

Automatic, Manual, or Hybrid? A Preliminary Investigation of Users' Perception of Features for Supporting Notification Management

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PROBLEM

Smartphone notifications keep users updated on various events. With the increasing of notifications, users may not always be available when notifications arrive [1]. Thus, notifications accumulate within the notification drawer [2].

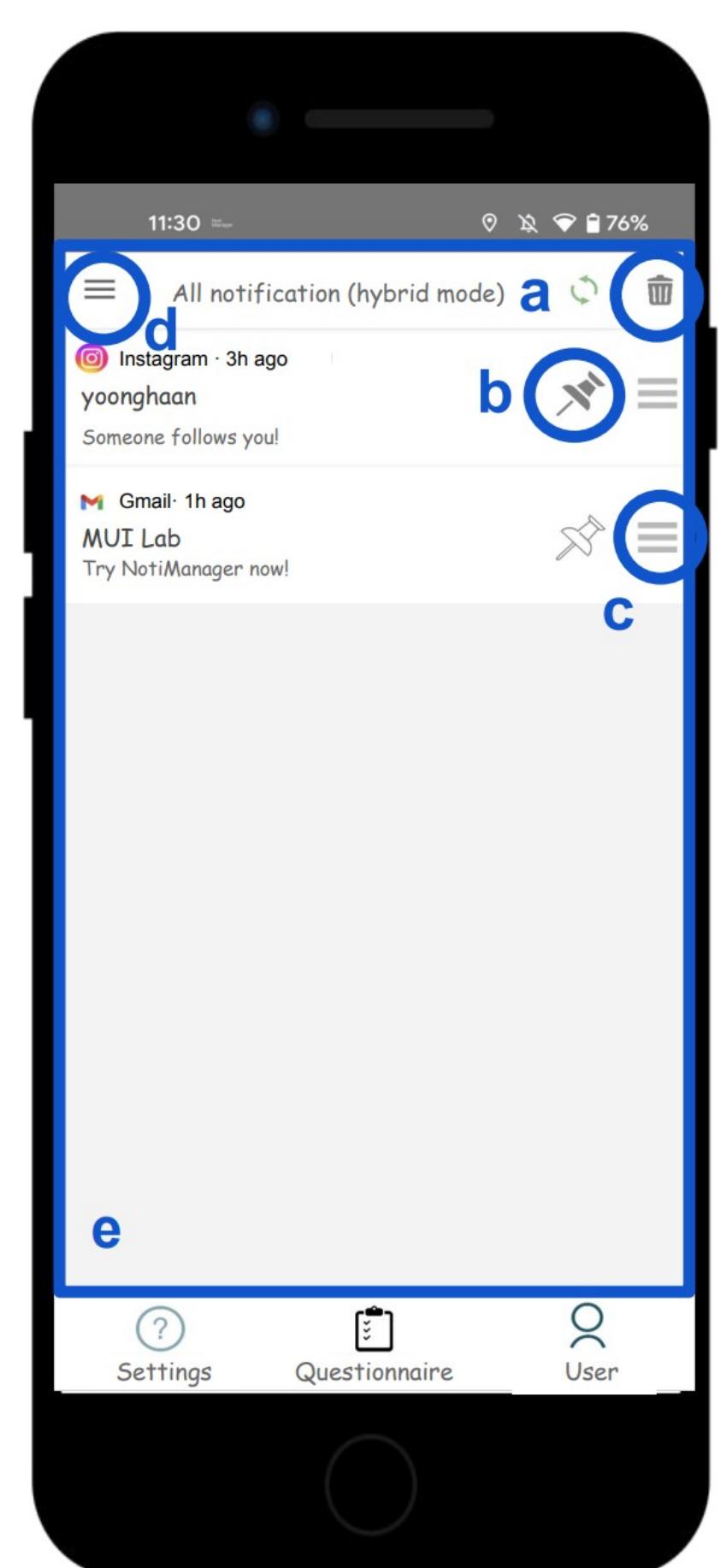


However, notifications play diverse roles, each with varying degrees of urgency and importance to users [3, 4]. Moreover, the order in which they are displayed often does not align with user preferences, making notification management a more challenging task [5].

