



The Open
University

On The Impact of Real-Time Feedback on Users' Behaviour in Mobile Location- Sharing Applications

Mobile Systems Privacy Workshop

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Privacy

“right to be let alone”
Warren and Brandeis, 1890



“right to select what personal information about me is known to what people “
Westin, 1967

Do we have a **control** over the personal information we share?

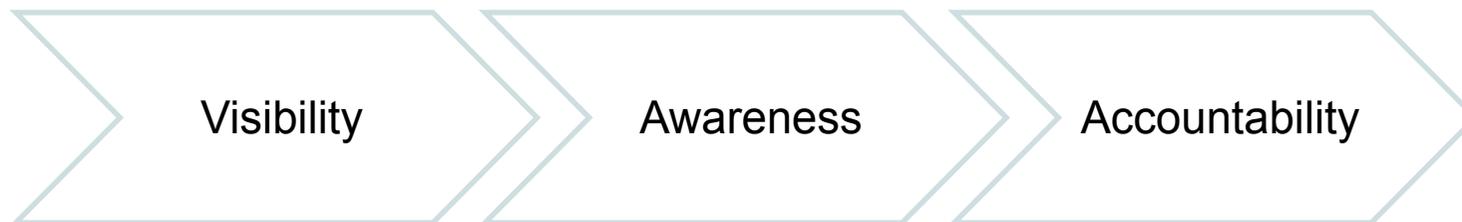
Are we **aware** of who has access to our personal information?



Real-Time Feedback

real-time **Feedback** - Informing people when and what information about them is being captured and to whom the information is being made available. **in the real time** (Erickson & Sellen 1993)

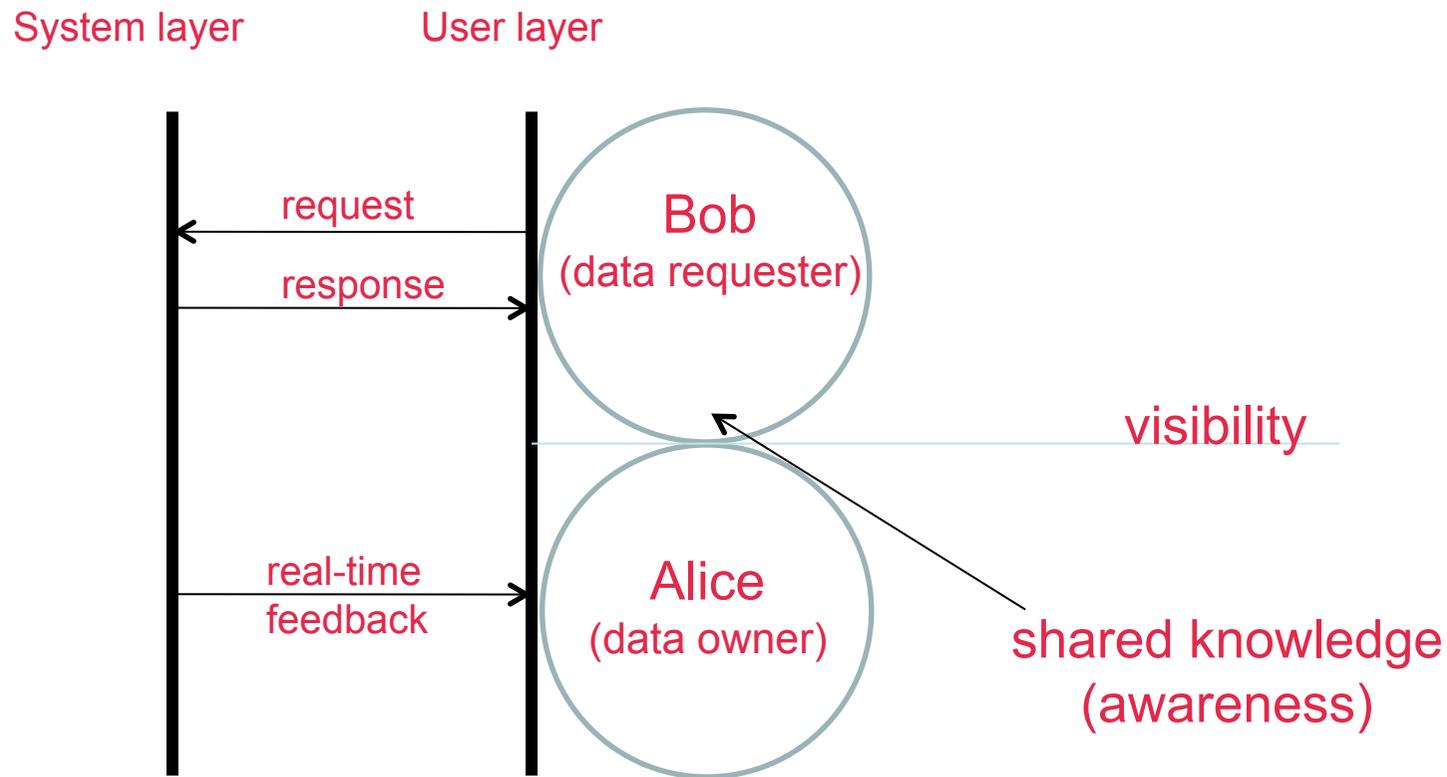
Social translucence (Erickson & Kellog 2000)





Real-Time Feedback and Social Translucence

An example scenario





Real-Time Feedback – Research Issues

- representation
- delivery time
- social implications
- privacy protection potential



Evaluating Real-Time Feedback

- focus group discussion
- interviews
- field trial



Context Matters



- **time**
- **location**
- **activity**
- **phone's position**
- **company**
- **importance of the information**
- **mobile activity (browsing web)**



Social Implications



Data owners

- mostly neutral about real-time feedback - not less or more willing to share location
- memory overload: “Why did X look up my location?”, “What does he want?”

Data requesters

- internal debate “Should I do it?” – protecting position within the social network
- change in users’ behaviour – smaller number of location lookups made in week 3 of the field trial



Privacy Protection

- real-time feedback limited the number of unjustified location lookups
- real-time feedback has to be supported by aggregated feedback



Summary

- wider demographics
- evaluate different sensory dimensions of real-time feedback in Buddy Tracker
- support context-awareness
- incorporate machine learning to improve users' experience



Thank you



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Privacy Rights Management for Mobile Applications

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