Appendix A: Careless behavior in the field – Samsung S III

We also tried to test for careless behavior with other popular phone models in our dataset. Note, however, that our dataset contained far more listings of damaged iPhone 4 devices (N=30,366) than any other leading smartphone model. Because the iPhone is so popular and has a small number of high-priced models, salvaging its damaged parts may be economically more worthwhile than doing so for the multitude of models, shapes, and sizes offered by Android manufacturers. Compared to the 30,366 damaged iPhone 4's listed on the site, the top five Android brands were Samsung Galaxy S II (N=11,256); HTC EVO (N=10,494), T-Mobile MyTouch (N=5,702), HTC Droid Incredible (N=3,885), and the Motorola Droid X (N=3,555). The HTC EVO and the T-Mobile MyTouch are a series of models with a wide range of variants that are difficult to uniquely identify. From 2009 until 2012, the HTC EVO line had seven model (3D, 4G, 4G LTE, Design 4G, 3D CDMA, Shift 4G, and 4G+) and the MyTouch line had 10 models (4G, 4G Slide, 3G, 3G Slide, MyTouch, Q 2, Q, 3G Fender Edition, 2, and 3G 1.2). This may explain why relatively many of these devices are listed. The other top models had even fewer listings, about 10% of the listings of the iPhone, and about 10 phones per day on average.

We performed our exercise on the Samsung Galaxy S II (SII) because of its relatively large number of damaged phones listed for sale. Samsung positioned the Galaxy S as a direct competitor to Apple's successful iPhone (Kain 2011). In May 2012, Samsung launched the Samsung Galaxy S III (SIII) to succeed the SII. The SIII offered a new design, four processors (compared to two for the SII), and a bright new high-resolution screen (GSMArena 2012), yet many pundits reviewed it as functionally similar to the SII, mentioning that upgrading to the SIII would reflect more of a desire than a real need (GSMArena, 2012; Hill, 2012; Manimaran, 2012). For this reason, we tentatively classify the upgrade to the SIII as relatively difficult to justify.

Though it is not as good an example as the white iPhone 4 of a relatively difficult-to-justify upgrade, it was the best option available to us.

The SIII was announced on May 3, 2012, and T-Mobile launched it in the US on June 21, with other providers launching it later. Because consumers could become aware of the SIII when it was announced, we examined the effect of the announcement on potentially careless behavior. Note the 49-day gap between announcement and launch is much larger than the 1-day gap for the white iPhone 4. According to H1, the announcement of the SIII should have prompted some consumers to become careless with their SII, and therefore we expected a steady increase in the number of damaged SII listings. We conducted the same analysis as that reported in Study 1, using 2012 SII listings of 113,109 SII phones: 101,853 used and 11,256 damaged.

Results

Table A1 shows the regression results for a 28-day window. We see β_3 is positive (.19, p = .056) after the announcement of the SIII and negative (-.24, p = .055) after the US launch. This pattern suggests the model announcement prompted SII owners to think about upgrading to the SIII, rather than the launch that took place 49 days later. Thus, we performed a finer-grained analysis of the effect of the announcement using a 14-day window. As was the case for the white iPhone 4, we find evidence of a gradually developing carelessness effect (Table A2). In the first 14-day window after the announcement, the difference between the listings of damaged and used SII was not significant (.19, p = .148), but it was significant in the 15-28 window (.31, p = .025) and it approached significance in the 29-42 window (.25, p = .063). These data provide converging evidence that when an upgrade to a new desirable model is relatively hard to justify, consumers become careless with their model, thereby increasing the likelihood of its damage.

Table A1: The effect of introducing the Samsung Galaxy SIII on used and damaged Samsung Galaxy SII models using a 28-day window.

	Samsung Galaxy S III	
Event	**Announced**	**Launch**
Intercept	-.29 (.06) **	-.18 (.07) **
Damaged Dummy	-.23 (.08) **	-.00 (.10)
Event Dummy	-.08 (.07)	.62 (.09) **
Damaged x Event Dummy (β_3)	.19 (.10) ·	-.24 (.12) ·
Weekend Dummy	-.52 (.08) **	-.54 (.10) **
Weekend x Damaged Dummy	.15 (.11)	-.01 (.14)
Adjusted R^2	37.2%	54.6%

N=112; · p-value < .1, * p-value < .05, ** p-value < .01; standard errors in parentheses

Table A2: DiD regression results for three successive 14-day windows compared to 14 days before the announcement of the Samsung Galaxy S III.

