regarding a government's responsibility to make its data freely available. See Appendix C on page 16 for the complete pre-test questionnaire.

Before beginning the user tests, participants were asked to view the homepage without clicking or navigating away from it. Based solely on the homepage information, they were asked to answer questions such as:

- Based on what is presented on the homepage, what would you expect to find throughout the rest of the website?
- Who do you feel this website was designed for?
- Who do you think currently uses the website?

Users were asked to complete two targeted tasks. In designing these tasks, researchers sought to make use of various aspects of the site, including the homepage, search function, filters, the presentation view of data sets, and the visualization tool.

Task 1:
You are thinking of moving to a new apartment in Bay Ridge, Brooklyn. Before you sign the lease, however, you'd like to learn more about the school that your 3rd grade child will be attending. You know that the NYC School District for Bay Ridge is District 20. You also know that the address of your new apartment dictates that your child would attend the Vincent D. Grippo (P.S. 69) school. Using the tools provided by NYC OpenData, find the school's average 3rd grade class size and the school-wide student-to-teacher ratio.

Task 2:
You work for an organization that is about to launch a campaign to reduce water consumption in NYC. As part of a baseline study, you're interested in finding data about historical water consumption in NYC and you want to present this information in a graph. Using this data set, create a line graph to illustrate NYC's per capita water consumption, with the years in ascending order along the X axis, and with the Y axis beginning at zero. Once you have the graph the way you want it, save it with a filename of your choosing. The task is complete once you are prompted for login information (you do not need to create a login).

After performing these two tasks, users were asked to rate the task's difficulty on a scale of 1 to 5 and give brief feedback as to why they chose that given score.

Users were then asked to navigate back to the homepage and find a data set of their choosing. They were asked to explore this data set and to identify the options available to them for manipulating the data and/or creating a visualization.

Finally, in-person users were asked to complete a post-test questionnaire that sought to understand their overall experience on the site, as well as their attitudes about the data that they interacted with. See Appendix E on page 23 for the complete post-test questionnaire.

Unmoderated (Remote) User Tests

Due to time limits for remote user tests on UserTesting.com, tasks and test structure were slightly modified for these participants.

The pre-test questionnaire was not administered to these users; instead, basic demographic information was collected through user profiles. To ensure that users fell within the category of average web users, the "Average Web User" option was selected during the panel-screening phase of ordering user tests. Users were also asked to complete the test in the mindset of an average web user.

Users were first shown the nycopendata.socrata.com homepage for five seconds. They were then asked to answer the questions:

- What do you remember?
- What do you think you can do here?

Two members of the research team ordered user tests with Task 1 [see Moderated User Tests section above]. The other two members ordered tests using Task 2.

Lastly, all remote users were asked to use the site to find and explore a data set of their choosing. A modified post-test questionnaire was then administered to all remote users in order to assess their overall experience and attitudes about the site.

Analysis

All user tests produced data in the form of video, audio, and screen captures of the sessions. Researchers reviewed all data to identify where users were successful, where they became confused and/or frustrated, and where they were unable to complete tasks as directed. These findings were discussed amongst the team in order to identify the underlying usability problems causing user confusion. Usability problems were then grouped and prioritized in order to determine their severity and importance, and recommendations were discussed as possible ways to fix these issues. While the sample group was small and therefore not fit for statistical analysis on user responses and rankings, these survey results were also analyzed to obtain a general picture of users' attitudes toward the site.

3.0 Findings and Recommendations

While users from the in-person tests were generally split as to the aesthetics of the website (split evenly across scores 1, 2, 4, and 5 on a scale of 1–5 where 1 = ugly and 5 = beautiful), they were more positive than negative on their general experiences with the portal, ranking them mostly 4 and 5 on a 5-point scale where 1 = a negative experience and 5 = a positive experience. Similarly, users from the remote tests were more likely to describe their experiences as positive rather than negative (See Appendix F on page 27 for complete responses from remote users).

All but one in-person user gave a score of 4 or 5 when asked how accurate they believed the data to be, with 1 =inaccurate and 5 = very accurate. All in-person users who were asked said that they learned something new while using the site, and would plan to return to the site in the future. Similarly, remote users were very likely to respond in the affirmative when asked if they would visit the site again or recommend it to a friend. Those that responded negatively cited not living in NYC as a main contributing factor to their decision.

Despite the overall positive experiences of most users, usability issues prevented some users from completing certain portions of the tasks they were assigned. Other problems caused confusion and mild frustration, although users were still able to complete the task. For the purpose of this report, researchers have focused on four recommendations that we believe will make substantial improvements to the site's usability.

3.1 Introduce NYC OpenData Users to the Interface

NYC OpenData is a unique resource that contains a variety of valuable information. Because of the site's uniqueness, many of our users hadn't come across anything like it before; they had no previous experience interacting with open data sets and frequently became overwhelmed when asked to find a particular piece of information within a data set. User frustration occurred much less frequently when users were asked to explore data sets of their own choosing, however.

With this in mind, we recommend providing introductory data sets with tours, which would give new users a place to learn how to use NYC OpenData data sets. Selecting attractive data sets that provide unique and valuable information to users, and displaying these data sets prominently on the homepage, would help to ensure that these introductory data sets are properly utilized (see Fig. 1).

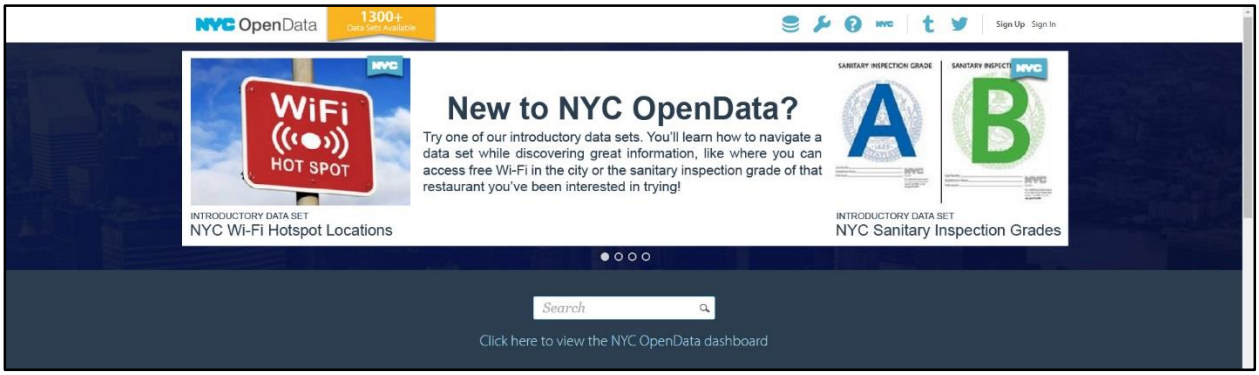


Fig. 1

Upon selecting one of these introductory data sets, a tour of the interface would then be initiated. This tour would introduce users to the interface's layout and tools (see Fig. 2).

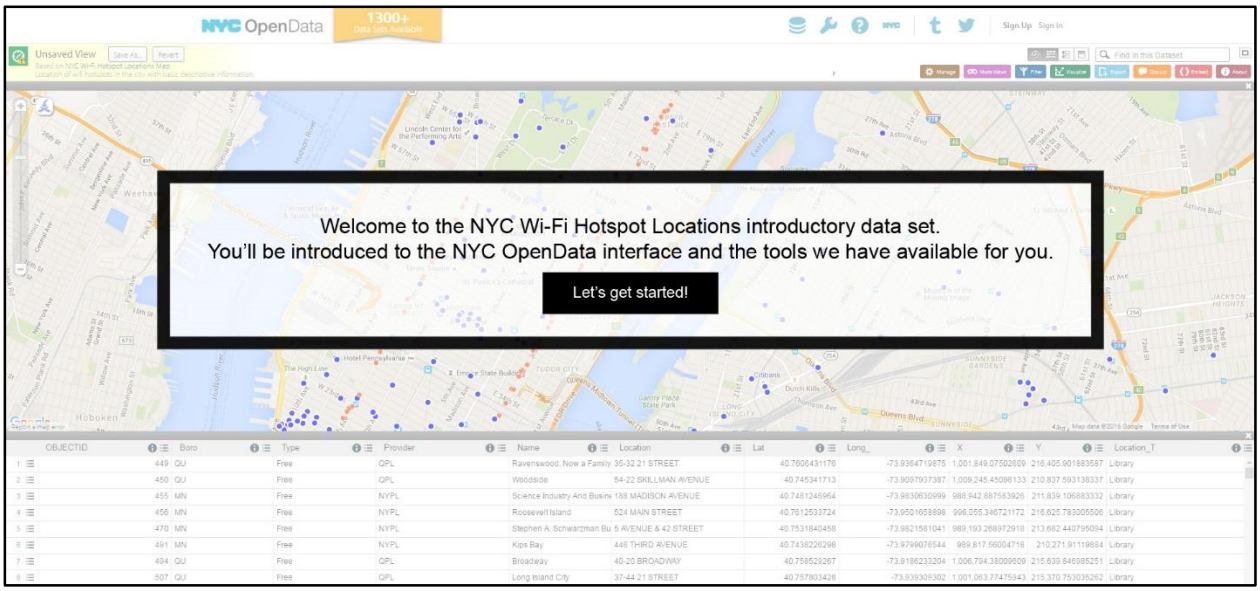


Fig. 2

Tour points would introduce users to specific elements within the interface and let them know what they could do with them (see Fig. 3, Fig. 4, and Fig. 5 for examples of these tour points).

