The Dark Side of Mobile App Adoption:
Examining the Impact on Customers’ Multichannel Purchase

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Abstract

Increasingly firms are using mobile applications to engage with customers, provide services, and encourage customer spending. Conventional wisdom indicates that apps have a positive impact on customer spending. We critically examine this premise by estimating the impact of app adoption on customers’ omni-channel spending in the context of a hotel chain and identifying the factors contributing to such impact. Exploiting the variation in customers’ timing of app adoption and difference-in-differences approach, we find that app adoption has a significant negative impact on total customer spending. This negative effect is robust to controlling for customer self-selection bias, measuring effects across alternative time frames, customer spending patterns and app usage behaviors, using different measures of purchase and alternative model specifications, and using different random samples. A survey of app adopters reveals that customers who adopt the focal app are also most likely to adopt competitors’ apps, and therefore are likely to search more and shop around, leading to decreased share of wallet with the firm. Our analysis also reveals that the negative impact on spending is lower for those customers who use the apps for mobile check-in than those who use the apps for just searching. So by encouraging customers to engage with the full functionality of the app, firms can possibly mitigate the negative impact.

Keywords: mobile applications, omni-channel marketing, difference-in-differences model.