

# Strategy for Effective Awareness

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**Abstract:** With the modern technologies business is evolving and the use of technology become a necessity. But with each technology there is a security and one of the main concerns for companies is awareness. Even if you have the top security controls, user's awareness must be effective to strengthen the security controls. Users understanding for the awareness is always different and interesting challenge for any information security analyst. How to know its effectiveness? and how to measure? or even how to provide the right awareness? we will introduce the four WWWW that will lead towards effective, sustainable and solid awareness. Who are the audience? What is their level of cyber security? What is their role in company business? What is the historical information about cyber security program? These questions are critical and in this technical paper we will discuss its value.

**Keywords:** Information security, Human factor, Cybersecurity, Analysis.

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## I. INTRODUCTION

Business can be very successful yet it can be fragile towards cyber security, both business goals and cyber security must accompany each other. When information security analyst work to protect and aware employees, the most important part is having a complete analysis. such step is a base for the awareness to assure its clarity to users so they can understand the concept. Our study here shows the main parts that the analyst needs to prepare prior to delivering an awareness.

## II. BODY

Awareness is a main pillar for any cyber security program and its importance comes from what is needed to have these security controls effective. You can explain the controls and the instruction in a text yet users' perception is a challenge, that's why delivering an awareness will lead to sympathetic and unity of the concept to cyber security. How to know that an awareness is efficient and how to measure the understanding? during our field of experience we depends on survey and historical data. Both shaped our analysis to us the WWWW concept. A set of selected questions in a survey can determine the way users received the message and after its analysis it will require an out of the box ideas to eliminate the gaps in the understanding. Having this useful information and measure it with the overall goal will provide a plan to deliver the perfect awareness. The first question is who are the audience? knowing the audience is important because when you use different terminology's to users you have to know which one to use and how to use it. People by work type, level of education are difficult to be in the same page if you don't do the research to know exactly who are they and what the common terminology's during worktime, personal time or even the culture. Let's have an example of 50 users who have ten engineers and the rest are mix of technical and management degrees, engineers tend to understands facts with evidence while technical needs a set of roles to follow and management perspective is performance. As analyst linking your awareness to cover all the fifty users is a must, so to do that simply use the set of their business goal as company users and aligned it with examples related to each user field by this you didn't provide the awareness you added a reminder to user's memories. What is the user's level of cyber security? you need to analyse their knowledge by addressing simple questions related to the cyber security such as did anyone experience a fake call? and how was it? and what was the solution to avoid it? or even credit card scheme. All of these questions will allow the analyst to measure the users experience in this part which will give him a guide how to tackle the best examples that users encounter so the overall message can be well received. knowing the users level needs time at the begging of the awareness which is important so the analyst can shed a light towards the best way to

be effective. What is the user's role in the company business? Knowing the user's role in the company is vital, as some deals with high-level information and others deal with routine work which in their opinion might not be important to such topic. While every user in any company may have a role that is so important to the business without it, they may lose time, information or money. Explaining the individual importance after knowing the business will not only give them motivation it will also provide their full attention to the presenter as humans we tend to focus on what touch us personally. What is the historical information about the cyber security program? And why it's important? this question will allow the analyst to know exactly which area he/she needs to tackle to be align with the needed awareness. And using this information during the awareness as lesson learned is linking the previous questions with user final observing of the information. All of these questions are key factor for successful and effective awareness to users which if it applied any company, the improvement will not be only perceived in short period it will reinforce the user's level of awareness for the long term to have them as cyber aware culture.

### III. CONCLUSION

Organizations pay thousands of dollars toward cyber security controls, yet users are the most critical part of any structure and in order to eliminate the risk of vulnerable employees' awareness. Security analysts applying such strategic questions prior to any awareness is an important to have effective results.

### REFERENCES

- [1] The Art of Service - Cybersecurity Awareness Publishing (October 15, 2020) "Cybersecurity Awareness A Complete Guide"
- [2] Ismini Vasileiou and Steven Furnell (February, 2019) "Cybersecurity Education for Awareness and Compliance"
- [3] Zheng Xu, Reza M. Parizi, Mohammad Hammoudeh, Octavio Loyola-González (March 11, 2020) "Cyber Security Intelligence and Analytics"