

Expert review of "NS Reisplanner Xtra" by HaystackAlien

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## **Introduction**

In the expert review we will review the NS Reisplanner Xtra app for Android, an app made by the NS providing information to travelers both en-route and those who are yet to depart. The primary goal of the app is to provide a means for the customer to plan their journey ahead of time while also providing up-to-date information during the journey. To do this it contains features such as push-notifications for major disruptions or warnings to remind you to check out. These warnings can be turned on or off in the settings menu. The app is also able to provide the available facilities for all currently existing train stations.

The intention of the app is not to be the primary information source, but rather to be a secondary source and supplement all the information that is given or displayed in the real world.

In this report we will test this app using a few suitable made-up personas, which are all part of the target audience of this app. They will all try out various functions and judge it based on their unique profile. After the evaluations we will show our final conclusions based on all of their findings and might do some suggestions.

Due to cost restraints will the app only be tested on one system, namely the Motorola Moto G (first generation) running Android 5.0.2. The version of the NS Reisplanner Xtra app will be 3.6.

## **Personas**

The people who use NS Reisplanner Xtra are mostly commuters. They know at what time their train departs, but don't know of any technical failures which might cause them to be late at work, miss their transitions or disruptions in any other way. Besides all different types of commuters, the elderly prefer the train as well and nowadays also use smartphones to some extent, which is why we include them in our report as well. Below we describe one person per group, which will be testing the app.

A 50 year old manager who travels mostly during rush hour in first class, to get from his home to work and in between various location of his company. Due to his busy schedule and long working days, he is impatient and benefits greatly from fast updates about any disruptions, because time equals money. Due to his age he is used to smartphones, but he is not the most experienced user.

A 30 year old consultant who travels during rush hour in second class, who uses the train to travel from home to work and back to home. She is flexible in when she's at work and as such doesn't mind a small delay, but without any notification beforehand she will be furious. She is an experienced smartphone user and knows her way around technology.

A 20 year old student who uses the train on Fridays and Sundays to travel between his parental house to university. He travels solely second class because of governmental free travelling for students during weekend and is used to well-built apps, therefore expects a very user-friendly app.

A 70 year old grandma with her grandchild who doesn't travel much by train, but when she does it's mostly in the holidays or weekend, outside of rush hours. Her eyesight has seen better days and because of it she needs a bigger font than most people. Due to a numerous amount of operations she cannot walk long distances anymore and travels by (electric) wheelchair, therefore needs wheelchair-friendly stations. She uses the app to find out if those facilities are available.

## Setup of the Heuristic Evaluation

The personas will be testing the following scenarios:

1. The personas will use the NS Reisplanner Xtra to plan a journey ahead of schedule when they should get the train in order to arrive at station Amsterdam Amstel around 9AM at the 1st of May, departing at station Nijmegen.
2. After the above scenario, the personas will use the built-in feature 'terugreis plannen', departing at the 1st of May at 5:20PM. They will add this journey to 'Mijn reizen'.
3. The personas will check which facilities are currently available at Utrecht Centraal.
4. The personas will check for any disruptions and if any, will plan a journey guaranteed to be hit by that specific disruption departing as soon as possible.
5. The personas will enable push-notifications for extreme weather causing a change in the normal schedule.
6. The personas will look up information about the OV-Chipkaart, more specifically what they should do if they forget to check out at their destination.
7. The personas will disable all possible notifications for their saved journeys, but will instead add an alarm 5 minutes before arrival at Amsterdam Amstel.
8. The personas will add Nijmegen - Amsterdam Amstel to 'mijn trajecten'.

We will use four evaluators, during each scenario the evaluator will rate the app on the following points:

1. Visibility: Is everything easily readable and are icons visible?
2. Comprehension: Is the language understandable and comfortable?
3. Consistency: Does the app do what you expect it to do?
4. Aesthetics: Does the app look good?

Every point will be rated from 0 to 4:

- 0 – Disaster: The problem should be fixed before release.
- 1 – Major problem: The problem has a high priority but the app is usable if the user takes great care.
- 2 – Minor problem: The problem has a low priority and the app is usable with little extra effort.
- 3 – Aesthetic problem: The problem should only be addressed if there is extra time left.
- 4 – No problem.

### Simulated Heuristic Evaluation

Here are the results of the simulated heuristic evaluation. Each row corresponds to the previous scenarios. Each column corresponds to the points that are being rated.

#### 50 yo manager

point	1	2	3	4
1.	4	4	4	4
2.	2	4	4	4
3.	4	4	4	4
4.	4	4	4	4
5.	4	4	4	4
6.	3	4	4	4
7.	4	4	4	4
8.	4	4	4	4

#### 30 yo consultant

point	1	2	3	4
1.	4	4	4	4
2.	3	4	4	4
3.	4	4	4	4
4.	4	4	4	4
5.	4	4	4	4
6.	4	4	4	4
7.	4	4	4	4
8.	4	2	4	4

#### 20 yo student

point	1	2	3	4
1.	4	4	4	4
2.	4	4	4	4
3.	4	4	4	4
4.	4	4	4	4
5.	4	4	4	4
6.	4	4	4	4
7.	4	4	4	4
8.	4	4	4	4

#### 70 yo grandma

point	1	2	3	4
1.	1	3	4	4
2.	2	3	4	4
3.	2	4	4	4
4.	4	4	4	4
5.	4	4	4	4
6.	3	4	4	4
7.	4	4	4	4
8.	4	4	4	4

**Conclusion**

With our simulated heuristic evaluation we have found problems in scenario 8. The button 'Mijn trajecten' does not exist but is called 'Mijn reizen' in the main menu. This could be changed. Besides this small change it is a very straight-forward app that is easy to use.