Event	*Samsung Galaxy S III announcement*		
Compared to:	***1-14 days after***	***15-28 days after***	***29-42 days after***
Intercept	-.08 (.07)	-.11 (.07)	-.10 (.07)
Damaged Dummy	-.28 (.10) **	-.29 (.11) **	-.28 (.10) **
Event Dummy	-.14 (.09)	-.37 (.10) **	-.06 (.09)
Damaged x Event Dummy (β_3)	.19 (.13)	.31 (.14) *	.25 (.13) ·
Weekend Dummy	-.65 (.10) **	-.55 (.11) **	-.57 (.10) **
Weekend x Damaged Dummy	.14 (.14)	.20 (.15)	.13 (.14)
Adjusted R^2	56.4%	47.0%	48.9%

N=56; · p-value < .1, * p-value < .05, ** p-value < .01; standard errors in parentheses

Appendix B: Image comparison of the iPhone 4 and 4S versions and colors

Figure A1. iPhone 4 versions offered in black and white

iPhone 4 Black	iPhone 4 White

Figure 1B. iPhone 4 (left) versus iPhone 4S (right)

iPhone 4 Black	iPhone 4S Black

Appendix C: The information participants read about the launch of the white iPhone 4 (design) and the launch of the iPhone 4S (technology) conditions

White iPhone 4 (design) condition:

The black iPhone 4 was launched on June 24, 2010.
The white iPhone 4 was launched on April 28, 2011. **The white iPhone 4 was virtually identical to the black iPhone 4, except it was offered in white.**

Figure 1. The black iPhone 4 (launched in June, 2010) and the white iPhone 4 (launched in April 2011)

Assume that you own the original black iPhone 4. You purchased it for $499.

iPhone 4S (technology) condition:

The black iPhone 4 was launched on June 24, 2010.
The white iPhone 4 was launched on April 28, 2011. The white iPhone 4 was virtually identical to the black iPhone 4, except it was offered in white.

The iPhone 4S was launched on October 14, 2011. **The iPhone 4S (offered in either white or black) was identical in its appearance to the black and white iPhone 4's respectively, but it was a faster device with new and innovative features (e.g., the introduction of the digital personal assistant Siri, a superior camera and more memory).**

Figure 1. The black iPhone 4 (launched in June, 2010) and the black and white iPhone 4S (launched in October 2011)

Assume that you own the original iPhone 4 in color BLACK. You purchased it for $499.

Appendix D: The information participants read in the design and technology condition

Design condition:

Now we would like you to read an article that appeared in a popular online tech forum. We have shortened the article a bit but captured its main points. Please read the article and answer the questions that follow it:

Verdict: The iPhone 7 looks great!

The iPhone 7 removes the cumbersome headphone jack and antenna bands for a more seamless design, while it also adds two new unique and gorgeous colors to the mix, the silky Black and the shiny Jet Black (pictured above). The change in the iPhone 7 isn't as dramatic as it was when the iPhone 6 launched a couple of years ago, but there are some good additions to the new device that will see a few wanting to upgrade, especially those with the iPhone 6.

Details:
Apple announced the next generation of its iPhones on September 7th. The Apple iPhone 7 features several changes compared to the iPhone 6: The antenna strips on the rear have seen a move to the top for **a leaner, cleaner look**, while the 3.5mm headphone jack has been finally removed altogether in favor of **a sleek Lightning port and stereo speakers**. **It's the first time an iPhone is being offered in two black colors: matte black and jet black, both colors look gorgeous**. It will also come in Silver, Gold and Rose Gold, as before. **The home button has also been redesigned and the camera bump on the rear is a little larger and more refined**. The

iPhone 7 sticks with a Retina HD display and the 4.7-inch size. That means a resolution of 1334 x 750 pixels for a pixel density of 326ppi. Apple claims the new display is 25 per cent brighter however, and it also has a P3 color gamut, meaning colors should be richer.

