

## **Privacy-Preserving Targeted Advertising on Mina :**

***Describe the problem your tooling or service is solving. Who will benefit the most from this tool or service ?***

Targeted advertising does not protect users' privacy. Our Vault Standard on Mina seeks to address the privacy violation inherent in traditional targeted advertising models. Currently, many online advertising platforms collect large amounts of user data to create personalised advertising profiles. This practice compromises users' privacy because this data can be sold or misused by third-party advertising companies or the advertising platforms themselves.

Our Vault Standard on Mina addresses this problem with privacy-preserving targeted advertising. This solution will allow advertisers to target specific audiences tailored to their advertising domains, without compromising users' privacy. This would benefit both advertisers and users, as advertisers would be able to reach their target audience more effectively, while users would be able to retain their privacy and control over their personal data.

This tool would be particularly useful for people who are concerned about their privacy and want to keep control of their personal data. However, it could also be useful for companies and organisations seeking to promote their products or services in a more targeted and effective way.

Overall, the main beneficiaries of privacy-preserving targeted advertising on Mina would be both individuals and businesses that value privacy and seek safer and more effective advertising solutions.

## ***Provide a high-level overview of your proposed solution to solve this problem.***

The solution is to leverage the power of Mina's blockchain technology to create a more secure and private advertising platform. The solution would use Zero-Knowledge Proof (ZKP) to allow advertisers to target specific audiences without collecting or exposing personal data.

Here's how the solution would work at a high level :

- Advertisers will create their ads while specifying the desired target audience using standard demographic information such as age, gender, location and interests.
- Using Mina's ZKP technology, the platform generates anonymous proof that an ad matches the desired target audience, without revealing any personal data about individual users.
- The ad will be served on the Mina network of nodes, and users belonging to the specified target audience will receive the ad directly on their devices.
- Users will have the option to interact with the ad or reject it, while the platform collects feedback data to improve ad targeting in the future.

Based on ZKP and Mina, this solution will provide a much more private and secure advertising platform, while enabling effective targeted advertising. The platform will protect users' data and privacy while allowing advertisers to reach the audience they want.