Legal issues of user tracking technologies.

An analysis of web and mobile tracking methods utilised by Austrian enterprises for business purposes

Zwischenbericht | Call 15 | Stipendium ID 5035

Inhalt

1 Einleitung

In the light of data scandals, like the Cambridge Analytica scandal, the EU legislators introduced new laws to police certain forms of user tracking as well as the use of data generated through user tracking. Thus, Austrian enterprises are now limited by EU and Austrian laws in the extent to which they can apply user tracking for business purposes. To evaluate the impact of these laws, it is necessary to answer the following research questions:

- What is currently considered state-of-the-art user tracking and which other methods are still in use?
- Which (state-of-the-art) user tracking technologies are currently used by Austrian enterprises for business purposes?
- In which ways are these technologies covered by Austrian or European law? Which technologies in use pose potential threats to users' privacy and are currently not regulated?

2 Status

2.1 Meilenstein 1 – Kapitel 1 „State-of-the-art user tracking methods"

Kurzbeschreibung der Haupttätigkeiten
Erkenntnisse zur Vorgangsweise
Kurzbeschreibung der erreichten Ergebnisse
Besondere Erfolge/ Probleme
Gab es große Abweichungen zum Plan? Warum?

My first chapter tries to answer the following question:
What is currently considered state-of-the-art user tracking and which other methods are still in use?

To paint a complete picture, I have used an approach similar to the methodology of meta-narrative review developed by Greenhalgh et al. in 2005.[1] I have come up with 63 publications, which were (partially) relevant to my thesis. While summarising my findings on user tracking history and methods, I came across even more relevant publications.
When I first started my research for this thesis, I did not know what vast amount of information on user tracking methods is out there. So I had to admit to myself that writing about all of it is too much for a single Master thesis. Therefore, I decided to re-focus my work on a smaller field within the same area and I renamed my thesis to make its contents even clearer.

Milestone 1 was reached as planned at the end of January 2021.

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[1] [GRM+05] Trisha Greenhalgh, Glenn Robert, Fraser Macfarlane, Paul Bate, Olympia Kyriakidou, and Richard Peacock. Storylines of research in diffusion of innovation: a meta-narrative approach to systematic review. Social science &medicine, 61(2):417-430, 2005.

2.2   Meilenstein 2 – Kapitel 2 „Application of user tracking technologies"

Kurzbeschreibung der Haupttätigkeiten
Erkenntnisse zur Vorgangsweise
Kurzbeschreibung der erreichten Ergebnisse
Besondere Erfolge/ Probleme
Gab es große Abweichungen zum Plan? Warum?

In order to create a meaningful survey for the next milestone, I needed to write a completely new chapter, one that was not on my initial list of things to do. At some point while writing chapter 1, I had to admit that people targeted by my survey might not be able to answer my questions sufficiently. Therefore, I decided the only way I can create an "answerable" survey is by taking the time to look up (commercially available) user tracking tools and, in a next step, match them to the methods I already described in my first chapter. This was much harder than initially thought; I was only able do it to the best of my resources. So many of those tools try hard to hide any information on their inner workings.

Milestone 2 (according to the revised plan) was reached as planned at the end of March 2021.

2.3   Meilenstein 3 - Survey

Kurzbeschreibung der Haupttätigkeiten
Erkenntnisse zur Vorgangsweise
Kurzbeschreibung der erreichten Ergebnisse
Besondere Erfolge/ Probleme
Gab es große Abweichungen zum Plan? Warum?

To answer the second research question "*Which (state-of-the-art) user tracking technologies are currently used by Austrian enterprises for business purposes?*" I initially proposed a survey. As mentioned in the section above, a survey must be suitable to its target group. In addition, the wording of each question and the overall design can influence the outcome of survey greatly. As Brace noted in his book about questionnaire design for market research[2], even the best questionnaire relies on people and what they (can / do not) tell us. Due to these facts, it took me more time than anticipated to design and formulate my survey. I consider it the heart of my thesis, and therefore I would rather take more time to create it than regret not doing so further down the line.
I also encountered (somewhat expected) difficulties reaching the right audience. There is no easy/good way to contact a representative sample of Austrian enterprises. I am currently working on a solution to that particular problem.
Altogether, I was not able to finish milestone 3 as planned. See the next section for necessary changes to my planning document.

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[2] Ian Brace. Questionnaire design: How to plan, structure and write survey material for effective market research. Kogan Page Publishers, 2018.

3 Zusammenfassung Planaktualisierung

Alle Anpassungen des Planungsdokuments kurz zusammengefasst

The following changes have been made to the planning document:
- I split former milestone 3 in milestone 3 and 5 because of the above-mentioned problems while creating the survey
- I extended the period planned for milestone 5 because of the upcoming holiday season. I hope I will be able to reach more people and therefore gather more answers over this extended period.
- I also extended the time planned for milestone 6. Mostly because of another change, the complete removal of the former milestone 6. In agreement with my supervisor, I decided to cancel my last proposed research question completely. By doing so I will give myself a chance to create a truly anonymous survey, which hopefully leads to more honest answers, and will also be able to write a more precise and self-contained thesis. To accomplish this goal, I am going to spend more time on milestone 6.
- Because my supervisor currently has many nearly finished Master students and there are only a few opportunities within a semester to hand-in a finished thesis at TU Wien, I delayed the expected finalisation of my thesis to October/November 2021.