DEVELOPER CENTRED PRIVACY: ANALYSIS OF DEVELOPERS STRUGGLES WITH IMPLEMENTING PRIVACY FEATURES INTO SOFTWARE SYSTEMS

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1 INTRODUCTION
Bottom up approach to incorporating privacy into software design utilising prescribed standards. Although, regulatory directives are explicit within legislative provisions outlined in GDPR/CCPA concerning privacy, the issue remains as to whether or not this translates to clear understanding for the average software developer.

2 MOTIVATION
> Requirement for a comprehensive framework.
> Need for standardized evaluation metrics or means of privacy calibration.
> Unexplored complexities that constrain the incorporation of privacy artifact into software design.

3 METHODOLOGY
Mixed Methods Research Analysis
Quantitative Data
Qualitative Data
Controlled experiments
Interviews and task based studies

4 RESEARCH QUESTIONS
> What are the complexities faced by developers in incorporating privacy artifact into software design?
> What is needed to design an effective and widely applicable framework that analyzes software developers struggles with regards to privacy?
> How might the usability, effectiveness and limitations of the derived framework be evaluated with regards to developer centered privacy?

5 PRELIMINARY STUDIES
Initial Study
Subsequent Studies
Systematic task based study with think aloud protocols

6 RESEARCH OBJECTIVES
> Understanding developers struggles in incorporating privacy artifact into software design.
> Developing a comprehensive framework for developer centred privacy.
> Evaluating the derived framework.

7 CHALLENGES

8 CONCLUSION AND FUTURE WORK
Laws
Market
Responsibility & Trust
Dependable & Open & Safe
Innovation
Delightful & Trusted
Norms
Dependable & Inclusive
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REFERENCES