

MOBILE ADVERTISING BASED ON MOBILE PHONE SENSING

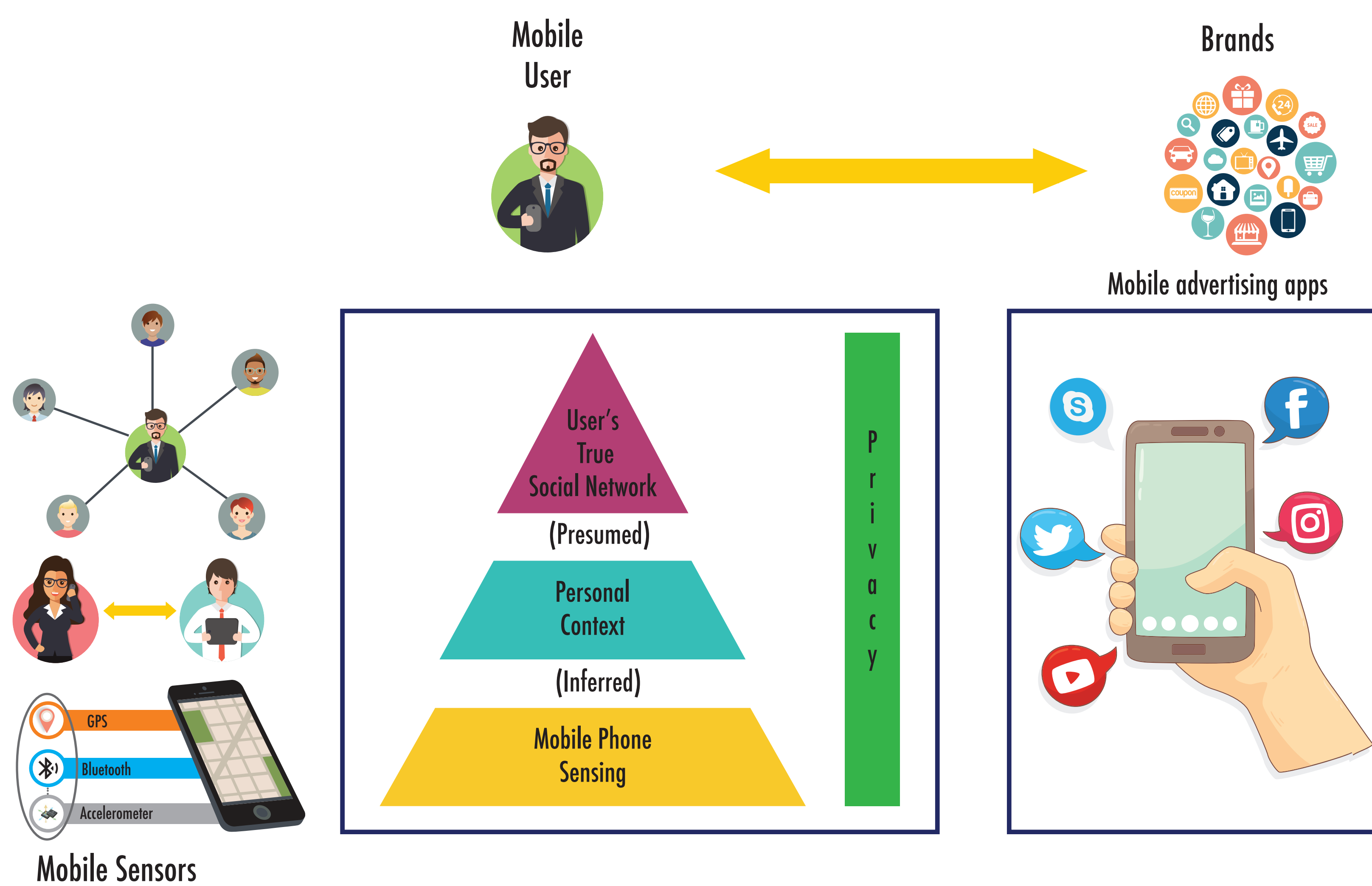
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Motivation of the work

Mobile advertising is a relatively new field, which has had great advances supported in technology and mainly in the Internet. However, experts and academics in advertising visualize a future scenario, where advertising will migrate from a mass advertising to a more individualized one, seeking to add value to the user and generate greater trust between the user and the manufacturers/suppliers of the products and services.

Thanks to the Internet, there has been a substantial shift in advertising business model, from systems controlled by manufacturers and advertisers to more open and transparent models with user empowerment. As a result of this, users have migrated from being the central objective of traditional advertising models, to being key players, generating new challenges for advertising.

The great penetration of mobile phones at global scale opens possibilities to use mobile phone sensing for advertising purposes, as it allows to obtain more granular data about mobile user personal context. However, there are certain challenges related to how advertising integrates and exploits data about personal context into its value chain, without affecting user privacy.



Activity 1. Studying Key Concepts and Theories.