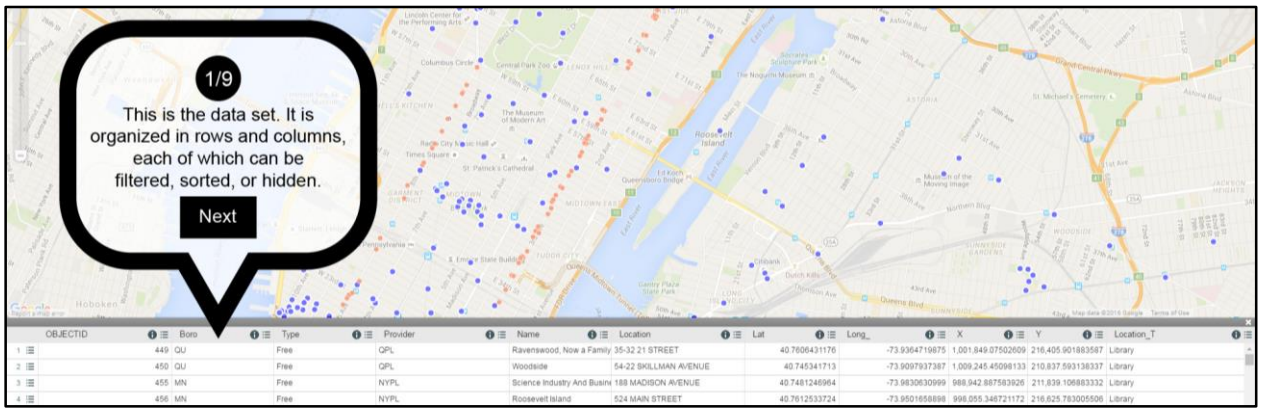


Fig. 3

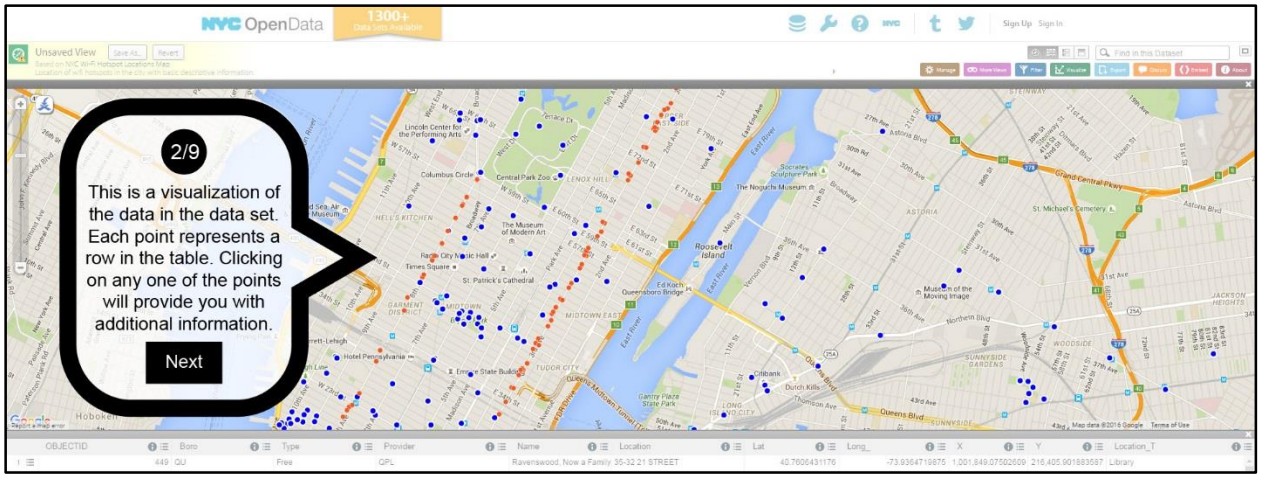


Fig. 4

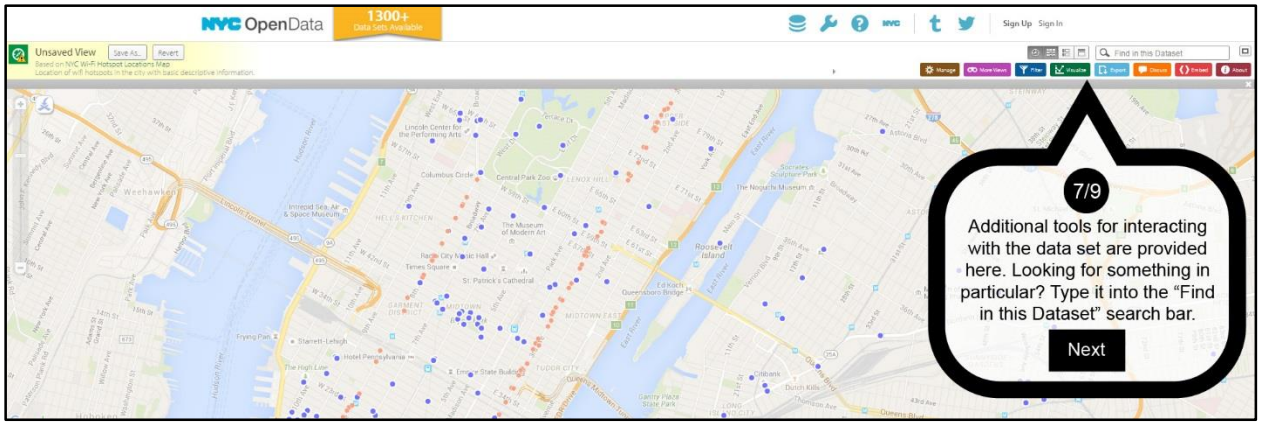


Fig. 5

Upon completion of the tour, users would then be able to explore the data set on their own. In doing so, they would, hopefully, become more comfortable with the interface, which would help them feel confident in exploring non-introductory data sets on their own.

3.2 Provide Textual Assistance to Users

Unfamiliarity with terminology was a barrier we frequently witnessed our users encounter. Users understood that they needed to create a graph, for example, but did not understand that they must click the “visualize” button in order to do so.

Providing users with textual assistance (in the form of labeling, prompts, feedback, etc.) would improve the usability of the NYC OpenData website for non-technical users, who may not be familiar with data analysis and its accompanying visualization tools. Adding a mouse-over prompt to the tools displayed in the upper-right corner of the data set window is one way this recommendation could be manifested (see Fig. 6).