Technology condition:

Now we would like you to read an article that appeared in a popular online tech forum. We have shortened the article a bit but captured its main points. Please read the article and answer the questions that follow it:

Verdict: The iPhone 7 improves on its predecessors in multiple areas!

Although it looks just the same, the iPhone 7 hardware sees a substantive improvement over the iPhone 6 and there have been enhancements in the camera and battery departments too. The iPhone 7 removes the headphone jack and antenna bands for a more seamless design, and it also adds waterproofing to the mix.

Details:
Apple announced the next generation of its iPhones on September 7th. The Apple iPhone 7 features a **similar design to the iPhone 6S and iPhone 6**, though there are a couple of changes to note. The antenna strips on the rear have seen a move to the top for a cleaner look, while the 3.5mm headphone jack has been removed altogether in favor of a Lightning port only and stereo speakers. **The iPhone 7 also offers IP67 waterproofing** and **3D Touch**, while the iPhone 6

doesn't, so **more features** are available on the later model. The iPhone 7 arrives with a new **12-megapixel sensor** (compared to 8-megapixel in the iPhone 6) and **a new six-element lens**, **optical image stabilization and a Quad-LED True Tone flash**, body detection and wide color capture. **The front camera has also upped its resolution to 7 megapixels**, while also offering body detection, wide color capture and auto image stabilization. The Retina Flash is onboard and the front-facing camera will record in 1080p, while the rear is capable of 4K. The iPhone 6 did not offer optical image stabilization and had a dual-LED True Tone flash rather than Quad-LED. The Apple iPhone 7 arrives with a **new processor - the A10 Fusion**. It has an embedded M10 motion coprocessor and it is said to two-times faster than the iPhone 6 A8 Processor. The GPU in the new iPhone 7 is claimed to add to the performance enhancement, with Apple saying it is three times better than the A8. The battery life of the iPhone 7 is also said to be two hours longer than the iPhone 6.

Appendix E: Study stimuli, related measures taken, and the information participants read regarding the iPhone 8 offering primarily non-functional improvements in design.

This survey is for participants with specific characteristics. To determine whether you can participate in this study, please fill in the following:

Please choose the model of the phone that you own and use.

- ❑ Moto Z
- ❑ Google Pixel
- ❑ Motorola Moto G4 or X Play
- ❑ Nexus 5, 5X or 6
- ❑ LG G4 or G5
- ❑ Huawei Mate 8, S or P9
- ❑ iPhone 5, or 5s (and their s or plus versions)
- ❑ iPhone 6, or iPhone 7 (and their s or plus versions)
- ❑ iPhone 7 (and plus version)
- ❑ HTC One M9 or HTC 10
- ❑ OnePlus 1, 2, or 3
- ❑ Samsung Galaxy S6, S7, S7 edge
- ❑ Samsung Galaxy S8
- ❑ Other (Specify) _____

In this survey we are interested in your honest impressions. To verify that you are carefully reading the instructions, please choose option number five in the following question and ignore its content.

When people buy cell phones, their primary consideration is price.

- ❍ Completely disagree 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Completely agree 7

Which iPhone do you currently use (if you use more than one iPhone for your own personal use then indicate all iPhones)?

- ❍ iPhone 6
- ❍ iPhone 7s
- ❍ iPhone 6 plus
- ❍ iPhone 7
- ❍ iPhone 7 plus
- ❍ Other _____

How did you get the iPhone you own?

- ❍ I purchased it
- ❍ I got it as a gift
- ❍ Other: specify _____

How long have you had the iPhone you currently use?

- ❍ 6 months or less
- ❍ Between 6 and 12 months
- ❍ Between 12 and 18 months
- ❍ Between 18 and 24 months
- ❍ More than 24 months

In this hit, you will be doing several consumer surveys. Please pay close attention to the instructions on each page. First, we ask that you complete a purchase inventory task.

PURCHASE INVENTORY SURVEY

Instructions

Now, we would like you to think about a (recent) purchasing decision you made that was hard to justify. In other words, you felt it was hard to justify why you bought the product or service. Please imagine the purchase occasion as vividly as possible and describe it and the feelings you felt feelings in 2 to 3 sentences.

