# Heuristic Evaluation Report Hexi Mobility

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Course:

Introduction to Human-Computer Interaction

# **Executive Summary**

### Goal:

The overall purpose of the evaluation is to find existing application issues on the Hexi Mobility application.

#### How:

Findings from the application will be conducted using Nielsen's Heuristic List, initially researched and created by Jakob Nielsen.

# Insights:

There were many positive findings in the final completed application, however, the overall realization was that the application is still in dire need of re-evaluation and repair due that face that there were an overwhelming number of negative findings found.

# Introduction

#### **About Hexi**

Hexi is a transportation technology company, headquartered in Gurgaon India. It focuses on addressing the First and Last mile connectivity problems for Smart cities and cities of the future by developing innovative solutions, using bicycles, electric vehicles and other means of environment friendly transport.

It is a joint venture between Hero Cycles and Youon Technologies, who are leading cycle manufacturing and operating companies in the world, they have dock based as well as dock-less bike share operations and their solutions are customized for the cities as well as universities, commercial and industrial campuses. Extensive research and development in various technologies and business models, keeps them at the forefront of last mile transportation solutions in India and worldwide.

Hexi shares a deep concern for the environment and promote the use of non-motorized transport, connected through intelligent AI systems, enabling smart technology solutions, to solve our everyday problems of efficient, safe and reliable transportation.

#### Context

Our Task: Try to book a bicycle for rent through the Hexi application

The methods section of this report will describe the process of the report in great detail. The findings section of this report will present the core insights

# Methodology

- Kickoff 5<sup>th</sup> February 2019
- Team Meeting: Role Distribution 6<sup>th</sup> February
- Individual Study 7 to 9<sup>th</sup> February
- Team Meeting: Evaluation Analysis 10<sup>th</sup> February
- Final Report: 11<sup>th</sup> February

# **Findings**

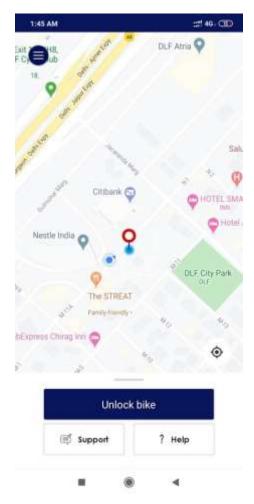
# Visibility of System Status

Issues to Work on:

1. When the app is open, there is no information given to the user that the bike locations on the map are being loaded. All a user can see is an empty map with only his location. After an extended period of time, the parking spot labels of the app start loading and then quite slowly different bike locations show up on the map. The user never gets information on whether all the bike locations have been loaded or are they still being loaded.



2. Confusion of system status: Two blue dots show up on the map at different places to show my live location



### Matching between System and Real-World

#### Positive Findings:

The parking spot pin labels on the map match the general parking symbol we are used to in real life so it's easier to understand what it signifies on the map. So is the logo for the cycle spot. (This is shown in the first figure)

#### Issues to Work On:

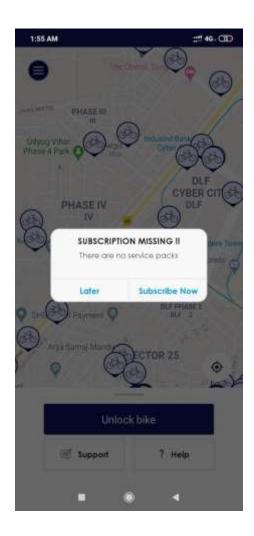
On clicking on the bike, what we see is the Bike ID which has no real-world significance at all. **Recommendation**: It could have possibly shown the distance to that particular bike from the user's current location and indicated the route to be taken to the bike. This would have been much more useful as well as representative of how we deal with directions in the real-world rather than showing an ID.



# Recognition vs Recall

Issues to work on:

- 1. At present since the app does not show the distance to the bike or even the direction on the map to reach its location. The user has to recall his understanding of the area to estimate how close the bike is and make an estimate about it rather than an actual quantifiable metric
- 2. The app follows a subscription model, but only after you try to book a bike it pops up telling your you don't have a subscription currently. Till then it relies on the user's recall of whether or not he/ she has a subscription. **Recommendation:**Maybe a small box on the top or just below the unlock bike button can show the current subscription status on the home page itself to make it clearer to the user.



