

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres

Introduction: Advancing understanding of mobile applications in marketing

ARTICLE INFO

Keywords

Mobile applications
In-app purchases
Special issue
Mobile marketing

ABSTRACT

This special issue of JBR includes seven articles about mobile applications in marketing that were selected through a blind review process. Topics include the relationship between pricing of app downloads and in-app purchases, the effects of developers switching between paid and free download pricing, how embedded sounds in apps affect behavioral intentions, motivations for use of branded apps, factors influencing the effect of mobile “check-ins” to retail locations on shopper satisfaction, how physical proximity to—and social tie strength with—others affect reactions to mobile promotions, and drivers of app downloads. Methods employed in these studies are diverse and include empirical modeling, natural field experiments, experiments, and surveys.

Mobile applications (apps) are on track to generate more than a *trillion* dollars in revenue in 2024 (Statista, 2020). And yet, relative to the size and continued growth of the app economy, academic research has barely scratched the surface of understanding the mobile apps strategies of developers as well as behaviors of customers of mobile apps. The goal of this special issue is to further our understanding of mobile apps as well as inform practitioners with much needed guidance. This special issue of JBR includes seven papers on diverse topics (pricing, service encounters, mobile coupons, embedded sounds in apps, promotion strategies, motivational antecedents of app adoption) utilizing a variety of methods (experiments, natural field experiments, surveys, empirical analysis) to further our understanding of this mammoth industry and raise compelling questions for future study.

Hsieh (this issue) examined the role of customer expectations in evaluating a vendor’s virtual response to a customer’s mobile check-in at a physical retail location. Hsieh analyzed the perceived quality of that response relative to the customer’s own expectations and how that affects customer attitudes and intentions toward the firm. Through a survey of 485 respondents, Hsieh found that vendors responding to check-ins with financial incentives strongly increased satisfaction and decreased disappointment, which in turn led to higher word-of-mouth and repurchasing intentions. The customer’s awareness of the persuasive intent of these messages moderated the relationship between satisfaction and word-of-mouth intention.

Gokgoz, Ataman, and van Bruggen (2021) looked at drivers of app downloads in the first year’s paired analytics data (downloads, updates, appearances on featured lists, and positions on app charts) of 979 mobile apps with publicly available data on app ratings and reviews. Analysis revealed differential effects by app category (Gaming vs. Non-gaming) and pricing (free vs. paid downloads). For example, being on a “top featured list” had a positive effect for all apps, but the effect was much larger for paid (vs. free) and non-gaming (vs. gaming) apps. The authors showed that the time of greatest impact for marketers in affecting app

adoption is shortly after launch. Perhaps most daunting for developers, the analysis revealed that platform-controlled factors such as the “featured app” designations have a stronger effect on adoption than developer-controlled factors. The authors found that the trajectory of app adoption over time is largely set as it becomes increasingly difficult to affect adoption.

Jang and Chung (2021) examined the effect of base prices (e.g. price to download) of gaming apps on in-app purchases (IAPs). The authors analyzed more than seven thousand weekly observations across 74 gaming apps. The absolute price of an IAP—that is, a listed price without a reference point—was positively related to sales. However, the relative price of an IAP—the price relative to the app’s original download cost—was negatively-related to sales. The negative relationship between relative IAP price and sales were moderated by availability of popularity information (sales and reviews) such that the more information about a product’s popularity that was available, the weaker the effect.

Lee, Ghasemkhani, Xie, and Tan (2021) used empirical data of 7,399 apps in a 12-month period. They analyzed developer behaviors in switching between paid and free pricing for downloads. The authors found that switching from paid to free downloads is twice as common as the inverse and is typically done as a means of reinvigorating interest in the app—a strategy they found effective in increasing downloads. Switching from free to paid had the opposite effect. The authors also estimate a model where the tradeoff between download fees and IAPs from greater downloads of a free app makes economic sense.

Poupis, Rubin, and Lteif (2021) examined the influence of sound on customer valuation and use of an app through a series of five experiments. Their results suggest that the use of intentional sounds in apps creates a feeling of “social surrogacy” with users—that is, a feeling of a social presence by the app. The feeling, in turn, increased customer evaluations, willingness-to-pay, and intention to recommend the app.

