A systematic approach to understand mental models of Indian users for payment apps

1. Introduction

- a. About Payment Apps
- b. Why is it important to study human interaction and experiences with UPI?
- c. How is social engineering is one of the biggest vulnerabilities in internet security?
- d. Prevalent threats (or this can come at the end as threats raised by people)
- e. Our ethical solution to gather data (in short, what is the method and why ethical)
- f. Provide citations for all points
- g. Research Question
 - i. How do we elicit mental models of Indian Users towards UPI apps while being ethical?

2. Background

- a. Drawbacks of UPI on protocol level
- b. Robert Cladini's principle of influence enlists factors that influence how people succumb to social engineering attacks
- c. Other studies on phishing susceptibility but not in UPI context

3. Methodology

- a. What kind of data do we need?
- b. Why do we need that?
- c. What are the ways of fetching that data?
- d. What are the issues with each of the methods?
- e. What problem does our method solve?
- f. How is it unique?
- Talk about ethics
- h. How did we come up with the idea?
- i. What inspired the interface?
- i. What are the features?
- k. Why did we ourselves limit to a few features?
 - i. We can give stats of the most commonly used UPI features and fraud conversion % of those if it's available somewhere
- I. Screenshots of the interface

4. Results

- Link to methodology by talking about how the simulator is going to be used by connecting it with some daily experiences the interviewees might encounter.
- b. Mention the attack models we are trying to simulate (not scenarios but more like: trust, lack of focus, lack of awareness, too much trust on logo etc.) (Our scenarios but in a round about manner)
- c. Validate each attack model with interviewee responses

i. What are their mental models to deal with these attack models

5. Conclusion

- a. How the simulator was not an influencer on the decisions made by the interviewees
- b. Quote the feedback by interviewees around interface.
- c. Mention a few vulnerable aspects of the user's mental model
- d. How can we assist users make choices that mitigate the attacks?

6. Future works

- a. Survey with multiple people from different socio economic, educational, ages backgrounds
- b. Test with some UI variations to see if it changes user perception

C.