_____
_____
_____

NEW IPHONE EVALUATION TASK

In this survey, we would like you to read an article that appeared in a popular online tech forum. We have shortened the article a bit but captured its main points. Please read the article and answer the questions that follow it:

Verdict: The iPhone 8 looks great!

Apple has some iPhone redesign planned for 2017. The iPhone 8 will feature a more seamless design, with an edge-to-edge OLED display that includes an integrated Touch ID fingerprint sensor and front facing camera, and it will come in some new colors.

Details:

The Apple iPhone 8 features several changes compared to the iPhone 7: Instead of placing the TOUCH ID fingerprint under the glass, it is located at the back of the iPhone. The iPhone 8 will feature a 5.8-inch display with 5.15 inches of usable area, with the rest dedicated to virtual buttons that will replace the existing Home button. Moreover, the display is flexible plastic OLED rather than an LCD, allowing Apple to introduce a thinner device that consumes less power and offers a slightly better display with a better contrast ratio and more true-to-life colors.

Finally, we asked 9 industry experts to provide an overall ranking of the new iPhone 8 relative to recent iPhone models in regards to design and technological improvement. The experts were given a 10-point scoring system, where 0 represents no improvement and 10 indicates a major improvement. Here are their rankings.

Expert	Technology	Design
Jamie Simmons ***CNET***	**2**	**7**
Robert James ***TechCrunch***	**4**	**8**
Lulu Yan ***Digital trends***	**3**	**6**
Dan Trout ***PC Mag***	**4**	**9**
Leslie Chou ***Phone Arena***	**3**	**8**

Bob Ross ***Top Ten Reviews***	**2**	**6**
Evan Wright ***Engadget***	**4**	**7**
Ben Monja ***The Verge***	**3**	**8**
Arun Ran ***Trusted Reviews***	**2**	**9**

In summary, our experts think the iPhone 8 looks great (an average design score of 7.5) yet it offers only minor technological advancements (an average technology score of 3).

The next couple of questions are based on the article excerpt and what you know about the new iPhone 8.

	1 Not at all	2	3	4	5	6	7 A lot
To what extent do you feel the iPhone 8 is better than your iPhone?	❍	❍	❍	❍	❍	❍	❍
To what extent do you feel the iPhone 8 is superior to your iPhone?	❍	❍	❍	❍	❍	❍	❍

IPHONE USAGE SURVEY

In this survey, we want to know about what you use your iPhone for. Please read each description carefully.

	1 Never	2	3	4	5	6	7 A lot
Do you use your iPhone to take selfies?	❍	❍	❍	❍	❍	❍	❍
Do you use your iPhone to wake you up?	❍	❍	❍	❍	❍	❍	❍
Do you use your iPhone to take pictures?	❍	❍	❍	❍	❍	❍	❍
Do you use your iPhone to make online purchases?							
Do you use your iPhone to make calls over the internet (like WhatsApp/Facebook messenger)?	❍	❍	❍	❍	❍	❍	❍
Do you use your iPhone to play games	❍	❍	❍	❍	❍	❍	❍
Do you use your iPhone to listen to music?	❍	❍	❍	❍	❍	❍	❍

LOTTERY

Special offer for iPhone 6 and iPhone 7 owners (s and plus versions included)!

We have a great offer for you from a company that is organizing a promotion event during the launch week of the new iPhone 8. The event will take place at retail stores nationwide (next to Apple stores and at many retailers that sell iPhones including Costco and Walmart).

Rules of the special event game:

Each iPhone owner chosen by the company to participate in the special event game will get one shot to toss their iPhone at a balloon that will be floating at the height of about 10 feet (in a room with thin carpet flooring).

Participants that successfully hit the balloon will receive a $400 cashback rebate on the new iPhone 8!!

Participants that miss the balloon will receive $50 cashback rebate for having tossed their iPhone!

Participants whose iPhone is damaged by the toss can sell their iPhone to the company organizing the event at the value that Buybackboss.com pay for damaged iPhones ($110 for the iPhone 6, $135 for the iPhone 6plus, $155 for the iPhone 6s, $160 for the iPhone 6s plus, $235 for the iPhone 7, $240 for the iPhone 7 plus).

