

Usability of disaster apps: Insights from the app markets

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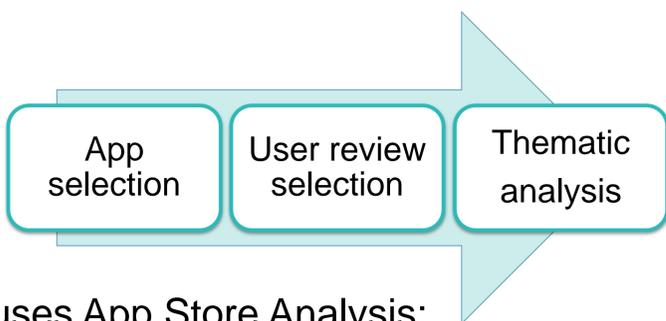
Background

The general public has access to a plethora of ‘disaster apps’ through App Markets like iTunes and Google Play. However, limited research has studied these ‘disaster apps’ and how the public perceives their usability. This project extends existing mobile app usability conceptualization by Hoehle and Venkatesh (2015) to include the users’ perception of existing ‘disaster apps’. Extensions are highlighted below.

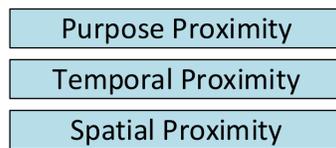
Research Question

What are additional usability concerns specific for ‘disaster apps’ given their circumstance of use?

Method



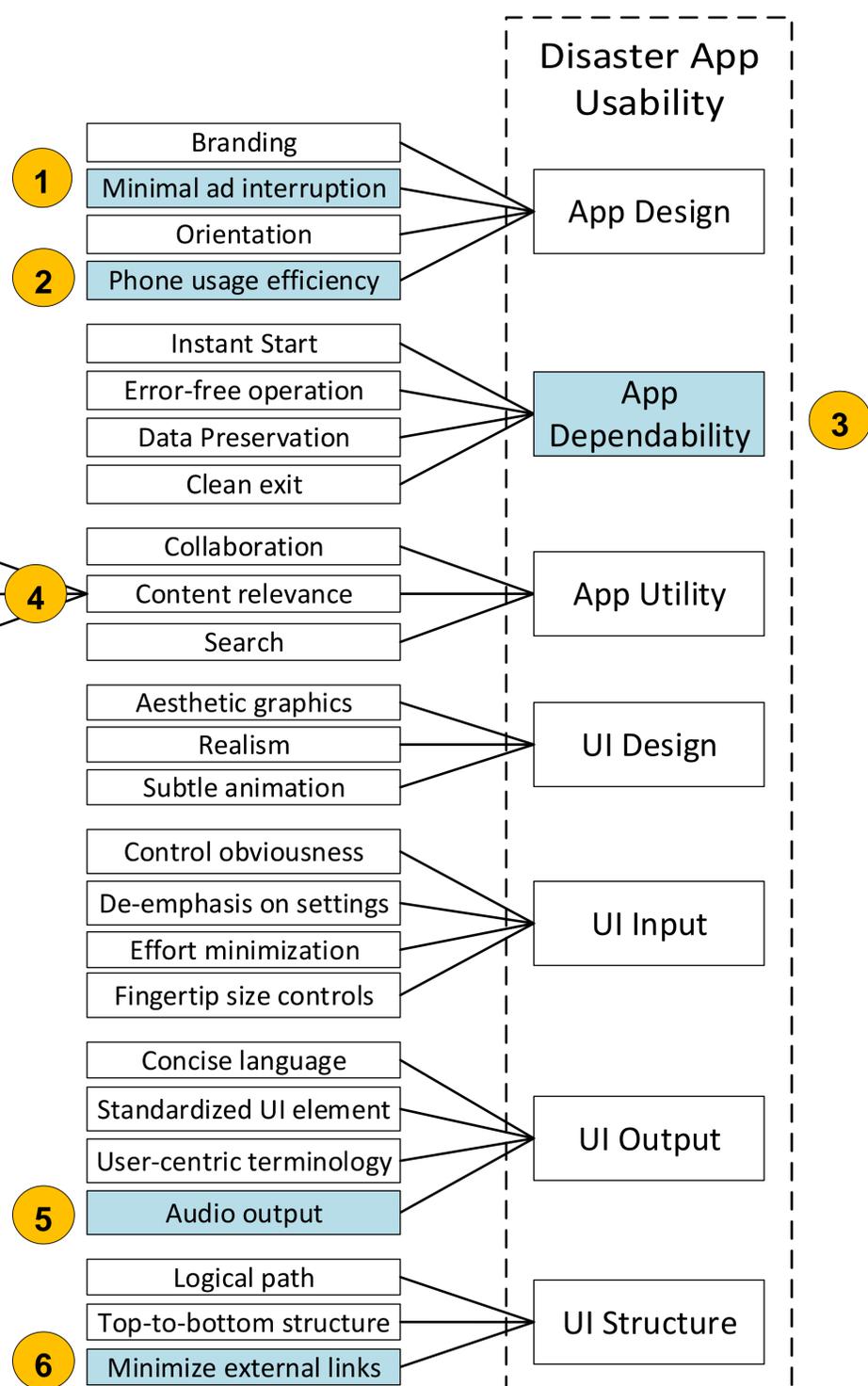
The study uses App Store Analysis: a thematic analysis of user reviews of ‘disaster apps’ from the Android and iOS markets. Insights from thematic codes form the conceptual framework.



Significant Observations

1. Advertisements contribute to cognitive load, therefore, should be minimised in disaster apps.
2. The app should efficiently work without unnecessarily draining critical phone resources. (e.g. battery). Users may need to use the phone’s other functionalities
3. App Dependability is introduced as a distinct higher order construct. Defined as the “degree to which a user perceives that operates effectively from start to exit”.
4. Content relevance is expressed in three ways: relevance to app’s purpose, relevance regarding temporal proximity, and spatial proximity
5. The audio UI can enhance the usability. Sounds can act as prompts that draw the users’ attention
6. In-app browsing have a potential contribution to usability. In-app browsing allows the app to display more content while staying within the app.

Conceptual Framework for Disaster App Usability



*Framework extends from Hoehle and Venkatesh (2015) mobile app usability conceptualization.
**Blue boxes are additional constructs emergent from the App Store Analysis

Future Work

This framework will be quantitatively validated then applied to prototyping and testing. Results will produce comprehensive usability guidelines for developers and designers of disaster apps