INTRODUCTION

The seemingly invincible security systems quite frequently fail leading to major security scams. The real motivation of thesis comes from the vulnerability of the real-world systems to attacks even when they are protected by various technical safeguards. The paper examines a number of scams & “short cons”, inspired by real world frauds carried out by con artists that were investigated and documented for the BBC TV programme “The Real Hustle”.

The author, in the paper presents various scams and principles behind these scams. Both of them are listed below:

1. The Distraction principle
   The authors state that it is basically by riveting the attention of the victim to a particular line of action manipulated by the con artist, that the dirty work of fooling the victim is accomplished in the background. The Monte scam is a sterling example.

2. The Social Compliance principle
   People are conditioned not to question anyone dressed as authority, and that is the Psychology that con artistes play upon! The jewellery shop scam is an example.

3. The Herd principle
   The marks are fooled by the shills that are strategically placed all around them, who seem to be sharing the same risks as they do. The Mark feels comfortable and confident with the Shills being around. The Monte scam is an excellent example.
4. The Dishonesty principle
In their greed, people might become a victim in the hope that they would reap in great rewards out of their “small” dishonesty. The classic “Money Making Machine” scam mentioned in the paper is an example.

5. The Deception principle
This principle plays upon the user’s tendency to believe a setup, just because it looks authentic. The house rent out scam and van dragging scam are examples.

6. The Need and Greed principle
The basic greed in human nature is responsible which most of the times forces people to fall prey to such scams. The lottery ticket scam is an example.
Scams like the 419 Nigerian scam is an example when the need comes into play when the Mark is on the verge of bankruptcy.

7. The Time principle
This principle works because sometimes the Mark makes a wrong decision when he is under time constraint. Scams, like the ring scam and the lottery scam are examples.

But everything cannot be generalised as the general principles mentioned may not always apply as different people react differently to situations, and it also depends on the culture, country, situations etc, but it’s true that the security engineers must take these facts into consideration who otherwise emphasize more on the deployment of latest technological advancements to make the system more secure. This mistake of ignoring the ‘Human factor’ (as the authors call it) in designing of the security system could help the adversary to crack the system no matter how secure and sophisticated the technology may be.

QUESTIONS-

- What are/were the different scam scenarios?
Which part of the human psychology is under attack?
What are the general principles about recurrent behavioural patterns of victims that hustlers have learnt to exploit?
What should be the ideal response time for mark in these situations so as to protect him from being victimized?
What exactly security engineers fail to understand/realize that results in successful application of the principle(s)?
What should/could be security defence strategy against the general principles?
How do we secure ourselves from falling prey to these scams?
What is the guarantee that after educating people about all the scams and the psychological factors on which the hustlers cash on, that they will not be a victim again?
What exactly should be done to make the defence system imbibe in one’s thinking process or intuitiveness?

Strength
The strength of the paper lies in the following aspects:

- Real world scams are the most prominent examples of understanding the psychology of humans and this is one of the strongest and the best part about the paper which actually made me chose this paper.
- We can easily find out the principle behind the scam by the categorization given in the paper, and then concentrate on the methodologies to overcome this scam.

Weakness
There are some weaknesses which can be drawn out:

- The paper only tells about the scams and the underlying principles but solely identifying the problem is not enough, it needs to be rectified as well and no concrete solution is being provided in the paper.
- All the information provided by the paper is good for educating purpose but what exactly should be done to make it actually work and to protect people from falling prey to these scams is the real challenge!
- Most of the scams discussed in the paper are related to non technical areas. Authors could have concentrated more in the IT domain.
- Some sort of manipulation could be sniffed, like in the videos we saw, the victim at times seemed way too cooperative on their part. As the authors themselves pointed out, at times, the producers had overridden their views so as to increase the TRP’s of the series.

**STATEMENTS OF RESULT:**

- Any systems involving people can only be made secure if the system designers understand the inherent vulnerabilities of the “human factor”.
- The taxonomy of seven principles, each of which identifies a specific behavioural pattern that ordinary
people exhibit in scams can be taken as most prominent points for understanding the psychological aspects of end system users.

• It is pointless to say by security engineers that the security system which they designed for the system is effective only when its users are less gullible, as psychology plays the effective role in it.
• Rigorous scientific experimental setup would have enabled them to draw statistically significant quantitative conclusion along with qualitative one.