Gupta and Mukherjee (2021) looked at the strength of social ties in a group and how that affects response to mobile promotions. Two

<https://doi.org/10.1016/j.jbusres.2021.01.005>

Available online 16 January 2021

0148-2963/© 2021 Elsevier Inc. All rights reserved.

experiments used WiFi log data and a mobile application to track the geographic location of 1,450 students and their proximity to one another in order to assess tie strength between students. Students were then assigned to groups of high and low cohesiveness and served coupons with either a short (same day) or long (same week) redemption window. Results showed that group cohesiveness had a negative impact on redemption intent for longer-term promotions and positive effect for short.

Tran, Mai, and Taylor (2021) developed a model of motivations in the use and valuing of branded mobile applications. A survey of 323 branded app users showed both utilitarian and hedonic motivations positively influencing perceived value, which was positively related to the three components of brand equity: brand loyalty, brand awareness, and perceived quality.

Combined, these articles help enhance the understanding of marketing and mobile applications forward through a diverse array of methods and theoretical perspectives. Given the ubiquitous use of mobile apps, this special issue, to a degree, has scratched the surface in advancing knowledge related to mobile apps. Through this special issue we hope we have created some interest among fellow academics to pursue research related to better understanding mobile apps.

Acknowledgements

The Special Issue Editors would like to thank *Journal of Business Research* Editors-in-Chief Naveen Donthu and Anders Gustafsson and Journal Managers Latha Sudarsanam and Aiswarya Sudharson for their frequent and invaluable guidance throughout the process. Additionally, we would like to thank the many reviewers and authors for their generosity and dedication in helping make this special issue possible.

References

Gokgoz, Z. A., Ataman, M. B., & van Bruggen, G. H. (2021). There's an app for that! understanding the drivers of mobile application downloads. *Journal of Business Research*, 123, 423–437.

- Gupta, R., Mukherjee, S., Jayarajah, K. (2021) The Role of Group Cohesiveness in Targeted Mobile Promotions. *Journal of Business Research*.
- Hsieh, J. K. (2020). The effects of transforming mobile services into mobile promotions. *Journal of Business Research*, 121, 195–208.
- Jang, S., & Chung, J. (2021). What drives add-on sales in mobile games? The role of inter-price relationship and product popularity. *Journal of Business Research*, 124, 59–68.
- Lee, Y. J., Ghasemkhani, H., Xie, K., & Tan, Y. (2021). Switching decision, timing, and app performance: an empirical analysis of mobile app developers' switching behavior between monetization strategies. *Journal of Business Research*.
- Poupis, L., Rubin, D., & Lteif, L. (2021). Turn Up The Volume If You're Feeling Lonely: The Effect of Mobile Application Sound on Consumer Outcomes. *Journal of Business Research*.
- Statista (2020), Mobile apps do \$581 Billion in 2020 and on track to become a Trillion Dollar industry in 2024. Retrieved from <https://www.statista.com/statistics/269025/worldwide-mobile-app-revenue-forecast/>. Accessed 15 November 2020.
- Tran, T, Mai, E., & Taylor, E. (2021). Enhancing brand equity of branded mobile apps via motivations: a service-dominant logic perspective. *Journal of Business Research*, 125, 239–251.

John Dinsmore*

Raj Soin College of Business, Wright State University, 3640 Colonel Glenn Highway, Dayton, OH 45435, United States

Kunal Swani

Raj Soin College of Business, Wright State University, 3640 Colonel Glenn Highway, Dayton, OH 45435, United States

Kendall Goodrich

Raj Soin College of Business, Wright State University, 3640 Colonel Glenn Highway, Dayton, OH 45435, United States

Umut Konus

Amsterdam Business School (University of Amsterdam), Plantage Muidergracht 12, NL-1018 TV, Amsterdam, the Netherlands

* Corresponding author.

E-mail address: john.dinsmore@wright.edu (J. Dinsmore).