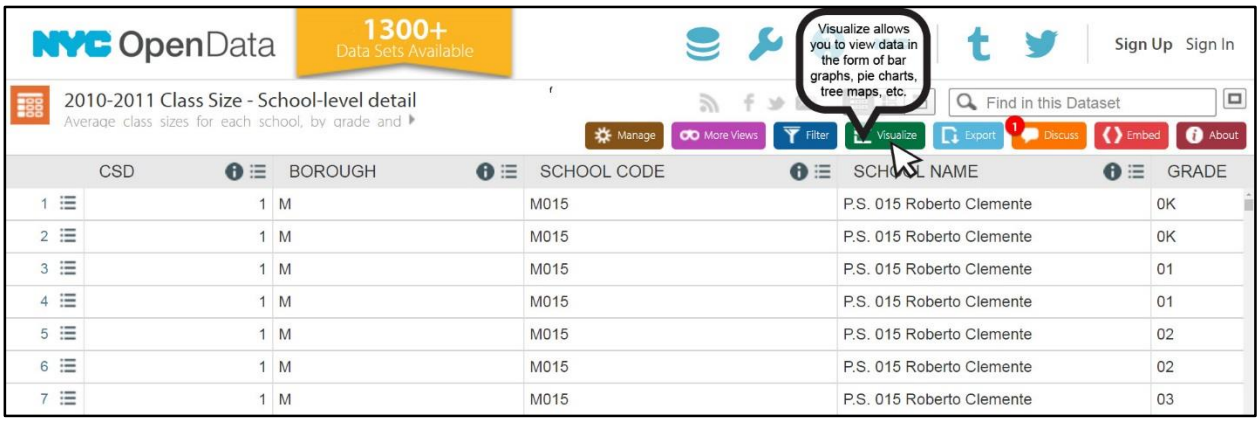


Fig. 6

Providing the names of available data sets as users type terms into the search bar on the homepage would be another manifestation of this recommendation. This type of instantaneous textual feedback would greatly simplify the process of finding desired data sets (see Fig. 7).

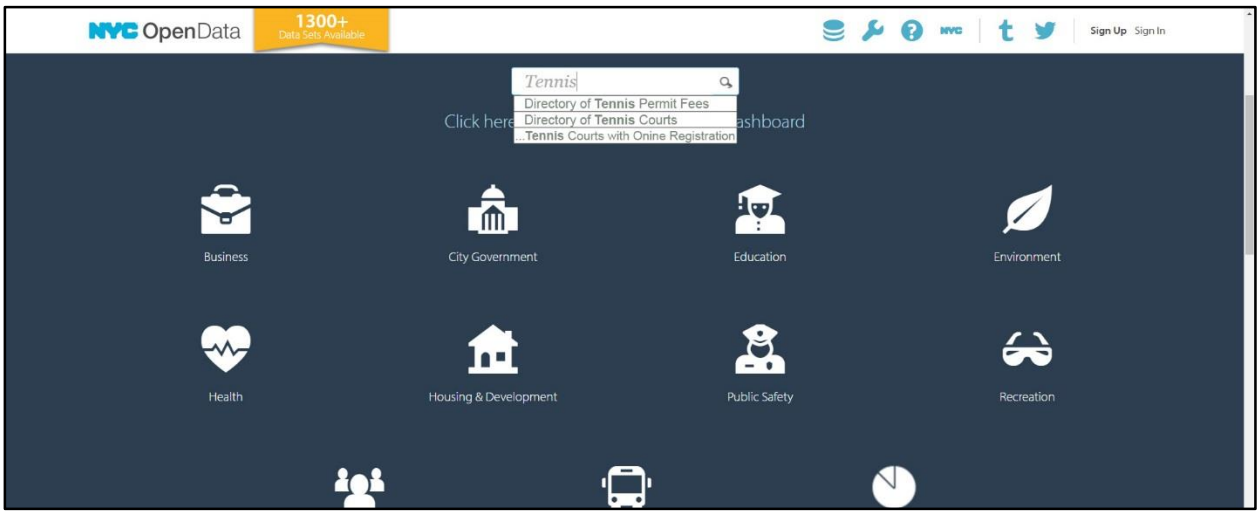


Fig. 7

3.3 Expand Data-Set Categorization

NYC OpenData's collection of data sets can feel overwhelming and many of the users in our study expressed this. We learned that non-technical users have difficulty finding desirable data sets when they are presented with the complete list of data sets for a particular category (e.g., education, recreation, etc.). For example, clicking the recreation category on the website's homepage (see Fig. 8), returns a list of all the data sets that are categorized as recreation (seventy-four in total). These recreation data sets include information on Queens Library branch hours and locations, the locations of NYC art galleries, and a directory of toilets in public parks (see Fig. 9).

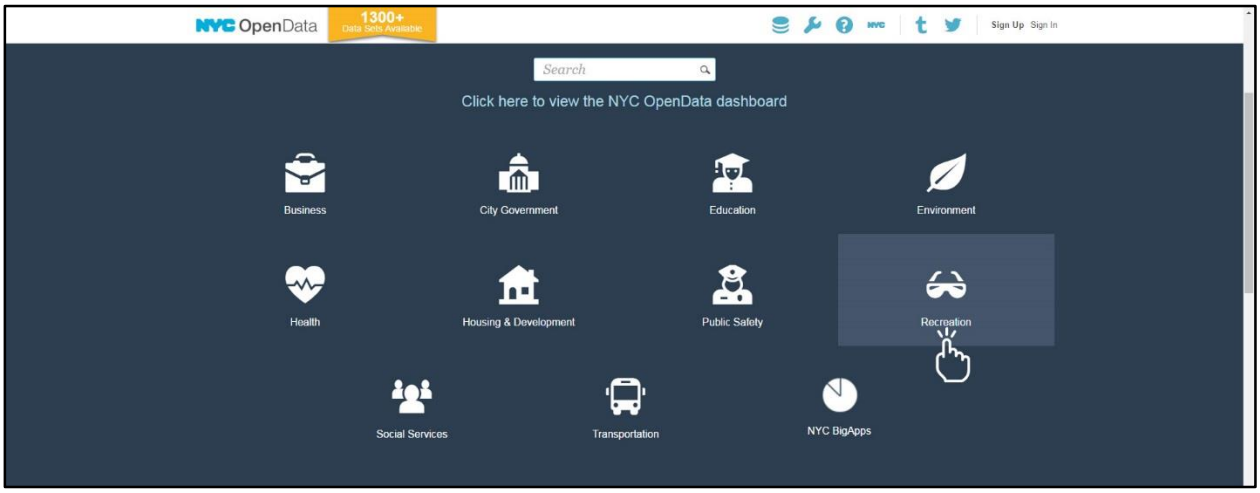


Fig. 8

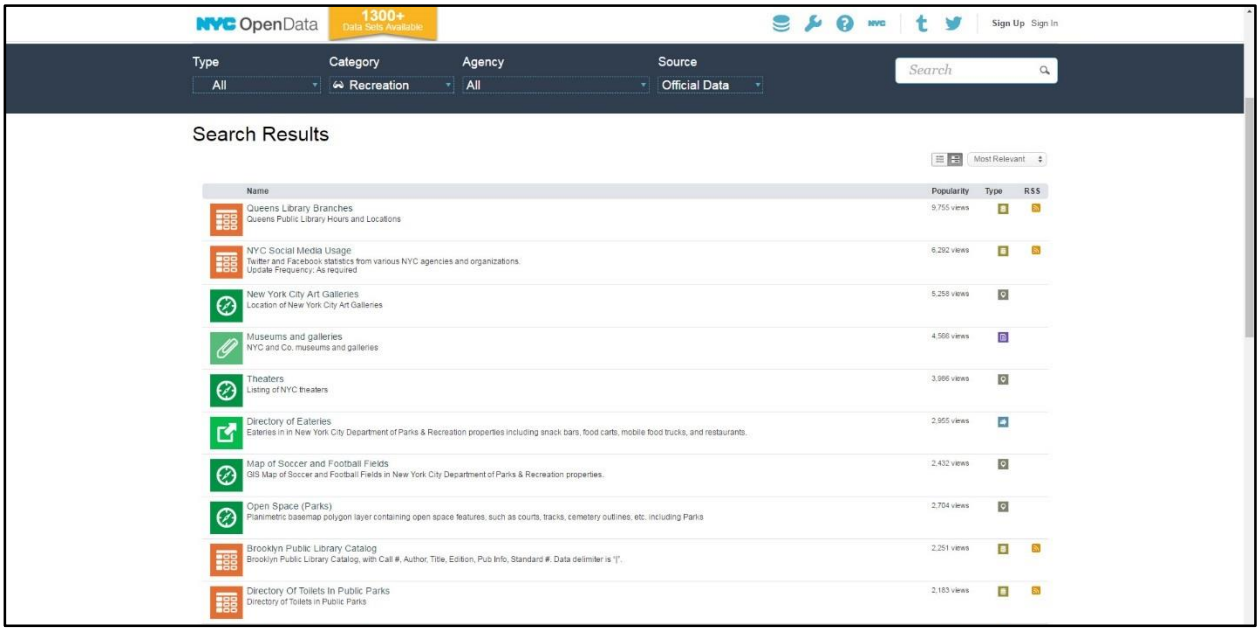


Fig. 9

By providing users with sub-levels of categorization and allowing users to select from these categories before presenting applicable data sets, NYC OpenData would simultaneously reduce the amount of data sets returned to the user and ensure that the data sets presented are actually of interest to the user. Selecting the recreation category on the website's homepage (see Fig. 10), rather than returning all data sets categorized as recreation, would display a number of secondary categories that the user could select from before the complete list of recreation data sets was returned (see Fig. 11). If the user then were to select the art category, only art data sets would be returned (see Fig. 12).

