

Supplementary Appendices

Appendix A – Heterogeneity by Device & Day of Week

We also explored the potential heterogeneity in the observed main relationships in our study. To begin with, the unique characteristics of mobile technology, for example, immediacy and ubiquity (Okazaki and Mendez 2013), leads to variation in user behavior by mobile *vs.* non-mobile devices (Wang et al. 2015). Indeed, prior literature has shown that users are more impulsive (Jung et al. 2019), carry heavier search costs (Ghose et al. 2012), and feel greater psychological ownership (Brasel and Gips 2014) when using a mobile device compared to using a non-mobile device. One prominent issue with a mobile device is its interface constraint due to its relatively small screen size (Lee and Benbasat 2004). Therefore, in our case, completing ex-ante registration on a mobile (*vs.* non-mobile) device might be more burdensome for users. In turn, the effectiveness of an ex-ante registration request would be less salient on a mobile device than a non-mobile one. In other words, the users might be less responsive to an ex-ante registration request and less likely to register with the website when visiting the site via a mobile *vs.* a non-mobile device. To test this intuition, we used the device of the users entering the experiment as a moderator (i.e., mobile *vs.* non-mobile device), and then conducted regression analysis.¹ As reported in column 1 of Table A1, our results show that the coefficient of the interaction term is negative and significant ($\lambda = -0.028, p < .01$), suggesting that users of a mobile device are less likely to respond to an ex-ante request and register with the site than those of a non-mobile device, confirming our expectation.

Further, prior research suggests that users' patterns of online activities could vary by day of week, particularly weekend *vs.* weekday (e.g., Moe 2003; Golder et al. 2007; Chen et al. 2008). For example, Chen et al. (2008) found that network gamers spent less time in online gaming sessions on weekdays than on weekends. The weekend *vs.* weekday pattern speaks to the notion that individuals, in general, have

¹ Following Ghose et al. (2012), we categorize a smartphone as a mobile device, and other devices, such as desktop and tablet computers, as non-mobile devices. We acknowledge that the classification of a tablet computer being a mobile or a non-mobile device is still subject to research debate. Here, reclassification of a tablet computer as a mobile device generates as consistent results as categorizing it into a non-mobile device.

more time for recreational activities on weekends than on weekdays. Hereby, in the context of our study, we expect that users might be busy with work and become less patient or responsive to an ex-ante registration request during the weekday (*vs.* the weekend). Conversely, users would have more time and in a state of leisure on the weekend, resulting in a greater increase in registration likelihood than on a weekday. To empirically examine this intuition, we performed moderation analysis with the weekend variable as the moderator, which denoted weekday (i.e., Monday through Friday) *vs.* weekend (i.e., Saturday and Sunday), by the day of week the users entered into the field experiment. As shown in column 2 of Table A1, our regression results suggest that users are indeed marginally more likely to respond to the treatment and ex-ante register with the website during the weekend compared to weekdays ($\eta = 0.012, p < .10$), supporting our expectation. At last, note that the analyses on the heterogeneous treatment effects (HTE) are not causal in nature, as the moderating variables are not directly manipulated. Thus, the HTE findings should be interpreted with caution.

Table A1. Moderation Analyses by Device and Day of Week

<i>Variables</i>	<i>DV: Registration Likelihood</i>	
	(1) Mobile	(2) Weekend
Ex-ante_request	0.231*** (0.006)	0.208*** (0.004)
Moderator	-0.146*** (0.005)	0.008 (0.007)
Ex-ante_request * Moderator	-0.028*** (0.007)	0.012* (0.007)
Constant	0.356*** (0.006)	0.405*** (0.012)
Controls	Yes	Yes
Observations	75,723	75,723
R-squared	0.074	0.085

Notes: In the mobile variable as the moderator, mobile = 1 *vs.* non-mobile device = 0;
 In the weekend variable as the moderator, weekend = 1 *vs.* weekday = 0;
 Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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