Teaching Security Lesson 3: Social Engineering

Assignment: Analog to Digital

What’s old is new again!

Instructions

- Read the description of your assigned scam (see page 2).
- Discuss with your partner the answers to the following questions, and report your answers on a large sticky note or poster paper.
- Then you’ll share it with the rest of the class.

Outline Questions

Part 1: How Does the Analog Version Work?

1. In your own words, describe how the scam works.
2. What aspect(s) of human behavior are being exploited by this scam?
   - You can answer in terms of Cialdini’s principles of influence, or in terms of other typical human behaviors or assumptions.

Part 2: How Could a Digital Version Work?

3. How could this scam be adapted to use digital resources? Write down a description of your digital version.
   - Feel free to include sketches or other information to help other students understand how you would encourage people to believe your digital scam.
   - If you’re basing your description on a real digital scam that you’ve seen in the past, explain its relationship to the analog scam.
4. What changes or additions are needed for this scam to move into the digital age? If your answer is “None”, explain why no changes are needed.
5. How do the properties of the Internet, for example the possibility for instantaneous communication, play into the digital version of the scam? How do they make it more or less difficult to pull off than the analog version?

Part 3: Which Would Work Better?

6. Do you think the digital version or the analog version of the scam is more likely to be effective? Why?
Classic Analog Scams

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The Money Box: Victor Lustig, a German con artist, designed and sold a “money box” which he claimed could print $100 bills using blank sheets of paper. A victim, sensing huge profits and untroubled by ethical implications, would buy the machine for a high price—from $25,000 to $102,000. Lustig stocked the machine with six to nine genuine $100 bills for demonstration purposes, but after that it produced only blank paper. By the time victims realized that they had been scammed, Lustig was long gone.

The Grandparent Scam: A grandparent gets a call from someone claiming to be their grandchild, saying that they are in trouble. For example, the scammer may claim to have been arrested and require money wired, or gift cards purchased for bail, and asks the victim not to tell the grandchild’s parents, as they would “only get upset”. The call is fraudulent impersonation, the name of the grandchild typically obtained from obituaries listed either in newspapers or from a funeral home’s website. Any money wired out of the country is gone forever.

The Green Goods Scam: The mark, or victim, would respond to flyers circulated throughout the country by the scammers (“green goods men”) which claimed to offer “genuine” counterfeit currency for sale. Victims, usually living outside major cities, would be enticed to travel to the location of the green goods men to complete the transaction. Victims were guided by a “steerer” to be shown large amounts of genuine currency – represented to be counterfeit – which was then placed in a bag or satchel. Victims then received offers to purchase the money at a price much less than face value. While a victim negotiated a price or was otherwise distracted, another accomplice (the “ringer”) would switch the bag of money for a bag containing sawdust, green paper, or other worthless items. Victims would leave unaware of the switch, and were unwilling to report the crime, as attempting to purchase counterfeit currency was itself a crime and the victim accordingly risked arrest.

Home Repair Con: A contractor comes to your home claiming that they are doing free inspections and estimates for home repairs. They will find something alarming wrong and offer to fix it for a reasonable price, and the home owner agrees because they are worried about their home. The “contractor” takes a deposit, and never comes back.

The Snake Oil Salesman: In this scam a traveling “doctor” would enter a small town claiming to have an elixir that could cure any ailment. The salesmen would have a fancy cart, and a few “happy customers” with him who would share their stories and explain how much better their life is now that they take the miracle medication. The man would sell the medicine to any willing buyer, and usually at a relatively high cost, or a large quantity as he would not be back around for a long time. The salesman would be gone within a few days, before the people realized that the medication did not work to cure their ailments. Because of the distance between towns, and the slow speed of communication, the salesman would simply need to move on to another town before the news of his scam reached the town he was in.

The Pigeon Drop: Someone comes up to you at a restaurant and says they found a piece of jewelry in the bathroom that looks expensive. They ask if it is yours which of course it isn’t, say they will keep looking for the owner. The con-man comes back to give you an update, that it was left by a customer who is offering a reward, but he cannot wait for the customer to come with the reward, because he has to be somewhere. He offers a deal, you give him half of the offered reward and he will leave you with the necklace to be claimed and get the whole reward from the owner. The con is that the item is actually junk, and no one is coming to give you the reward money.

Pig in a Poke: The con entails a sale of what is claimed to be a small pig in a poke (bag). The bag actually contains a cat (not particularly prized as a source of meat). If one buys the bag without looking inside it, the person has bought something of less value than was assumed, and has learned first-hand the lesson caveat emptor.