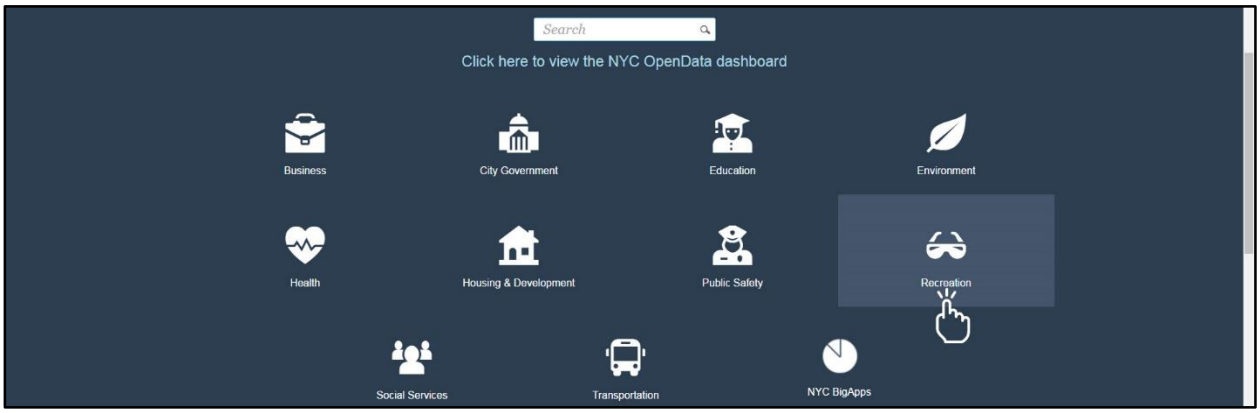


Fig. 10

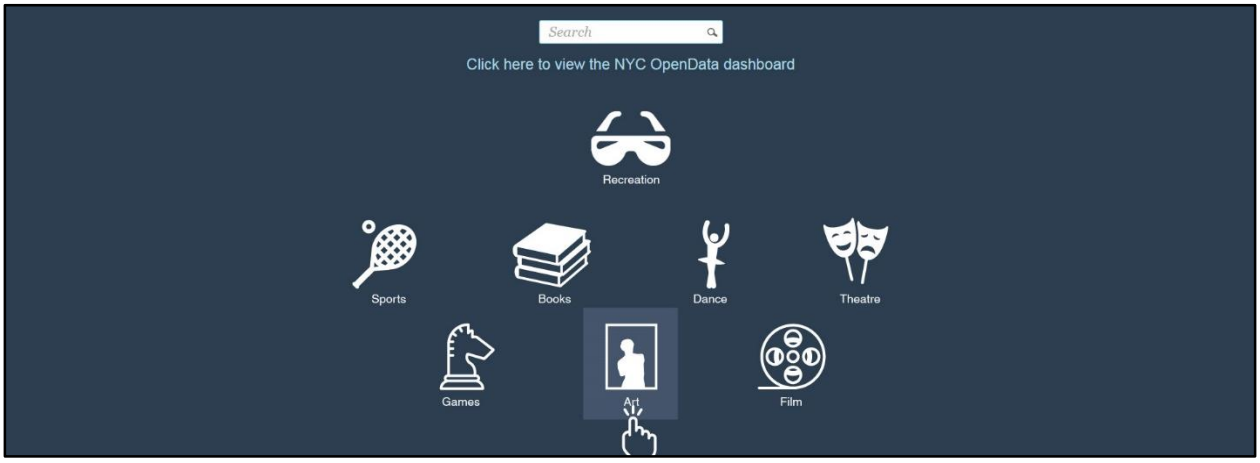


Fig. 11

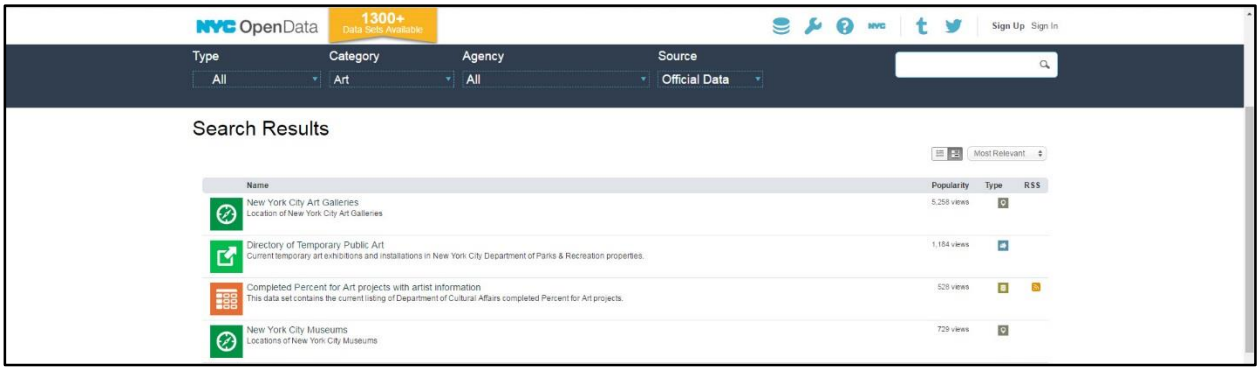


Fig. 12

3.4 Improve Visibility of “Find in this Data Set” Search Bar

Our users frequently navigated away from data sets that contained information they were looking for because after completing a ctrl+f browser search, which returned no results, they felt they were looking in the wrong data set. The ctrl+f browser search was producing false negatives because it is only capable of searching for data that is loaded within the browser window at the time of the search. Because of the quantity of data in these data sets, not all data is loaded at once, so much of it is not discoverable via this type of search.

Searching using the “Find in this Data Set” search bar would search the entire data set and return the desired information, but it was not utilized by our users. We feel this search bar wasn’t utilized because it was simply overlooked, likely because of the search bar’s visual treatment and placement, which is similar to, and becomes lost among, adjacent low contrast icons, particularly in the default data set view (see Fig. 13).

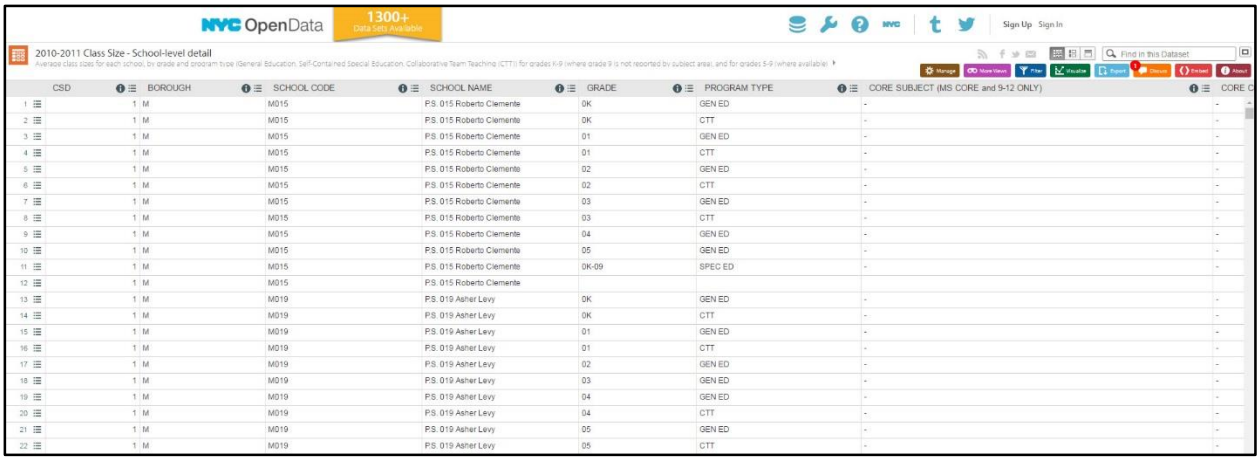


Fig. 13

Even at 175% zoom, however, the search bar still blends in with adjacent icons (see Fig. 14).