The company organizing the effect is conducting a lottery on the 26th of July to determine which lucky iPhone owners will play the game. Each lottery ticket costs one cent (that will be deducted from your $1 pay for completing this hit). Each iPhone owner can buy up to 10 lottery tickets (for a total of 10 cents). The company is charging for the lottery tickets so that only those wanting to play the special event game receive lottery tickets.

Do you want to participate in the lottery so you can play the game?

If so, how many lottery tickets do you want to purchase (each ticket costs 1 cent)? (scale varies from 0 to 10 tickets)

Please enter your email here so that we can contact you if you are selected to play the special event: _____

Demographics

Is your iPhone under a warranty agreement where it is replaced if it is broken or damaged?

- ❍ Yes
- ❍ No

Which iPhones (aside from your current iPhone 7 or 6) have you owned in the past for your own personal usage? (you can indicate more than one iPhone)

- ❑ iPhone SE
- ❑ iPhone 6S
- ❑ iPhone 6S plus
- ❑ iPhone 6 plus
- ❑ iPhone 6
- ❑ iPhone 5S
- ❑ iPhone 5C
- ❑ iPhone 5
- ❑ iPhone 4S
- ❑ iPhone 4
- ❑ iPhone 3GS
- ❑ iPhone 3G
- ❑ iPhone (first generation)
- ❑ I did not own an iPhone before owning my current iPhone

Now we would like to know a bit more about you: What is your age?

_____

What is your gender?

- ❍ Male
- ❍ Female

Information about income is very important to understand. Would you please give your best guess? Please indicate the answer that includes your entire household income in (2016) before taxes.

- ❍ Less than $10,000
- ❍ $10,000 to $19,999
- ❍ $20,000 to $29,999
- ❍ $30,000 to $39,999
- ❍ $40,000 to $49,999
- ❍ $50,000 to $59,999
- ❍ $60,000 to $69,999
- ❍ $70,000 to $79,999
- ❍ $80,000 to $89,999
- ❍ $90,000 to $99,999
- ❍ $100,000 to $149,999
- ❍ $150,000 or more

Appendix F: The information participants read regarding the iPhone 8 offering primarily functional improvements in technology.

In this survey, we would like you to read an article that appeared in a popular online tech forum. We have shortened the article a bit but captured its main points. Please read the article and answer the questions that follow it:

Verdict: The iPhone 8 looks improves on its predecessors in multiple areas!

Apple has some iPhone technological improvements planned for 2017. The iPhone 8 hardware sees a substantive improvement over its predecessors and there have been enhancements in the camera and battery departments too. The iPhone 8 features an IP68 water resistance rating, an improvement over the IP67 certification earned by the iPhone 7, 6 and the iPhone 6 and 7 Plus.

Details:

The Apple iPhone 8 features major changes compared to the iPhone 7: Instead of placing the TOUCH ID fingerprint under the glass, it is located at the back of the iPhone. With an edge-to-edge design, iPhone 8 offers a display the size of the 5.5-inch iPhone. It features a 5.8-inch display with 5.15 inches of usable area, with the rest dedicated to virtual buttons that will replace the existing Home button. Moreover, the display is flexible plastic OLED rather than an LCD, allowing Apple to introduce a thinner device that consumes less power and offers a much better display with a much higher contrast ratio and more true to life colors. In a glance, iPhone 8 will offer the following advanced features: 5.8 inch OLED display, Faster A11 processor, Glass body, Edge-to-edge display, Camera and Touch ID integrated in the display, No home button, wireless charging, and a new OLED model.

Finally, we asked 9 industry experts to provide an overall ranking of the new iPhone 8 relative to recent iPhone models in regards to design and technological improvement. The

experts were given a 10-point scoring system, where 0 represents no improvement and 10 indicates a major improvement. Here are their rankings.

