

Smart-cycling

/ IWP Project

Short Problem Statement

How can we integrate mobile technology with road bicycle safety?

Introduction

Smartphone use has rapidly become an essential part of daily life. It has become so essential that even though Dutch cyclists acknowledge the risks of using a smartphone while riding a bike, they still use their mobile phone when they should be paying attention to the road. As a result, there recently have been many applications that lock down a smartphone while riding a bike, to prevent dangerous distractions. In this project, we are exploring in a different direction. Instead of preventing smartphone use, we are looking for an innovative design to integrate the use of smart devices with bicycle safety.

Innovation

In the project, we are looking for a design that allows the user to safely use smart devices while cycling. This raises potential questions such as:

- What smart devices functions can and cannot be used safely while on a bike?
- What are possible alternatives to control smartphone functions (voice, handlebars, etc.)?
- What are possible alternatives to give information and feedback from a smart device to the user?
- How can smartphone functions and sensors be used to increase a cyclist's road safety?

Target Audience

Cyclists, with a special focus on middle school pupils (middelbare scholieren)

Themes

Multitasking / Road safety / Distraction

Primary Clients

Harmen de Weerd (Research Group User-Centered Design)

Chris Dijksterhuis (Research Group User-Centered Design)

(Equipment may be acquired for creating concepts or prototypes)

Secondary Clients

New Nexus Mobile (Rob Willems)

Regionaalorgaan Verkeersveiligheid Friesland (Jan de Jong)