

# Research Proposal

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## 1 Introduction

The business of online advertising has evolved to a landscape which is not transparent anymore. A handful of large advertisement firms are controlling practically every online ad you see. Almost every movement during the visit of a regular website is sent in an obfuscated way to the advertisement broker, without any visible sign to the end user. This makes the whole browsing experience obnoxious, especially now it turns out that entire societies are influenced by the power of advertisement networks, as we have seen in the Cambridge analytica scandal<sup>1</sup>.

This proposal focuses on the development of a concept which combines distributed systems and client based profiling in order to provide a transparent and privacy-friendly advertisement network.

## 2 Problem

The difference between tracking and targeting is, that tracking is the art of building a profile, which can be targeted. Targeting is about finding the right ad for a user. In the classical advertisement industry, targeting was only possible based on general profiles. During the internet era, profiling became possible in a more fine-grained matter. In the current Big Data revolution, even the smallest improvement can lead to significant improve in revenue.

## 3 State of the art

## 4 Concept

- zeroconf

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<sup>1</sup>Carole Cadwalladr and E Graham-Harrison. "The Cambridge analytica files". In: *The Guardian* 21 (2018), pp. 6–7.