2017: Semester 2 - 2018: Semester 1

- Concepts of social networks and their application in mobile advertising.
- Mobile sensing concepts and its application in advertising and social networks.
- Modeling personal context of the mobile user and its integration into advertising.

Activity 2. Design the New Advertising Model:

2018: Semester 1 and 2

- Scoping the new model of mobile advertising and its requirements.
- Design a new mobile advertising model which is user-centered and based on personal user context.

Activity 3. Simulation and Validation:

2018: Semester 2 - 2019: Semester 1

- Study of methodologies and simulation tools and selecting a tool for simulating the new Model.
- Simulation of new mobile advertising model and its validation.

Activity 4. Results analysis:

2019: Semester 1

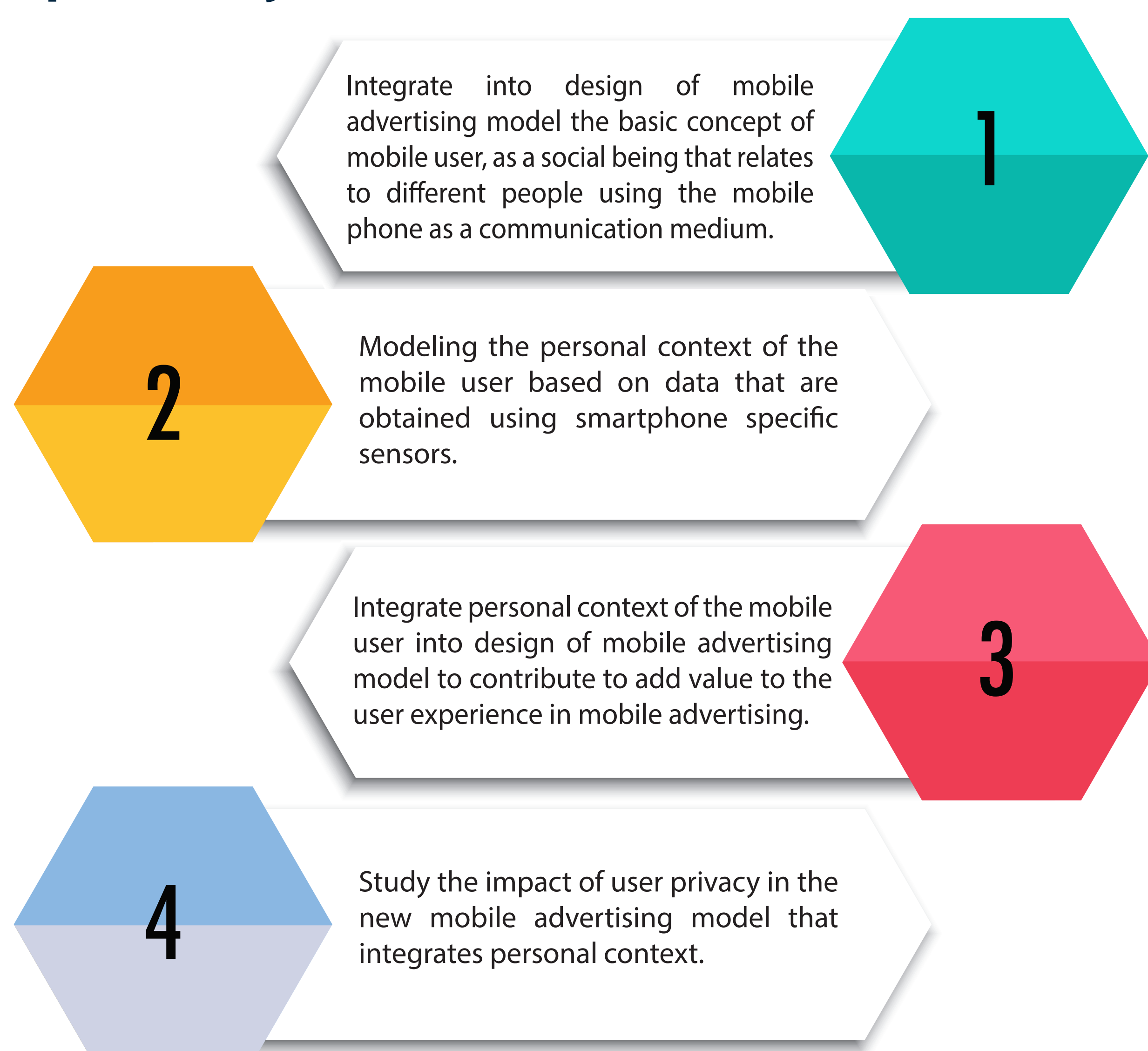
- Analysis of the results of the model simulation.
- Formalize documentation of the thesis, contributions and conclusions.