Expert	Technology	Design
Jamie Simmons ***CNET***	7	2
Robert James ***TechCrunch***	8	4
Lulu Yan ***Digital trends***	6	3
Dan Trout ***PC Mag***	9	4
Leslie Chou ***Phone Arena***	8	3
Bob Ross ***Top Ten Reviews***	6	2
Evan Wright ***Engadget***	7	4
Ben Monja ***The Verge***	8	3
Arun Ran ***Trusted Reviews***	9	2

In summary, our experts think the iPhone 8 offers major technological improvements (an average technology score of 7.5), yet it offers only minor design advancements (an average design score of 3).

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Web Appendix A – Extending the window for the timing of the damage

In Table 1, we conduct analyses for a time window of 28 days before and after the event. Herein, as a robustness test, we reran all regressions in Table 1 while using an extended time window of 42 days before and after the event. The results are similar to Table 1, and the magnitude of the effect is much stronger, $\beta_3 = 0.66$, with standard error of .17.

Table WA1: DiD regression results for a 42-day time window for the effect of introducing the white iPhone 4 and the iPhone 4S on used and damaged iPhone 4 models

	White iPhone 4	***iPhone 4S***	
Event	**Announced**	**Announced**	**Launch**
Intercept	-.47 (.09) **	-.14 (.10)	.51 (.14) **
Damaged Dummy	.29 (.13) *	.39 (.13) **	-.17 (.20)
Event Dummy	.26 (.12) *	2.28 (.12) **	1.31 (.18) **
Damaged x Event Dummy (β_3)	.66 (.17) **	-2.03 (.17) **	-1.24 (.25) **
Weekend Dummy	-.54 (.13) **	-.44 (.14) **	-.50 (.20) *
Weekend x Damaged Dummy	-.40 (.19) **	-.16 (.19)	-.07 (.28)
Adjusted R^2	53.4%	72.1%	38.1%

N=168; · p-value < .1, * p-value < .05, ** p-value < .01; Standard errors in parentheses

Web Appendix B – Varying window for the timing of the damage

In Table 2, we conduct analyses for three successive time periods of 14 days each (1-14, 15-28, and 29-42 days after the introduction). We compare the listing in these shorter windows with a 14-day window immediately prior to the introduction.

Herein, as a robustness test, we reran all regressions in Table 2 while using a window of 15-28 days prior to the introduction and also one with 29-42 days prior. The estimates were even more supportive in these regressions. In Table WB1, we compared 15-28 days before the announcement, to the three successive 14-day windows, with results similar to those in Table 2. In Table WB2, we compared 29-42 days before the announcement with the three successive 14-day windows, again, with results similar to those in Table 2.

Table WB1: DiD regression results for three successive time periods of 14 days each, compared with 15-28 days before the announcement of the white iPhone 4

Event	***White iPhone 4***		
Compared to:	***1-14 days after***	***15-28 days after***	***29-42 days after***
Intercept	-.44 (.14) **	-.45 (.13) **	-.45 (.19) *
Damaged Dummy	.33 (.19) ·	.36 (.18) *	.36 (.26)
Event Dummy	.38 (.18) *	.27 (.16)	.07 (.24)
Damaged x Event Dummy (β_3)	.08 (.25)	.81 (.23) **	.94 (.34) **
Weekend Dummy	-.57 (.20) **	-.53 (.18) **	-.52 (.27) ·
Weekend x Damaged Dummy	-.65 (.28) *	-.77 (.26) **	-.77 (.38) *
Adjusted R^2	50.5%	69.3%	49.0%

N=56; · p-value < .1, * p-value < .05, ** p-value < .01; Standard errors in parentheses

Table WB2: DiD regression results for three successive time periods of 14 days each, compared with 29-42 days before the announcement of the white iPhone 4

Event	***White iPhone 4***		
Compared to:	***1-14 days after***	***15-28 days after***	***29-42 days after***

Intercept	-.47 (.15) **	-.48 (.14) **	-.49 (.20) *
Damaged Dummy	.10 (.21)	.13 (.20)	.13 (.28)
Event Dummy	.40 (.19) *	.29 (.18)	.09 (.25)
Damaged x Event Dummy (β_3)	.28 (.27)	1.02 (.26) **	1.14 (.36) **
Weekend Dummy	-.52 (.21) *	-.48 (.20) *	-.47 (.28) ·
Weekend x Damaged Dummy	-.54 (.30) ·	-.66 (.28) *	-.67 (.40) ·
Adjusted R^2	44.2%	64.5%	45.6%

