

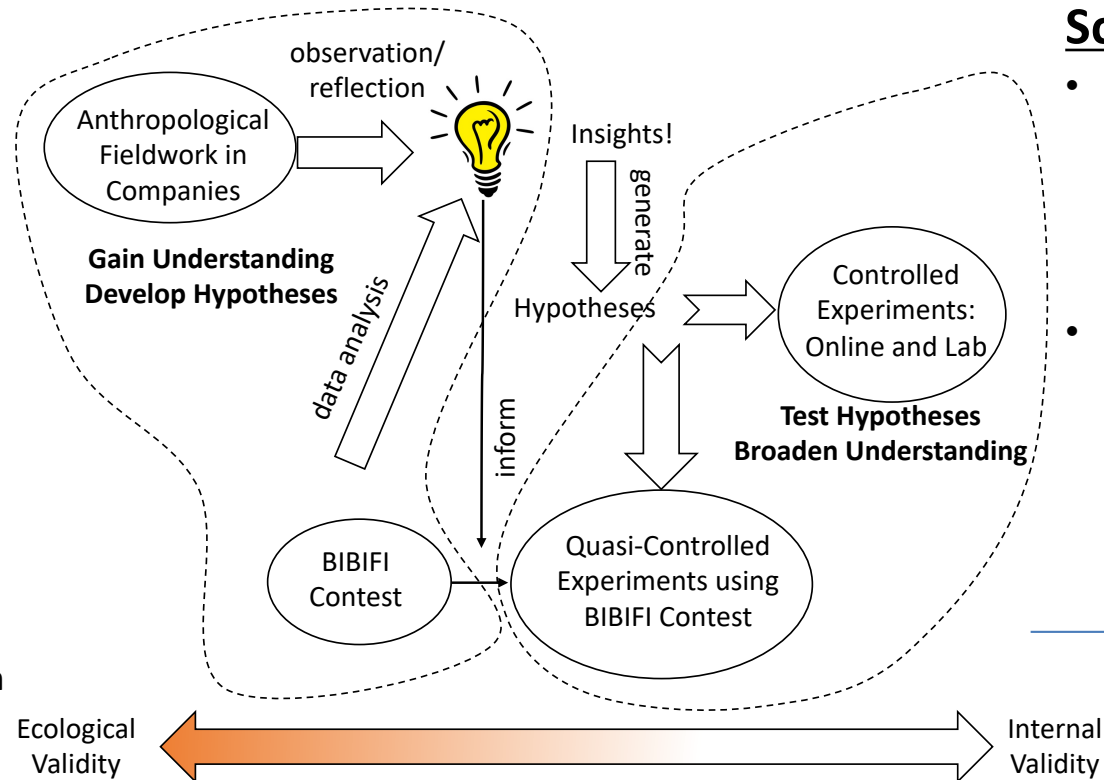
# Understanding Security in the Software Development Lifecycle: A Holistic, Mixed-Methods Approach

## Challenge:

What are human and organizational factors that impede secure software development in practice?

## Solution:

- Ethnography in software companies, controlled experiments, and semi-controlled experiments based on secure coding competitions
- Leverage the strength of each approach; findings complement each other



## Scientific Impact:

- Findings could lead to insights on how to reduce software vulnerabilities in software systems
- Shed lights on the importance of human and organization aspects in understanding secure coding problem.

## Broader Impact and Broader Participation:

- Could provide guidance on companies to design/implement secure coding practices.
- Companies could adopt proven approaches from the research.
- Research creates positive impacts on students who participate in the BIBIFI competitions, software developers who participate in the research as human subjects, and companies where the ethnography work is carried out.

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