Thesis Objectives

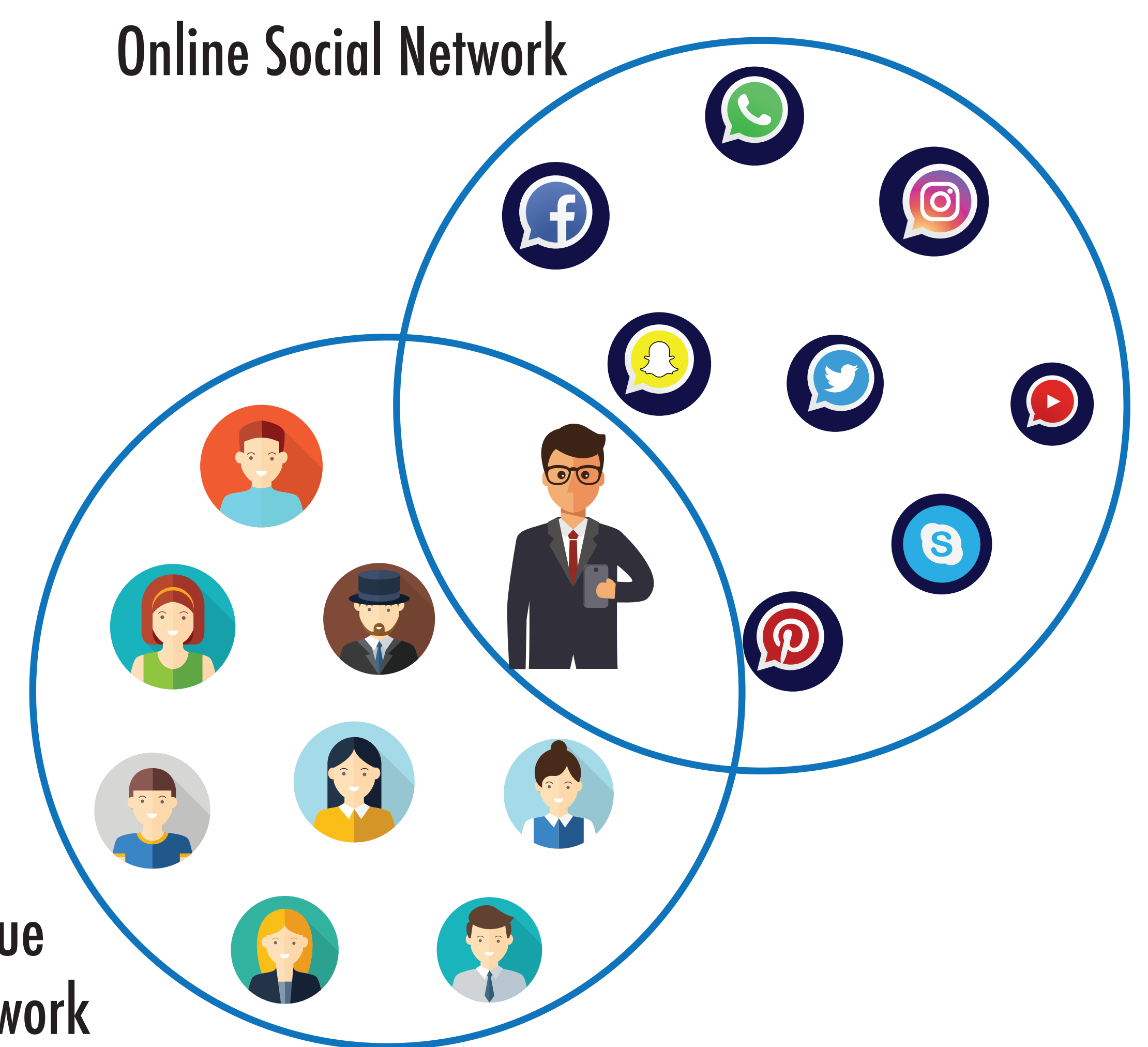
General Objective

Design a user-centered mobile advertising model that is based on personal context information obtained from smartphone specific sensors.

Specific objectives



User's True Social Network



Next Year Planning

The aim is to focus on designing the new Advertising Model:

- Define the scope of a new model and its requirements.
- Design a new mobile advertising model: user-centered, based on personal user context, and user privacy aware.

References

- [1] V. Kumar, Shaphali Gupta, "Conceptualizing the Evolution and Future of Advertising", Journal of Advertising. Volume 45, Issue 3. 2016.
- [2] Don Schultz, "The Future of Advertising or Whatever We're Going To Call It", Journal of Advertising, Volume 45, Issue 3, 2016.
- [3] Wazir Zada Khan, Yang Xiang, Mohammed Y Aalsalem, Quratulain Arshad. "Mobile Phone Sensing Systems: A Survey". IEEE Communications Surveys & Tutorials, Vol. 15, No. 1. 2013.
- [4] Nicholas D. Lane, Emiliano Miluzzo, Hong Lu, Daniel Peebles, Tanzeem Choudhury, Andrew T. Campbell. "A Survey of Mobile Phone Sensing". IEEE Communications Magazine, Vol. 48, Issue 9, 2010.
- [5] Elsa Macias, Alvaro Suarez, Jaime Lloret. "Mobile Sensing Systems". Sensors, 2013, No. 12.