

Unit 6 Reflection

This week, I read about the role of penetration testing tools as well as how they relate to the idea of risk management.

I enjoyed the reading material related to the definition of the terms risk and uncertainty as described in the book by Hubbard (2020), whereby *risk* can be known by quantifying all possible outcomes, while *uncertainty* is the inability to fully comprehend distribution of probabilities. Interesting it was to read that these terms carry slightly different meanings based on the context they're used in, for instance, financial advisers may view risk as having a financial impact, while project managers may view risk as affecting delivery schedules. In contrast, risk itself can bring about positive outcomes: for instance, in the context of cybersecurity, I think that organisations need to invest in their security systems to prevent data leakage or system disruption. Therefore, possible risks—attacks—bring positive outcomes, namely, a stronger focus on secure systems.

On the topic of penetration testing, while I had some prior knowledge about what its focus is, I found this unit's reading regarding penetration testing, illuminating—white box and black box testing are useful for the website scanning activity. Penetration testing involves information gathering, vulnerability analysis and then executing various types of attacks (for example, Denial of Service or Cross Site Scripting) and then make various recommendations for improvement. Though there are several penetration tools available (such as Metasploit, Nmap or even Kali Linux), I do not have any experience with these tools, however do look forward to leveraging these (or others) for this module's final unit submission.

Our team performed our last revision of the team design document and submitted it for grading. It was a challenge to keep the content within the one-thousand-word limit, because we had sufficient content to highlight the team's understanding of regulations, risk, vulnerabilities, and tools that we will leverage in the weeks ahead. Overall, we were all happy with the content and submitted the design document on time.

Unfortunately, there has not been much interaction on the discussion forum; I believe this is mainly because the topic for discussion is not research-related, but rather simply listing the outcomes of a scanning activity. Given that all students performed the same activity, using the same tools, it is hard to find a specific point for discussion. Nevertheless, I did attempt to generate a summary post based on what I learned from using the specified tools, and from other information gained to support the idea of network reconnaissance.

In submitting the peer review document, I was pleased to note that the grading mechanism for peer review was revised from the previous scale to a more logically sound—in my opinion—approach. I was delighted with the new approach because I found it fairer to grade fellow team members without penalising members merely because other members are given better ratings.

References

Hubbard, D.W. (2020). The failure of risk management: Why it's broken and how to fix it. 1st Edition. Hoboken, New Jersey: John Wiley & Sons.