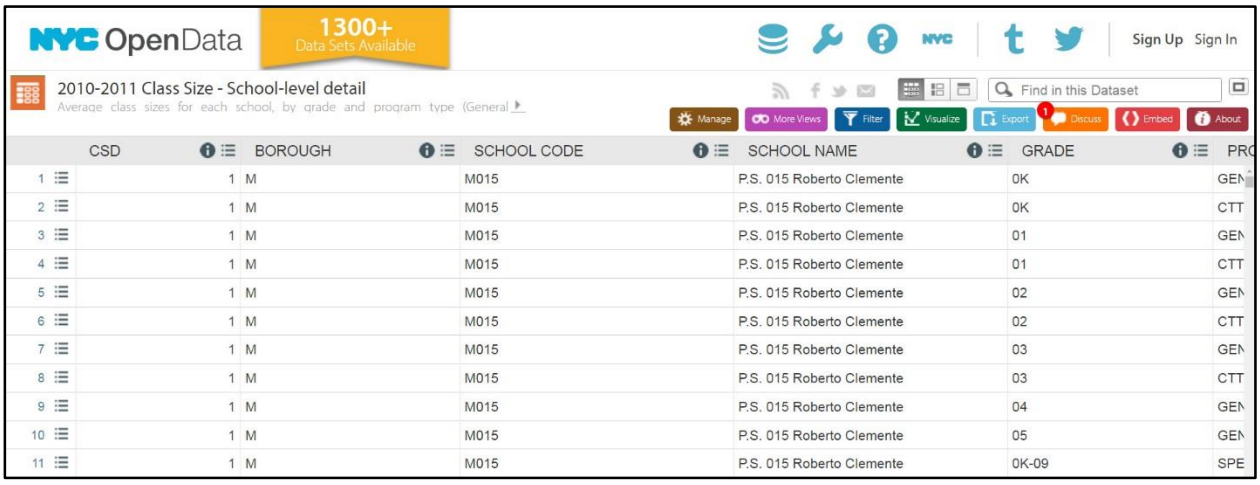
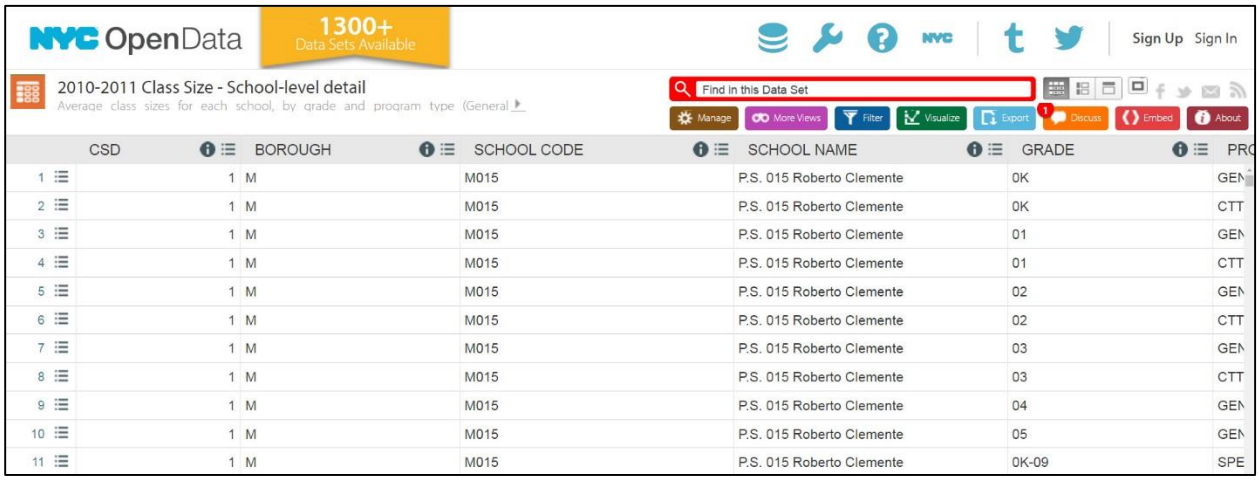


Fig. 14

By reorganizing adjacent icons so that the search bar could be placed in the leftmost position, increasing its size, and adding a high-contrast color consistent with the icons below it, the search bar would be much more visible and more frequently utilized (see Fig. 15).



	CSD	BOROUGH	SCHOOL CODE	SCHOOL NAME	GRADE	PRO
1	1	M	M015	P.S. 015 Roberto Clemente	0K	GEN
2	1	M	M015	P.S. 015 Roberto Clemente	0K	CTT
3	1	M	M015	P.S. 015 Roberto Clemente	01	GEN
4	1	M	M015	P.S. 015 Roberto Clemente	01	CTT
5	1	M	M015	P.S. 015 Roberto Clemente	02	GEN
6	1	M	M015	P.S. 015 Roberto Clemente	02	CTT
7	1	M	M015	P.S. 015 Roberto Clemente	03	GEN
8	1	M	M015	P.S. 015 Roberto Clemente	03	CTT
9	1	M	M015	P.S. 015 Roberto Clemente	04	GEN
10	1	M	M015	P.S. 015 Roberto Clemente	05	GEN
11	1	M	M015	P.S. 015 Roberto Clemente	0K-09	SPE

Fig. 15

4.0 Conclusion

NYC's OpenData Portal was well-rated by users in many respects: users felt fairly confident in the accuracy of the data that they viewed, all reported learning something, and they said that they would visit the site in the future. Usability issues causing minor confusion and frustration during task completion were bucketed into four categories: unfamiliarity with data sets, textual assistance, data categorization, and tool visibility.

By addressing issues in these categories, namely including introductory data sets, adding textual assistance/prompts, expanding categorization to increase search and browsing precision, and improving the visibility of the "Find in this Data Set" search bar, NYC OpenData will be able to provide an even more positive experience for its non-technical users.

Successful implementation of solutions to the issues presented in this report may help MODA increase usage of the portal, and create more widespread awareness of the site and its functions. Given the positive response from our users, and the desire for further data exploration that the user tests incited, it is reasonable to predict that increasing positive user experience of the site can result in an uptick of usage.

5.0 Appendices

Appendix A - Participant Consent Form

The purpose of this usability study is to evaluate the design and usability of the NYC OpenData Portal at https://nycopendata.socrata.com. We are interested in determining if users are able to complete certain tasks on this site easily and efficiently. The session will not test you or your ability, rather the session will test the NYC OpenData website to provide information on areas that might be improved. Please be advised that there are no risks associated with participation in this session.

During this session, you will be asked to explore the website and complete two tasks using the website. You will also be asked two brief questions during the test and a few longer questions after you've completed the test. As you interact with the website a member of the research team will observe and take notes. In addition, the session will be captured on video, audio, and screen recording for future review. The session will last no longer than forty-five minutes.

If for any reason you are uncomfortable during the session and do not want to complete a task, you may say so, and we will move on to the next task. In addition, if you do not want to continue, you may end the session and leave at any time.

Sixteen people will participate in this study. Results from all sessions will be included in a usability report to be presented to the client and shared with the Pratt UX class. Your name will not be included in the report nor will your name be associated with any session data collected.

If you wish to speak with someone about your participation in this study, or if you feel you were not treated as described above, please contact the User Experience Group manager at mreesele@pratt.edu.

I, _____, have read and fully understand the extent of the study and any risks involved. All of my questions, if any, have been answered to my satisfaction. My signature below acknowledges my understanding of the information provided in this form and indicates my willingness to participate in this user testing session. I have been given a blank copy of this consent form for my records.

Signature: _____

Date: _____

Appendix B - Moderator Script (In-Person Test)

Good afternoon, my name is _____.

First I'm going to ask you to read over this consent form and sign if you're comfortable. [Review form and take it once they've signed].

Thank you for agreeing to take part in this user test!

Let's get started. I'm going to read from a script during this session to ensure that my instructions to all participants in the study are the same. The purpose of this study is to identify any usability problems with NYC's OpenData portal, and what improvements can be made to make it a more enjoyable website for its target users.

This user test will be recorded using Lookback software. Lookback will create a video and audio recording of you while you complete the test; it will also capture your actions on the computer screen. After your session is complete, my team and I will review the data along with data collected from the other participants and use the results to write a report for the Mayor's Office of Data Analytics (MODA).

