Application Activity 4: Mobile Marketing

Dorri Kannell

School of Professional Studies, Wake Forest University

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Elizabeth Ricks

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Introduction

In “A Simplified Mobile Advertising Model to Study Advertising Spreading through Personal Social Networks and Branded Apps”, Alexander Garcia-Davalos and Jorge Garcia-Duque studied viral mobile advertising and the various benefits that encourage ad spread among users. The article emphasizes the importance of electronic word-of-mouth as an essential advertising tool. The study simulated a viral campaign to show how ads are shared across users’ personal social networks (PSNs). It used 2 models: a simple model that focused on virtual space and advertising propagation and a model with user privacy perception level (UPPL) that focused on user perception of privacy risks, protection, and benefits (Garcia-Davalos & Garcia- Duque, 2023, p. 115-116). The study revealed that users tend to share information and products among family and friends. The understanding of privacy protection and benefits increased the user’s likeliness of sharing the ad across their personal social network.

Leveraging Personal Social Networks

As previously stated, the study revealed the importance of electronic word-of-mouth in advertising. Each user has its own online PSN that includes personal contacts like family, friends, and peers. Users are more willing to accept recommendations from their family, friends, and peers in their PSN. In addition, they are also more eager to share ads among their contacts in their PSNs. This mimics real-world interactions: people are more trusting of people’s opinions and recommendations if they know them. Therefore, users with strong-ties and trust are more likely to increase ad shares. This can be leveraged to help spread mobile advertising (Garcia-Davalos & Garcia- Duque, 2023, p. 1105).

The study does state that the impact of viral advertising has a threshold. Smaller groups of users are more effective in spreading ads than larger groups of users. The study used the Pareto principle, which suggests that 20% of users are responsible for 80% of ad spreading (Garcia-Davalos & Garcia- Duque, 2023, p. 1126). This indicates that users are more likely to share ads among smaller personal networks, consisting of users they personally know and trust. Based on previous studies, Garcia-Davalos and Garcia-Duque assumed that a user's personal social network consists of 10 other users at maximum (2023, p. 1112).

Privacy concerns influenced the way users share information among their PSNs. There is great concern among users on how brands use their personal information for mobile advertising (Garcia-Davalos & Garcia- Duque, 2023, p. 1105). Brands can now track user data for personalized and targeted marketing which raises many privacy concerns. The UPPL model revealed that users are more likely to spread ads if they trust the brand and feel their privacy is protected. As discussed, users will more likely accept and share information from strong ties in their PSNs. Users will not want to put themselves and their friends, families, and peers in their PSN at risk for privacy violations. Thus, the user's likelihood of sharing will increase if the user feels more protected. In addition, it creates a form of trust with the brand. Users are more likely to recommend brands that they trust and have a good relationship to their PSNs.

User Privacy Perception

The study also focused on infected-users, or users who download, utilize, and engage with a branded app. A user's relationship with branded apps is important in digital marketing as the use of branded apps enhances a positive relationship with the brand itself. Users are more motivated to share brands that they have a strong and positive relationship with (Garcia-Davalos & Garcia- Duque, 2023, p. 1108). Infected-users are an important metric in digital marketing, as

the study found that mobile advertising propagation and ad spreading increased with the increase in infected-users. The UPPL model revealed that users are more likely to become infected-users if they feel their privacy is protected in the app (Garcia-Davalos & Garcia- Duque, 2023, p. 1123). This affirms the importance of addressing privacy concerns with branded apps.

Privacy concerns can vary across media. The article highlighted a 2020 study by Kenan Degirmenci that reviewed users' privacy concerns on mobile apps (Garcia-Davalos & Garcia-Duque, 2023, p. 1109). The study discussed that prior privacy experience, computer anxiety, and perceived control all contribute to app users' privacy concerns (Degirmenci, 2020, p. 261). Advertisers can address these concerns by granting users a feeling of control over their personal information. For example, making privacy policies clear to users and allowing users to address what they want to be shared can have a positive impact. Advertisers can implement consents when users download apps so users have control over what information is tracked. In the article "The Use of Data Analytics of Online Vaccine Safety Info" , Gesualdo, et al. emphasized ethical and privacy issues. Companies can use cookies to collect and use info, but the article also discussed that this can only happen when consent is given by the user (2020, p. 6419).

Addressing privacy concerns will increase the amount of infected-users, thus strengthening brand relationships and trust. Users with a stronger relationship with a brand will be more likely to spread the brand and ads to their PSN.

