On the monetization of mobile apps

— Appel, Libai, Muller, Shachar (IJRM)

Summary

A theoretical / empirical framework analyzing how *sampling* (users try app before full valuation) and *satiation* (utility decays with time) shape optimal monetization (ad-funded free vs. paid/freemium). Models dynamics of user retention and revenue source trade-offs.

Key insights

- Two central forces shape revenue mix: **uncertainty** (users unsure of fit → sampling valuable) and **satiation** (utility declines with use). These determine how many users convert to paid vs stay free (ad revenue).
- When satiation is low (users persist), price and ad intensity can be higher and the paid share increases; when uncertainty rises, ad-driven scenarios become less profitable overall.
- A surprising result: offering a “damaged good” free version with ads can be profitable for the provider *even if advertisers pay nothing* — because it serves as sampling that funnels high-value users to paid version.

Practical implications

- Product managers should segment apps by expected retention/satiation: games (short life) vs utility apps (long life) require different monetization mixes.
- Use free (ad) version strategically as a sampling funnel; tune ad intensity to encourage conversion without destroying perceived value.

Limitations / future directions

- Model stylized; empirical validation across app categories and large cohorts recommended. Real-world frictions (platform fees, ad ecosystem) add complexity.
-