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 undrstanding for the average software developer.

2 MOTIVATION

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

3 METHODOLOGY
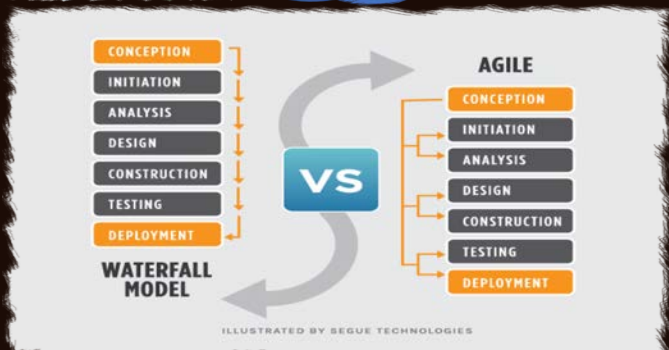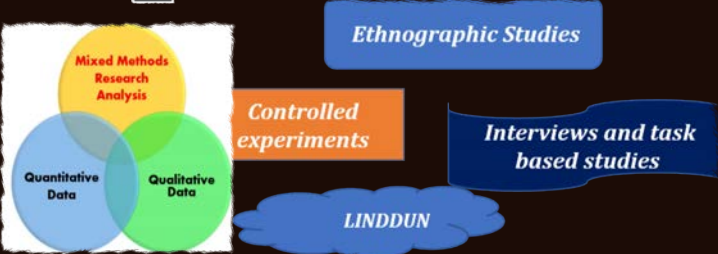
4 RESEARCH QUESTIONS

>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

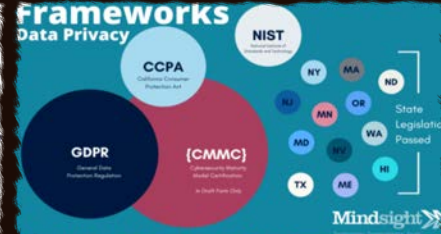Systematic task based study with think aloud protocols

Subsequent Studies

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

REFERENCES
[1] Cavoukain., A., 2009. Privacy by Design: The 7 Foudational Principles . Information and privacy Commissioner of Ontario, Canada.
[2] Tahaei et al (2021), Privacy Champions in Software Teams: Understanding Their Motivation,Strategies and Challenges