

Thomas Brüggemann

Master Thesis
im Fach Allgemeine Wirtschaftsinformatik

Automating the privacy risk assessment for mHealth apps

Themensteller: Jun.-Prof. Dr. Ali Sunyaev

Vorgelegt in der Masterprüfung
im Studiengang Information Systems
der Wirtschafts- und Sozialwissenschaftlichen Fakultät
der Universität zu Köln

Köln, Februar 2016

Contents

| | |
|--------------------------------------|-----|
| Index of Abbreviations | III |
| 1. Problem Statement | 1 |
| 2. Objectives | 1 |
| 3. Definitions | 1 |
| 3.1 Mobile health applications | 2 |
| 4. Methods | 2 |
| 5. Structure | 2 |
| 6. Expected Results | 2 |
| 7. Problems | 2 |
| Literaturverzeichnis | 3 |

Index of Abbreviations

1. Problem Statement

The market for mobile smart device applications (apps) is growing extensively in recent years. It is increasingly easier for small companies or even single developers to create unique apps that reach millions of users via app stores. This market growth also effected mobile health (mHealth) apps. More and more apps are available that support the users in solving their health related issues and information deficiencies. Users are asked to input their personal information in order to tailor the app to their custom needs. The users are asked to expose vulnerable information about their health status while it remains mostly unclear how and where the data is processed, stores or tossed along.

The information about privacy practices of the app providers should be found in the privacy policy document provided by the app provider. Processing these privacy policies- requires a higher level of education and time to read through large documents of text to find the relevant information. Additionally, the important information is hidden in legal language or insufficiently addressed, if at all.¹ Aside from the data usage beyond users control, it is also challenging for users to assess what kind of privat information an app asks for, in order to tailor the app experience. Users have to download the apps of interest and try them out, before it becomes clear what information is used. This leads to low inter comparability between apps. If users are looking for specific functionality in a mHealth app, it is challenging to find the app that offers the desired functionality at an acceptable privacy risk.

2. Objectives

3. Definitions

Certain terms are used in the remainder of this thesis that need to be defined:

¹ Dehling, Gao, Sunyaev (2014), p. 11

3.1 Mobile health applications

4. Methods

5. Structure

6. Expected Results

7. Problems

So far there are no open questions or problems.

Literaturverzeichnis

Dehling, Gao, Sunyaev (2014)

Tobias Dehling, Fangjian Gao, Ali Sunyaev: Assessment Instrument for Privacy Policy Content: Design and Evaluation of PPC. In: WISP 2014 Proceedings. 2014,