To: Richard Froggatt, Ido Birger
From: Daniel Ardila, Sharvi Dadhich, Chuyang Yu, Sriaansh Sahu
**Cc:** Pam Sheff, Trevor Mackesey, Hardik Shah and Riyaa Jadhav
Date: October 27, 2024
**Subject:** Fraud Detection Strategy for Shopkick, Issue Tree

Introduction:

Throughout its operation Shopkick has developed and deployed many methods to combat fraud; however, fraudsters have adapted to each of these new methods as fast as they are created. Our goal was to develop 2 issue trees: one that explores the role of Shopkick and the User in combating and committing fraud respectively and the other that explores the multifaceted fraud that occurs on the main kick-earning actions users complete in the app.
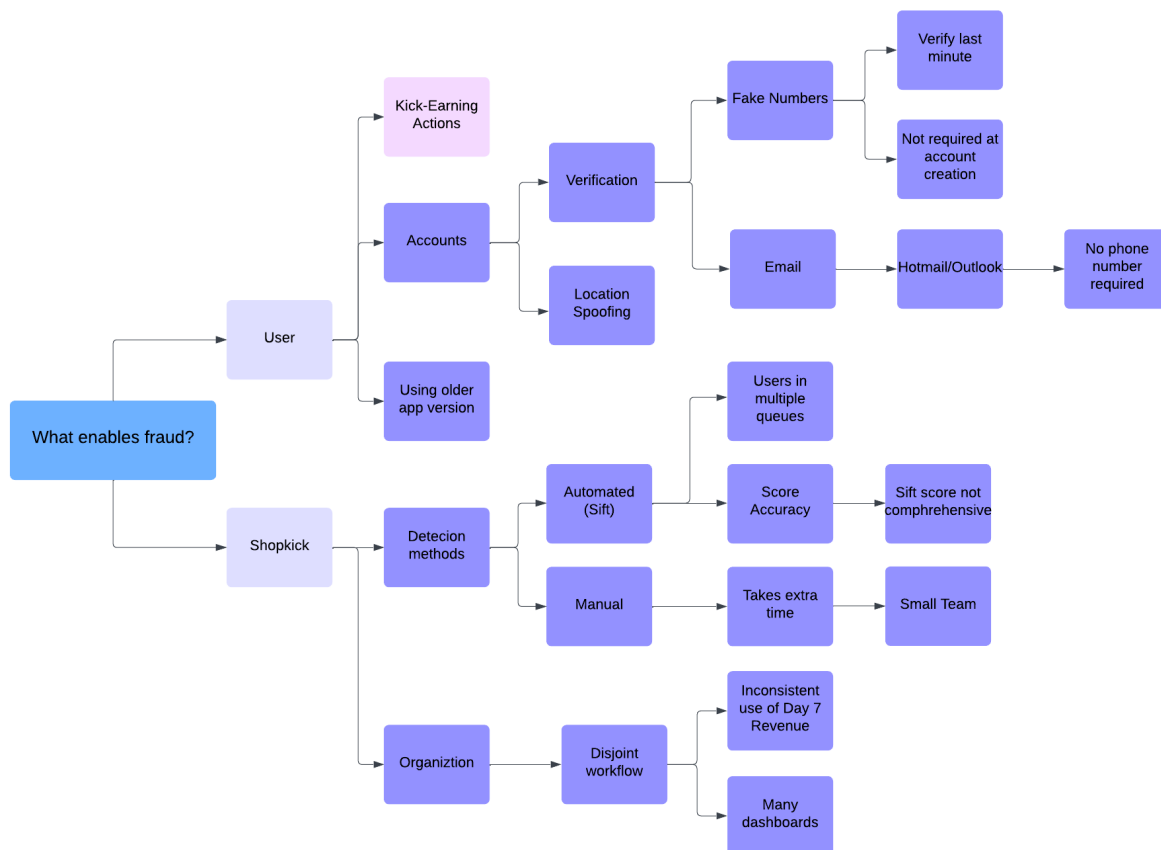
Description of Tree 1:

This issue tree illustrates the key factors contributing to fraud from both user and platform perspectives. It highlights how certain user behaviors, such as suspicious account activation and verification bypasses, lead to fraudulent activity. On the platform side, it emphasizes challenges in detection methods, Sift system limitations, and complex organizations that may cause fraud.
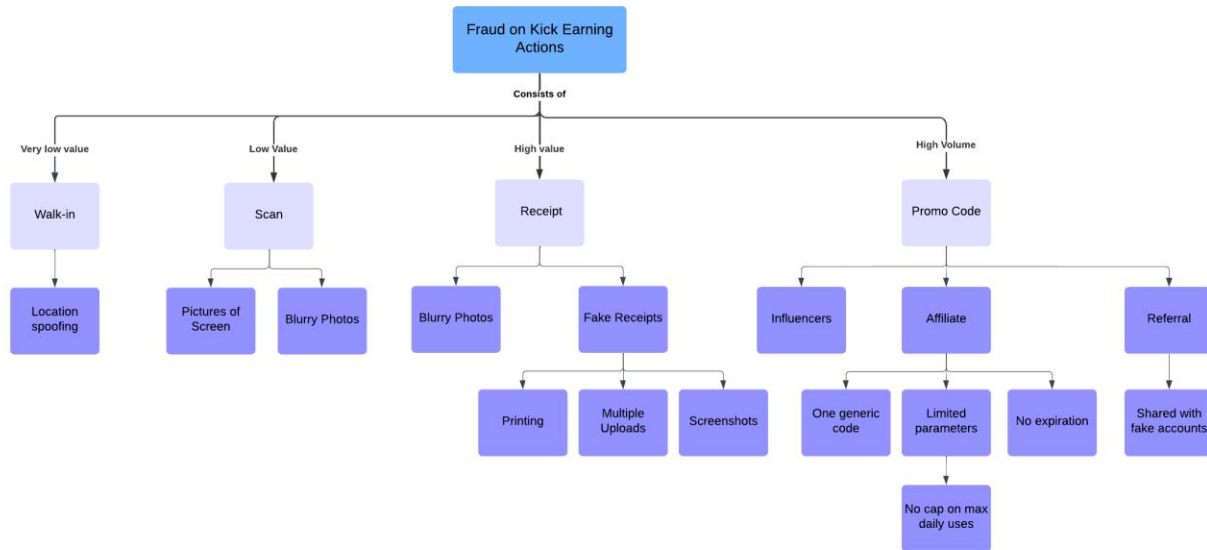
Description of tree 2:

This issue tree categorizes fraud types based on different kick-earning actions. It identifies specific loopholes in each action: low-value actions (like walk-ins and scans) where location spoofing and blurry images are common, high-value actions (like receipt uploads) involving fake receipts and multiple uploads, and high-volume actions (such as promo codes) including sharing referral codes with fake account and using generic codes with no expiration.

Conclusion

These two issue trees provide a comprehensive overview of the key factors causing fraud on the Shopkick platform. The first issue tree focuses on user behaviors and platform gaps. The second categorizes fraud types based on kick-earning actions. These structures offer different targeted frameworks to address fraud at both system and action levels, which allows us to develop more effective fraud prevention measures.