

## Executive Summary

### Anti-Theft Software in Mobile Phones Could Save Consumers \$3.4B a Year

A recent report from ComScore estimates that over 166 million Americans are now walking around with smartphones in their pockets. Although smartphones make our lives easier and more enjoyable, these expensive electronics also make us easy targets for theft. A stolen smartphone – such as the iPhone 5S – could sell for \$800 or more in the United States and overseas. For criminals, a stolen phone could be worth more than a stolen wallet, a tablet, or even a laptop.

It's no surprise that cell phone theft has exploded in the past few years. A recent study by Consumer Reports estimated that approximately 3.1 million cell phones were stolen in the US during 2013 (up from 1.6 million in 2012). Many have argued that a "Kill Switch" – technology that would disable stolen phones – could be an effective theft deterrent if it was installed on every phone. If all stolen phones could easily be disabled, criminals would have virtually no incentive to steal a phone in the first place.

Although many have considered the public safety benefits of a Kill Switch, I wanted to understand whether or not consumers *want* a Kill Switch in their phones and whether or not a Kill Switch could actually *save consumers money*.

To answer these questions, I conducted a survey of 1,200 smartphone owners and reviewed the average cost of cell phones and cell phone insurance. I discovered that consumers overwhelmingly support the Kill Switch and that a Kill Switch could save consumers a lot of money.

According to the survey:

- 99% of smartphone owners feel wireless carriers should give all consumers the option to disable a cell phone if it is stolen
- 83% of smartphone owners believe that a Kill Switch would reduce cell phone theft
- 93% of smartphone owners believe that Americans should not be expected to pay extra fees for the ability to disable a stolen phone

Consumers not only support a free Kill Switch pre-installed on all phones, they expect it.

To estimate the financial savings a Kill Switch could deliver, I considered two components: the cost of replacing stolen phones and the cost of paying for premium cell phone insurance that would cover stolen phones. According to my calculations, a Kill Switch could save Americans up to \$3.4 billion per year. Here's how:

- Americans spend about \$1.1 billion per year replacing stolen phones.

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Author: Dr. William Duckworth, Heider College of Business at Creighton University

- They also spend another \$5.5 billion per year paying for premium cell phone insurance from their wireless carriers.
- If the Kill Switch significantly reduced cell phone theft, consumers could save about \$1.1 billion a year from not needing to replace stolen phones and another \$2.3 billion a year by switching from premium cell phone insurance (offered by the wireless carriers) to more basic coverage offered by third parties such as Apple and SquareTrade.

My research suggests that at least half of smartphone owners would in fact reduce their insurance coverage if the Kill Switch reduced the prevalence of cell phone theft.

Overall, it seems clear that Americans want the Kill Switch and that an industry-wide implementation of the technology could significantly improve public safety and save consumers billions of dollars a year.

Data Sources:

1. ComScore MobiLens and Mobile Marix. Results published May 2014.
2. Consumer Reports survey of adult Internet users. Results published May 2014.
3. Consumer Opinion Survey of 1,200 smartphone owners, conducted in February 2014 using ResearchNow, one of the largest and most respected online panels. Demographic weights were used to ensure a representative sample.
4. Online review of cell phone prices and cell phone insurance plans available at AT&T, Verizon, Sprint, T-Mobile, Apple, and SquareTrade.

**Savings Calculations:**

| <b>Theft Reduction Savings</b>                                      |                  |
|---|------------------|
| Number of Smartphones Stolen Annually                               | 3,100,000        |
| Percent of Consumers Covered by Insurance                           | 34.0%            |
| <b>Losses for the Insured</b>                                       |                  |
| Number of Stolen Phones Insured                                     | 1,054,000        |
| Insurance Deductible (midpoint, range \$99-\$200)                   | \$150.0          |
| Total Annual Losses for the Insured                                 | \$ 158,100,000   |
| <b>Losses for the Uninsured</b>                                     |                  |
| Number of Stolen Phones Not Insured                                 | 2,046,000        |
| Replacement Value of a Smartphone (midpoint, range \$99 to \$849)   | \$474            |
| Total Annual Losses for the Uninsured                               | \$ 969,804,000   |
| <b>Total Economic Savings</b>                                       |                  |
| Amount the Insured and Uninsured Spend Replacing Stolen Smartphones | \$ 1,127,904,000 |

| <b>Insurance Premium Reduction Savings</b>                                     |                  |
|--|------------------|
| Total Number of Smartphones in the US  | 166,000,000      |
| Percent of Smartphones Currently Insured Through Wireless Carriers             | 34.0%            |
| Total Number of Insured Smartphones  | 56,440,000       |
| <b>Amount Spent on Insurance</b>   |                  |
| Monthly Insurance Premium (midpoint, range \$5.18-\$11)                        | \$8.08           |
| Total Amount Smartphone Owners Are Spending on Carrier Insurance               | \$ 5,472,422,400 |
| <b>Lower-Cost Alternative to Premium Insurance</b>                             |                  |
| Monthly Cost of Plans Without Theft Coverage (midpoint, range \$4.125-\$5.208) | \$4.66           |
| Monthly Savings if a Consumer Switched to AppleCare/SquareTrade Coverage       | \$3.42           |
| Total potential annual savings for people who downgrade                        | \$ 2,316,297,600 |