Comparisons with Traditional Advertising Models

The simplified mobile advertising model uses a viral approach to advertising spread through a users' PSN. The simplified mobile advertising model was inspired by some aspects of a traditional advertising model. For example, the traditional model uses advertisers, ad agencies,

publishers, and audiences as 4 key players. The simplified model reduced this and focused on only the direct relationship between advertisers and mobile users (Garcia-Davalos & Garcia-Duque, 2023, p. 1106). This will show a clearer sentiment between users and the brand. The simplified model was also inspired by the traditional model's emphasis on protecting user privacy in branded apps (Garcia-Davalos & Garcia- Duque, 2023, p. 1106).

The simplified model uses an agent-based modeling tool to show the spread of advertising across PSNs. Previous studies have not focused on spreading ads through users' PSN. This simplified model uses the "mobile users' PSN as a crucian component and leveraging the potential of users in these networks to accept and share ads because of their empathy and close relationships." (Garcia-Davalos & Garcia- Duque, 2023, p. 1106). The model really narrows down how and why ads are shared between users. It also enables the study of specific concerns, like user privacy perception and its effect on mobile advertising propagation. Overall, it revealed how mobile advertising can be enhanced by leveraging users' PSNs (Garcia-Davalos & Garcia-Duque, 2023, p. 1106).

With these benefits comes limitations. The model did not use a more varied virtual space. The virtual space for the studies were similar and thus lacked information on advertising in more diverse virtual spaces (Garcia-Davalos & Garcia- Duque, 2023, p. 1129). For example, using different sizes of virtual space would have made the model and study more useful for variable scenarios.

Use of the SIR Epidemiological Model

The SIR epidemiological model is a popular tool in studying ad spreading using a viral approach. It simulates viral marketing. The model divides users into 3 categories: susceptible (S),

infected (I), and recovered (R). The susceptible user represents a potential user who accepts ads from other contacts in their PSN. For example, an infected user may share the brand with a susceptible user. An infected user represents someone who downloads, uses, and shares the branded app. A recovered person is someone who no longer utilizes the app, and thus stops sharing ads (Garcia-Davalos & Garcia- Duque, 2023, p. 1114).

The SIR model allows for advertisers to track ad spreading in a user's PSN across different social networks (Garcia-Davalos & Garcia- Duque, 2023, p. 1109). The SIR model allows for a deeper look on what influences the spread of ads and the virality of specific marketing approaches. For example, in the study, the model allowed for the influence of privacy concerns across users and showed how it affected viral advertising.

Practical Implications for Promotion Managers

Promotion managers can use this research to develop more effective mobile advertising strategies. Promotion managers should understand the importance of branded apps on user-brand relationships. Using marketing tactics to encourage users to download and engage with branded apps will have a positive impact on the brand itself. Increasing the number of infected users will increase ad spread across UPNs. To do this, marketers must understand users' concern with privacy.

Implementing user consent and control over users' personal information will have a positive impact on viral marketing. In addition, increasing privacy protection will increase app usage and app shares and recommendations. Brands can also show users the benefits of sharing ads within their PSN. Having open rules about privacy will encourage users to feel more comfortable sharing app information. Any other privacy risks should be outweighed by the

benefits of sharing the app or ad. Implementing incentives and other benefits, like discounts for friend and family referrals, will encourage users to share within their PSNs. However, this must be done while keeping privacy risks low.

Conclusion

Mobile advertising has grown exponentially in recent years. The article predicted a 10% growth of mobile advertising spending by 2024 (Garcia-Davalos & Garcia- Duque, 2023, p. 1104). According to current spending trends, Stastia predicts mobile advertising spending to reach $399.6 billion by the end of 2024 (2024). It is important that mobile ad spending is done effectively. The article emphasizes the importance of electronic word of mouth as a powerful advertising tool. Encouraging shares within a user's PSN is an efficient way to make mobile marketing more successful and cost-effective.

In order to measure success of mobile apps and campaigns, user analysis is necessary. This can include user behavior tracking, user demographic and geographical insights, and conversion tracking (Allison, 2024, p. 171-172). In addition, companies may track users across other platforms to enable personalized and targeted ads. This brings up the concern of users' privacy. While user monitoring is an excellent tool to gain insights on how to target ads and improve apps, it can risk losing customers and users based on privacy concerns. The article emphasizes the importance of companies understanding users' privacy risks, protection, and benefits.

Apps should be open and clear with users on how they will protect their privacy. They should also ask for consent from users to track certain metrics. This will strengthen the user-

brand relationship and build trust. Trust will encourage users to accept and share ads with contacts in their PSN.

Mobile advertising will continue to grow even more over the years and new benefits, limitations, and concerns will be revealed. It is important that this research continues. For example, more and more brands are using artificial intelligence, which raises ethical and more privacy concerns among users. Future research can reveal how AI can benefit or limit user-brand relationship and mobile marketing.

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