This user test will consist of a pre-test questionnaire, the test itself, and a post-test questionnaire to get an idea of your experience using the website. I will also ask you to answer a few short questions mid-test.

Please keep in mind that this test is NOT a test of your abilities, it is a test of the usability of the NYC OpenData website. There is no such thing as a wrong answer at any time during this session. Also, please be honest with your feedback—my team and I are independent researchers that had nothing to do with the design of the website, so there is no risk of offending us!

Let's get started with the pre-test questionnaire. Do your best to answer each question, but if you feel uncomfortable or don't know the answer to anything, feel free to skip ahead. [Direct them to the Pre-Test questionnaire]

Great, thanks! Now on to the user test. Remember that this is a test of the website, NOT you. Please try to think aloud as you interact with the website, discussing what you're doing, what you're looking for, why you're doing it, and any problems that you encounter. [Direct them to the NYC OpenData Homepage]

First, take a minute and explore the NYC OpenData home page. Based on what is presented on the homepage, what would you expect to find throughout the rest of the website? Who do you feel this website was designed for? Who do you think currently uses the website?

Great! Now we'll begin the tasks. If you have any questions about the tasks or would like further clarification, please do not hesitate to ask.

Task 1: You are thinking of moving to a new apartment in Bay Ridge, Brooklyn. Before you sign the lease, however, you'd like to learn more about the school that your 3rd grade child will be attending. You know that the NYC School District for Bay Ridge is District 20. You also know that the address of your new apartment dictates that your child would attend the Vincent D. Grippo (P.S. 69) school. Using the tools provided by NYC OpenData, find the school's average 3rd grade class size and the school-wide student to teacher ratio.

Great, thank you so much! We're going to ask you to briefly answer two questions about this task. [Direct them to the post-task questionnaire].

Task 2: You work for an organization that is about to launch a campaign to reduce water consumption in NYC. As part of a baseline study, you're interested in finding data about historical water consumption in NYC and you want to present this information in a graph. Using this data set, create a line graph to illustrate NYC's per capita water consumption, with the years in ascending order along the X axis, and with the Y axis beginning at zero. Once you have the graph the way you want it, save it with a filename of your choosing. The task is complete once you are prompted for login information (you do not need to create a login).

Again, great! Same brief questions for this task [Direct them to the post-task questionnaire].

[Direct them to return to the NYC OpenData homepage] Now that you're familiar with the NYC OpenData website and the types of data that can be found on it, take a few minutes and explore a dataset that you would personally find interesting. Using the tools provided experiment with how the dataset can be manipulated and/or visualized.

Great! Now we are going to move on to the post-test questionnaire. Again, please try to answer all the questions but if you feel uncomfortable, you don't have to.

Thank you again for participating in this study! By completing these tasks, which might be expected of a user of the website, and providing feedback on the ease of accomplishing these tasks, you've provided us with valuable insights into the usability of the website. All the information you provided today will remain anonymous.

Do you have any questions about today's session?

If anything comes up, you can feel free to contact me at [give email address].

Appendix C - Tasks (In-Person Test)

Mindset: Explore this website and complete the tasks provided with the mindset of an average web user.

1. Take a minute and explore the NYC OpenData home page. Based on what is presented on the homepage, what would you expect to find throughout the rest of the website? Who do you feel this website was designed for? Who do you think currently uses the website?

2. You are thinking of moving to a new apartment in Bay Ridge, Brooklyn. Before you sign the lease, however, you'd like to learn more about the school that your 3rd grade child will be attending. You know that the NYC School District for Bay Ridge is District 20. You also know that the address of your new apartment dictates that your child would attend the Vincent D. Grippo (P.S. 69) school. Using the tools provided by NYC OpenData, find the school's average 3rd grade class size and the school-wide student to teacher ratio. https://data.cityofnewyork.us/Education/2010-2011-Class-Size-School-level-detail/urz7-pzb3

3. You work for an organization that is about to launch a campaign to reduce water consumption in NYC. As part of a baseline study, you're interested in finding data about historical water consumption in NYC and you want to present this information in a graph. Using this dataset, create a line graph to illustrate NYC's per capita water consumption, with the years in ascending order along the X axis, and with the Y axis beginning at zero. Once you have the graph the way you want it, save it with a filename of your choosing. The task is complete once you are prompted for login information (you do not need to create a login).

4. Now that you're familiar with the NYC OpenData website and the types of data that can be found on it, take a few minutes and explore a dataset that you would personally like to learn more about. Using the tools provided experiment with how the dataset can be manipulated and/or visualized.

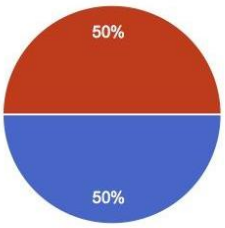
Appendix C - Pre-Test Evaluation (In-Person Test)

4 responses

Publish analytics

Summary

What is your gender?



Female	**2**	50%
Male	**2**	50%
I prefer not to answer	**0**	0%
Other	**0**	0%

What is your age?

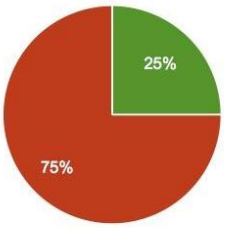
26

41

29

31

What is the highest level of education you've completed?



High School	**0**	0%
College	**3**	75%
Some College	**0**	0%
Master's Degree	**1**	25%
Doctoral Degree	**0**	0%

Are you currently a student?

no

Yes

No

What is your occupation?

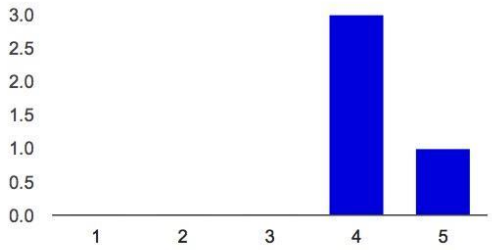
Advertising Account Executive

Managing Editor

Student

Researcher and Project Manager

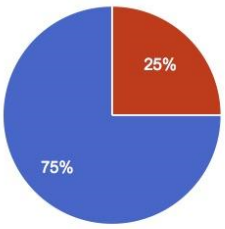
How would you rate your comfort level with technology?



Very uncomfortable: 1	**0**	0%
2	**0**	0%
3	**0**	0%
4	**3**	75%
Very comfortable: 5	**1**	25%

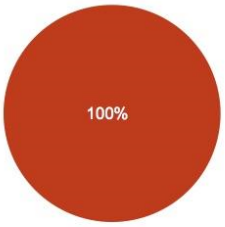
Are you familiar with the concept of open data?

Yes	**3**	75%
No	**1**	25%



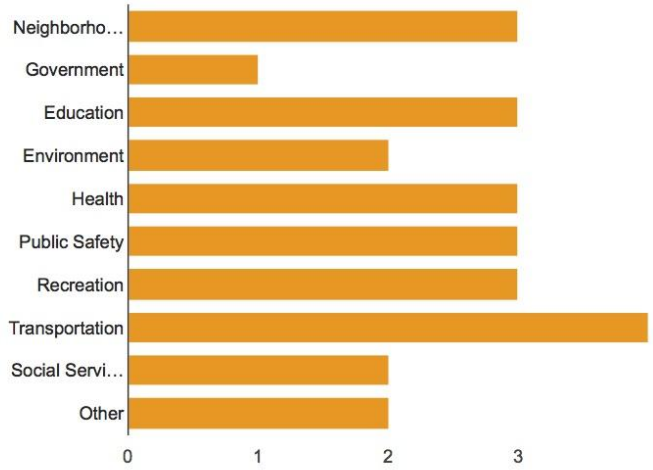
Not sure	**0**	0%

Have you ever used NYC Open Data before?



Yes	**0**	0%
No	**4**	100%

What kind of open data would you find useful or be interested in?



Neighborhood/Housing	**3**	75%
Government	**1**	25%
Education	**3**	75%
Environment	**2**	50%
Health	**3**	75%
Public Safety	**3**	75%
Recreation	**3**	75%

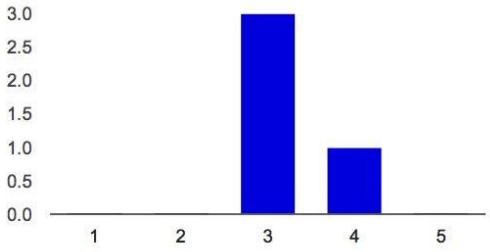
Appendix D – Post-Task Questionnaire (In-Person Test)

4 responses

Publish analytics

Summary

How would you rate the difficulty of task 1?