# Wrong Mental Models

Issues to work on:

1. The page where you can buy subscriptions has the packages in a very different order than the natural order. It first shows Month then day then Six months and then a week. Ideally, it should be either in ascending order of duration of package or descending. It looks like this has been done to encourage people to buy monthly subscriptions more but possibly a better way to highlight that could be used rather than disturbing the order



2. The FAQ page has an icon that represents the customer support or calling



- 3. Clicking the help button opens up the app usage tutorials instead of any help
- 4. The Support button icon seems more like composing a message icon.



### User Freedom and Control

Issues to work on:

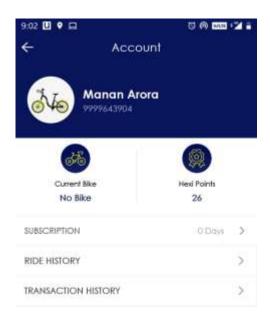
- 1. The user does not get the ability to change his location other than what is detected by the phone GPS. Phone GPS location at times is incorrect.
- 2. The payment mechanism while booking a subscription plan is not clear. Once a user is using a particular mechanism to make a payment, it is very difficult for the user to use a different payment gateway for the next transaction.
- 3. The report problem page does not fetch information from the ride history to make it easier for the user to report. Instead, it asks to explicitly enter the bike id which is hard to remember for the user.

## Consistency and Standards

Issues to work on:

- 1. On the profile page, we have a user ride history wherein the user can see the rides they have taken in the past. There is also a transaction history that shows the history of subscriptions bought by the user, however, on the same page, there is a rides tab as well which has no information to show at all. **Recommendation**: Either there should be one history section with both subscription as well as rides as part of it or each should be separate and uniform.
- 2. On the profile page as well as ride history page, the user sees that he/ she has accumulated Hexi points through his rides they have taken, however, there is no information anywhere in the app about what these points mean and what rewards do they entail if any.





3. On clicking on the name of the user in the profile tab, edit page opens but here there are in total three clickable edit buttons on this page; it's unclear which one is responsible for each of the respective fields in the form.



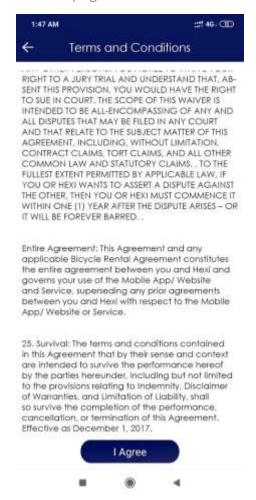
## Provision of Help and Documentation

#### Positive Findings

The FAQ page is well made and both the questions and the answers are quite concise and relevant to the use cases on offer through the app.

#### Issues to work on:

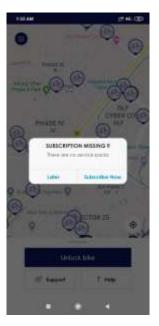
- 1. The Terms and Conditions that one has to look at when buying a subscription is too long and uses paragraphs instead of crisp pointers.
- 2. The Terms and conditions page also use some harsh language.



# Aesthetic and Minimalistic

Issues to work on:

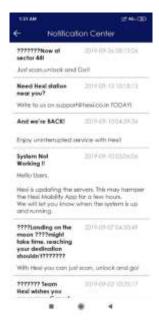
1. On clicking unlock a bike, if you don't have a subscription, the pop up that opens says - 'Subscription Missing!!'



2. On clicking Support on the home screen of the app, the pop says - 'Customer Care!'



3. Under the notification center section of the app, there is a lot of unwanted information and crappy text without any context.



4. The yellow labels for FAQ are not even clickable and don't serve any purpose when the title already says FAQ. No need for highlighting them or even keeping them here.



# Conclusion

Given that Hexi Mobility has 100k+ downloads on Play Store, we decided to pick this app for analysis using Nielson's 10 heuristics. We recognized that there are several areas where the app can improve the user interaction experience and have presented the same in this report. We have not only pointed out the areas of problems, but have also suggested specific improvements for some of them.