N=56; · p-value < .1, * p-value < .05, ** p-value < .01; Standard errors in parentheses

Web Appendix C - Excluding water-damaged iPhones from the analysis of the white iPhone 4 announcement

Table WC1: DiD regression results for a 14-day time window before and a 14-day window X days after the event (without water-damaged iPhones)

Event	***White iPhone 4 announcement***		
Compared to:	***1-14 days after***	***15-28 days after***	***29-42 days after***
Intercept	-.47 (.15) **	-.48 (.14) **	-.48 (.20) *
Damaged Dummy	.54 (.21)	.56 (.20) **	.56 (.28) ·
Event Dummy	.42 (.19) *	.31 (.18) ·	.11 (.25)
Damaged x Event Dummy (β_3)	-.01 (.27)	.78 (.26) **	.84 (.36) *
Weekend Dummy	-.61 (.21) **	-.57 (.20) **	-.56 (.28) ·
Weekend x Damaged Dummy	-.82 (.30) **	-.88 (.28) **	-.87 (.40) *
Adjusted R^2	53.4%	69.2%	50.3%

N=56; · p-value < .1, * p-value < .05, ** p-value < .01; Standard errors in parentheses

Web Appendix D – Manipulation checks for Study 2

Perceived design improvement of iPhone 7 relative to owned iPhone. The effect of past usage on perceived design improvement was significant ($b = .22$, $p < .01$). Neither the main effect of warranty ($F(1, 147) = 2.92$, $p = .09$, partial $\eta^2 = .02$) nor the warranty x upgrade frame interaction ($F(1, 147) = .16$, $p = .68$, partial $\eta^2 = .00$) were significant. Participants rated the design improvement as higher when the upgrade was framed as primarily offering a technological improvement than when framed as primarily offering a design improvement ($F(1, 147) = 6.94$, $p < .01$, partial $\eta^2 = .05$; $M_{\text{technological upgrade}} = 5.00$, $M_{\text{design upgrade}} = 4.30$). Note the technologically improved version also offered design improvements (see Appendix C). This fact may have led to the relatively high ratings of design superiority in the technological-improvement condition.

Perceived technological superiority of iPhone 7 relative to owned iPhone. The effect of past usage on perceived technological improvement was marginally significant ($b = .14$, $p = .06$). The main effect of warranty was not significant ($F(1, 147) = 1.98$, $p = .169$, partial $\eta^2 = .01$). Participants rated technological superiority as higher when the upgrade was framed as primarily offering a technological improvement than when framed as primarily offering a design improvement ($F(1, 147) = 7.78$, $p < .01$, partial $\eta^2 = .05$; $M_{\text{technological upgrade}} = 5.68$, $M_{\text{design upgrade}} = 5.00$). We also found a significant warranty x upgrade frame interaction ($F(1, 147) = 4.30$, $p < .05$, partial $\eta^2 = .03$), such that the effect of the iPhone 7 upgrade framing on ratings was apparent for iPhone owners without a warranty ($M_{\text{technological upgrade}} = 6.10$, $M_{\text{design upgrade}} = 4.92$), but not for those with a warranty ($M_{\text{technological upgrade}} = 5.26$, $M_{\text{design upgrade}} = 5.09$).

Wanting the new iPhone 7. The effect of the covariate, past usage, was significant ($b = .32$, $p < .001$). The main effect of warranty was significant ($M_{\text{without warranty}} = 3.97$, $M_{\text{with warranty}} = 3.35$; $F(1, 147) = 5.00$, $p < .05$, partial $\eta^2 = .03$), and the warranty x upgrade frame interaction was not

significant ($F(1, 147) = .00$, $p = .98$, partial $\eta^2 = .00$). Participants wanted the new version more when it offered a technological improvement than when it offered a design improvement, yet this effect only approached statistical significance ($F(1, 147) = 2.40$, $p = .12$, partial $\eta^2 = .02$; $M_{\text{technological upgrade}} = 3.88$, $M_{\text{design upgrade}} = 3.44$).