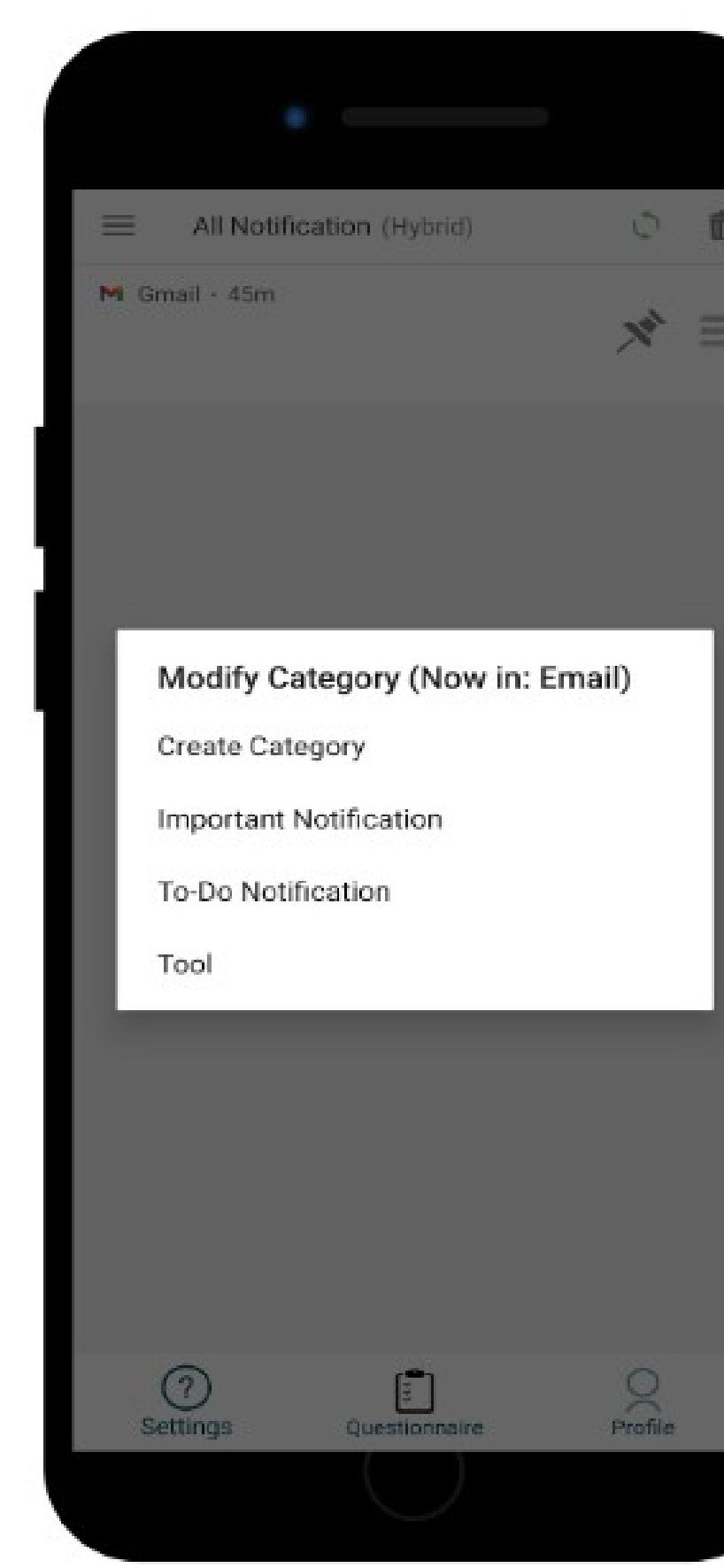
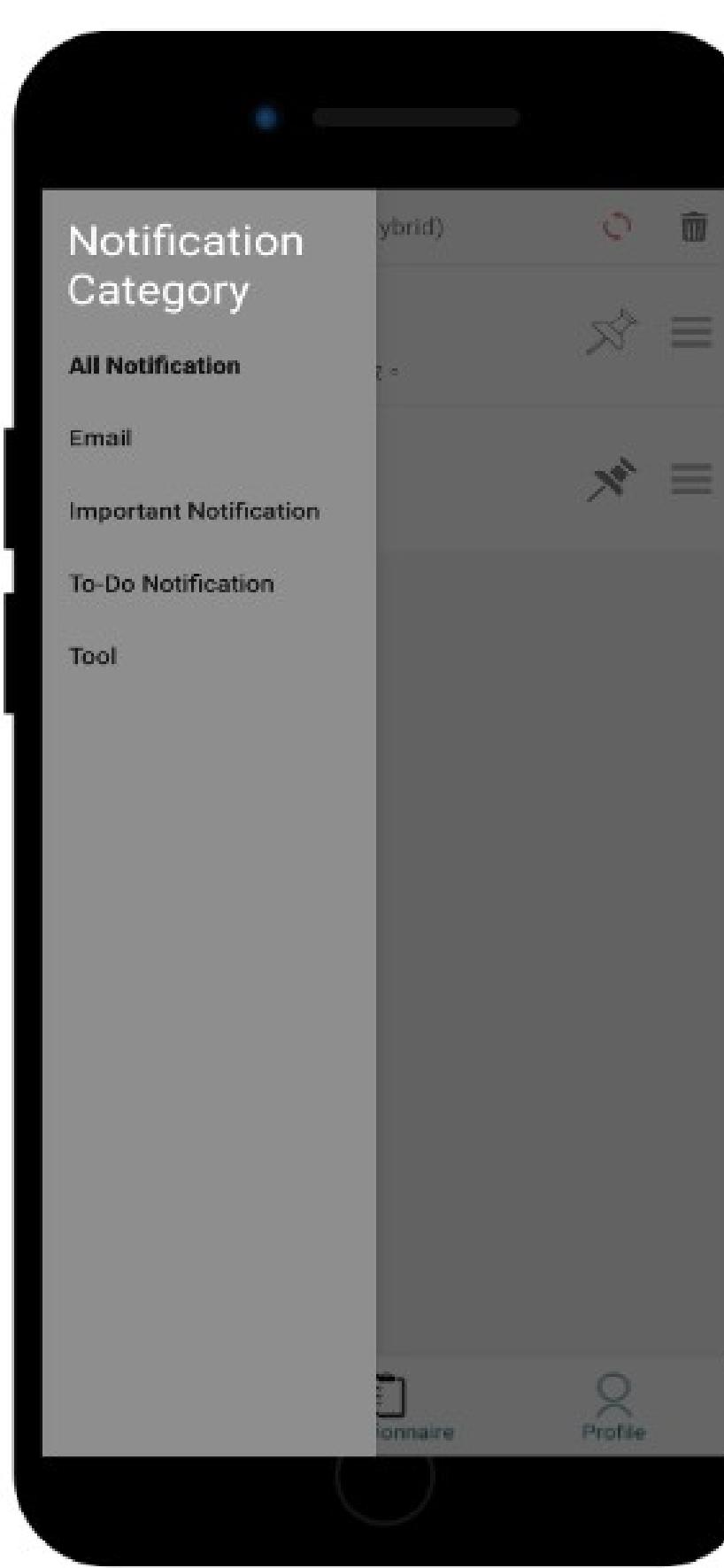
[1] Pielot et al., IMWUT 2017 [2] Weber et al., MUC 2019 [3] Mehrotra et al., CHI 2016
[4] Shirazi et al., CHI 2014 [5] Lin et al., CHI 2021