Very Easy: 1	**0**	0%
2	**0**	0%
3	**3**	75%
4	**1**	25%
Very Difficult: 5	**0**	0%

Why did you give the task this difficulty rating?

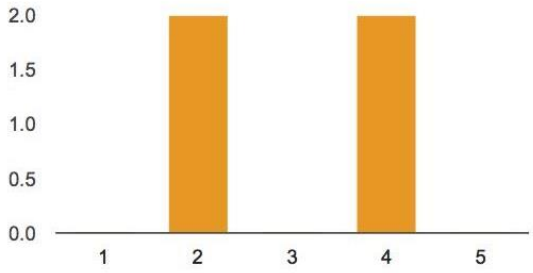
I was able to find the solution, however it took some digging. Filtering in the spreadsheet made categorizing information easy, however getting to the specific information page (class size) was not intuitive.

I found that the Open Data website was a little difficult to navigate. There's lots of information and it's hard to filter.

Since it was the first time I have used the site, it took a little time to figure out how to use it. I don't usually use search bars on website, but I ended up falling back on it to figure out how to actually get to the data set I was looking for. Once I did find the data set it was very hard to navigate the spreadsheet, and seemed like it would take a significant amount of time to learn how to best use the data.

Post-Task Questionnaire

How would you rate the difficulty of task 2?



Very Easy: 1	**0**	0%
2	**2**	50%
3	**0**	0%
4	**2**	50%
Very Difficult: 5	**0**	0%

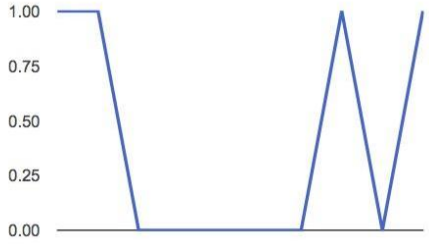
Why did you give the task this difficulty rating?

Navigation buttons I needed to user were small--took me a while to find them, and discover what they did. When the side bar opened, you had to scroll to find additional filter options. The one I needed were at the bottom. Option to view information as a graph should have been more easily identifiable.

Not user-friendly for the average person. Would need to understand data and its terminology to complete.

It pretty intuitive and straightforward to find the correct graph, but then customizing seemed too complicated. The fact that I couldn't find out how to invert the order of the data on the axis was frustrating because it seemed like it would be easy to figure that out. It was difficult, but not impossible.

Number of daily responses



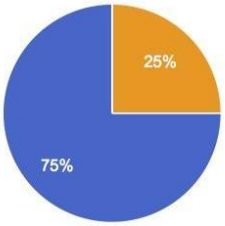
Appendix E – Post-Test Questionnaire (In-Person Test)

4 responses

Publish analytics

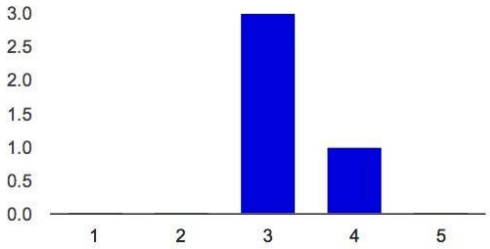
Summary

Would you say that browsing the NYC Open Data website sparked your interest to find and interact with more public datasets?



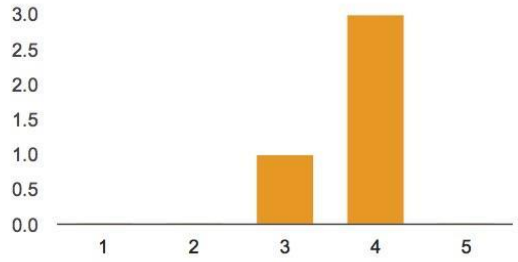
Yes	**3**	75%
No	**0**	0%
Unsure	**1**	25%

How confident do you feel that the datasets you encountered were complete?



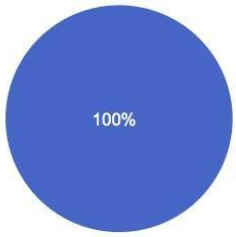
Not at all Confident: 1	**0**	0%
2	**0**	0%
3	**3**	75%
4	**1**	25%
Very Confident: 5	**0**	0%

How confident do you feel that the datasets you encountered were accurate?



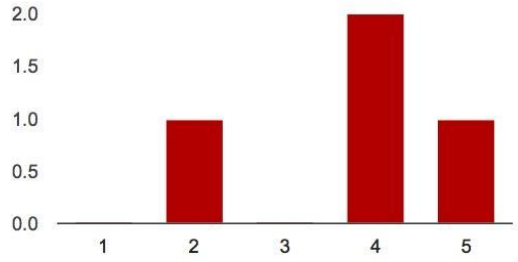
Not at all Confident: 1	**0**	0%
2	**0**	0%
3	**1**	25%
4	**3**	75%
Very Confident: 5	**0**	0%

Did you learn anything new from the data you accessed?



Yes	**4**	100%
No	**0**	0%

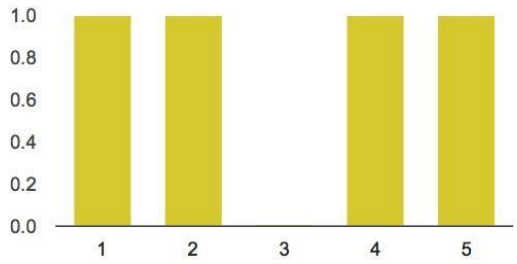
Would you say your experience with the website was negative or positive?



Negitive: 1	**0**	0%
2	**1**	25%
3	**0**	0%
4	**2**	50%

Positive: 5	**1**	25%

How would you rate the appearance of the website?

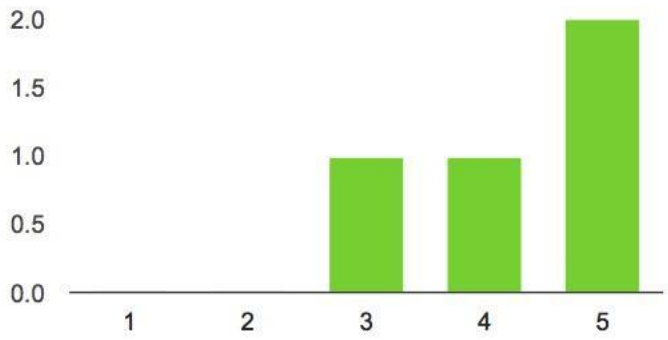


Ugly: 1	**1**	25%
2	**1**	25%
3	**0**	0%
4	**1**	25%
Beautiful: 5	**1**	25%

Would you visit the website again?

Yes	**4**	100%
No	**0**	0%

How likely are you to recommend this website to a friend?



Unlikely: 1	**0**	0%
2	**0**	0%
3	**1**	25%
4	**1**	25%
Very Likely: 5	**2**	50%

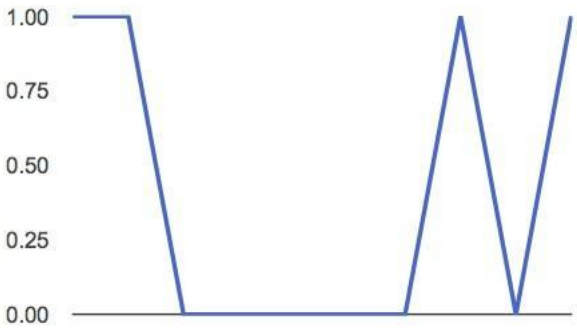
Do you have any suggestions for improving the experience of the website?

Make nav functions size and naming conventions more apparent.

Seems a little difficult to navigate for the average person.

Way to complicated. I am pretty tech savvy and I thought it was very difficult to use. It would be impossible for most of the population to take advantage of all this great data!