SYSTEM: NOTIMANAGER

A notification management app that replicates the traditional smartphone notification drawer while encompassing sorting, and categorization, with both automatic and manual approaches, and manual pinning.



- a. "Delete All Notification" button
- b. "Pinning" button
- c. "Sorting" button
- d. "Category Menu" button
- e. Notification drawer



Category menu &
Changing category interface

PILOT STUDY & PRELIMINARY RESULTS

We utilized the Experience Sampling Method (ESM) and Diary for in-depth user insights. To compare different modes, each participant experienced two modes:

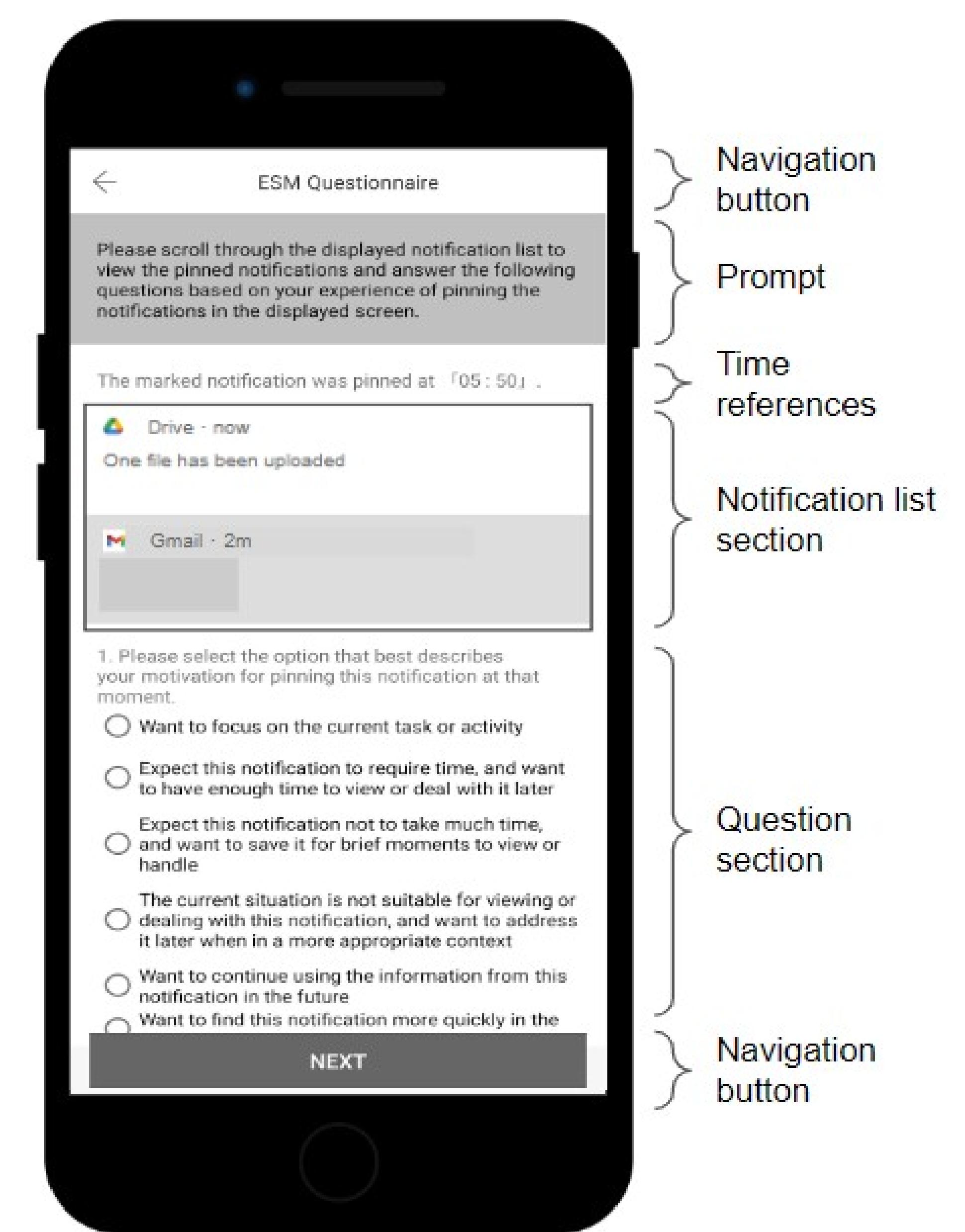
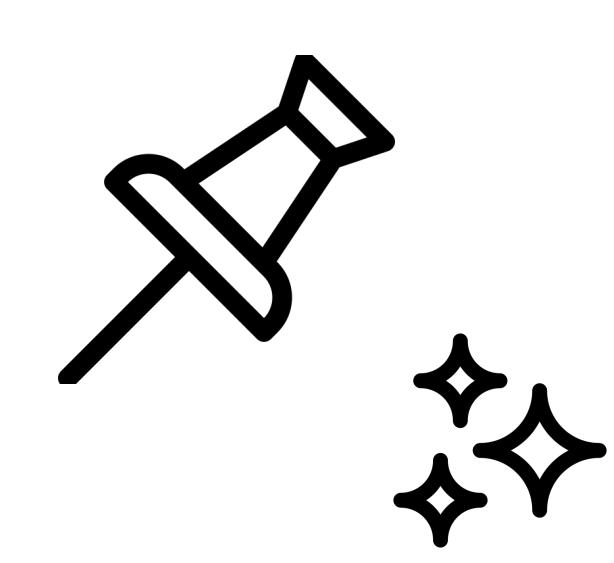
Hybrid + (Manual or Auto)

Perceived superiority for a **hybrid system** combining automatic and manual functionalities.



Hybrid

Particularly appreciated the "pin" feature provided by NotiManager.



ESM questionnaire



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