Number of daily responses



Appendix F - Remote User Demographics and Responses

John Chagaris' Remote User Testing Data

Participants Demographic Information

	Gender	Age	Income	Web expertise	U.S. State
P.1	Male	26	Less than $40,000	Average	Florida
P.2	Male	25	Less than $40,000	Average	Ohio
P.3	Female	21	Less than $40,000	Average	Texas

Participants' Written Responses

Question 1: Would you say your overall experience with the website was negative or positive? Why?	
P.1	Positive. The positives of the internet are that you can find anything, however sometimes there is too much info to sort through, and this site would be particularly useful to businesses interested in improving their city
P.2	It was tough getting to understand the purpose of the website right away, but it was cool to see that NYC has an open data portal.
P.3	This was definitely a positive experience, the website was easy to navigate and held a lot of relevant, interesting information in a format accessible to all ages.
Question 2: Did you learn anything new from the data you accessed? If so, what?	
P.1	Water consumption has not drastically changed over the last 10 years meaning we are finding more uses for water and using it more efficiently.
P.2	I learned that water consumption has drastically decreased in NYC since 1979.
P.3	I learned more about the water consumption of a city, as well as the abundance of libraries NYC has and the wide spread park system the city provides.
Question 3: Would you visit this website again? Would you recommend this website to a friend? If yes, why? If no, why not?	
P.1	Yes, it's much quicker than using a census or library. The limitation is the fact that it is only in NYC. I'm sure it will evolve over time.
P.2	Yes. It is an excellent source to display data about NYC.
P.3	I would both visit it again and recommend it to friends. The website is a wealth of knowledge useful to students, employees, citizens, writers, really anyone who has an interest.
Question 4: Do you have any suggestions for improving the experience of the website? If so, what improvements would you suggest?	

P.1	Bigger buttons so that it is easier to find menus. Otherwise, the site is great.
P.2	Focus and streamline the homepage. There's too much clutter to understand what it's purpose is during those first crucial 5 seconds.
P.3	The only suggestion I have is to add an advanced search. It may save people time and making the website more accessible and efficient will boost user ratings.

Nishant Goyani's Remote User Testing Data

Participants Demographic Information

	Gender	Age	Income	Web expertise	U.S. State
P.1	Female	27	Less than $40,000	Average	Wyoming
P.2	Male	19	$100,000 +	Average	Arkansas
P.3	Male	19	$100,000 +	Average	Iowa

Participants' Written Responses

Question 1: Would you say your overall experience with the website was negative or positive? Why?	
P.1	Overall, I would say negative. It took me quite a while to find the specific information I was looking for. When I use the "search" menu, I expect to retrieve the information right away and not have to do too much digging.
P.2	Negative. I was unable to find the data I was looking for through the mountains of information; a filter option to create a more streamlined list of results would be ideal. Also, navigating through graphs of data proved difficult and frustrating–the graph scrolled slowly and inconsistently, making it difficult to locate pieces of information.
P.3	Positive - easy to navigate to where I needed to go and it was broken down into very obvious categories. However, navigating throughout the finer points of the website was a bit cumbersome (maps, spreadsheets, etc.)
Question 2: Did you learn anything new from the data you accessed? If so, what?	
P.1	I learned that there are quite a lot of schools in New York and that they have quite a few city-wide events.
P.2	Yes. I learned that water consumption in NYC has steadily declined in the past 30 years.
P.3	I learned that New York has a great number of school districts that each have many schools and students within them, and that it would be difficult to decide where to move if I was concerned about my child's education. This is because there is simply so many schools - it can be a bit overwhelming.
Question 3: Would you visit this website again? Would you recommend this website to a friend? If yes, why? If no, why not?	

P.1	I actually would, especially if they were visiting New York - just to see what was going on.
P.2	Yes. While the website is not perfect and has work to do to perfect navigating data, there is no denying the uses for this site. The massive amount of easily accessible information makes it ideal for research.
P.3	I would recommend this website because I feel it has almost every bit of data about New York one would need to know SOMEWHERE ON THE SITE. However, finding that one little bit of data may not be as easy as one may initially percieve [sic].
Question 4: Do you have any suggestions for improving the experience of the website? If so, what improvements would you suggest?	
P.1	I have said this in my previous comments, but please make it easier to find specific information. For example, I was looking up "Vincent D Grippo" school and the search did not turn that up at all. It gave me the entire list of schools.
P.2	Create a more streamlined option for finding specific pieces of information. Make the data sets easier to navigate.
P.3	Make navigating more specific databases more easy.

Charles Dellebovi's Remote User Testing Data

Participants' Demographic Information

	Gender	Age	Income	Web expertise	U.S. State
P.1	Female	19	$40,000-$100,000	Average	North Carolina
P.2	Female	21	Less than $40,000	Average	Michigan
P.3	Female	40	Less than $40,000	Average	North Carolina

Participants' Written Responses

Question 1: Would you say your overall experience with the website was negative or positive? Why?	
P.1	It was positive to see all the interesting information. However, it was negative in the sense that I couldn't find exactly what I was looking for.
P.2	I would say that overall my experience with the website was positive in that I think it is a really good idea for a bigger city like Detroit to have a website to input all of their data too. And negative to the effect that it is hard to find specific information and also that it seems to be a little bit out of date.
P.3	It was both positive and negative. Mostly positive because there is a lot of information with the two departments that i chose to search. Its slightly negative because It's so much information on the record sheet that it seems cluttered , but in an organized way. It can possibly take a long time to really find what you are looking for.

Question 2: Did you learn anything new from the data you accessed? If so, what?	
P.1	I learned there are a lot of schools and theatres in NYC.
P.2	From what I was accessing I would say that I learned that even though New York has a large school system they still manage to keep their student to teacher ratio very small which is a good thing! The more teachers per student the better.
P.3	Yes , i learned about available contract amount information for the police department and different notices for animal control that were sent out for awards, soliciting and a little more. I couldn't seem to find anything about Vincent D grippo about average class size and school wide student ratio.
Question 3: Would you visit this website again? Would you recommend this website to a friend? If yes, why? If no, why not?	
P.1	I probably wouldn't visit this site again, unless I was visiting NYC. If a friend needed to learn about specific information, I may refer them to this. However, I think I may find the same information googling it.
P.2	I personally would probably not visit again only because I don't live in New York or have any intention to live there in the future. But I would definitely recommend it to someone who may be looking for information about New York and the different districts within.
P.3	Maybe, It just really depends on what type of information he or she is looking for.
Question 4: Do you have any suggestions for improving the experience of the website? If so, what improvements would you suggest?	
P.1	Make it easier to find specific things. The information is cluttered.
P.2	The only suggestion that I have is that they update the website. From the information that I was seeing or accessing it seemed that the information or data on the website was from a couple years back and is more than likely different now than it was then.
P.3	My suggestions is to have the information grouped and give a description of each category in that particular , that may help the user to find the desired information in a timely manner.

Molly Reese-Lerner's Remote User Testing Data

Participants' Demographic Information

	Gender	Age	Income	Web expertise	U.S. State
P.1	Male	19	$100,000+	Average	Arkansas
P.2	Female	34	$40,000 - $100,000	Average	Georgia
P.3	Female	25	Less than $40,000	Average	Florida

Participants' Written Responses

Question 1: Would you say your overall experience with the website was negative or positive? Why?	
P.1	Positive. The website is incredibly user friendly, with a modern appearance and simple layout. There is also a very wide variety of data sets available on this site, making it even more useful.
P.2	I would say positive because it seemed to be pretty straight forward.
P.3	I would say that the website is a bit hard to figure in the beginning because the website is not very user friendly. I see this being benefinical in the sense of the graph being created it self but I don't think that this is the focus of the website. I think that you all are trying to gear more towards the charts of the things unique to New York City.
Question 2: Did you learn anything new from the data you accessed? If so, what?	
P.1	I learned that one of the leading causes of death for Hispanic American males in New York City in 2010 was Immunodeficiency Virus.
P.2	I learned that some chart views were better for comparing than others.
P.3	I did not learn anything new except for there are places to look up information on specific things I may want to see in New York City or a way to help a business planner with locations.
Question 3: Would you visit this website again? Would you recommend this website to a friend? If yes, why? If no, why not?	
P.1	would absolutely visit the site again. If I was doing research on a particular topic or simply curious about trends or data in society, this website makes it very easy and straight forward to access the wide variety of information available.
P.2	Yes I would recommend it. It was interesting comparing the water consumption. It was very user friendly.
P.3	I would probably not recommend this site to a friend because I am not 100% on what the purpose of it is.
Question 4: Do you have any suggestions for improving the experience of the website? If so, what improvements would you suggest?	
P.1	I did not encounter any issues in my experience with the site.
P.2	I would suggest to relocate the save button to the right side of the screen so it can be in line with the other actions you are using.
P.3	I would recommend making the site more visually friendly with basic instructions on how to navagate the site as well as have a video tutorial to help enhance the understanding and experience of your guest on the site.