IT 315

Hands-On #6

Plan

To create a network that spans an entire university building that has two floors and hundreds of rooms. It takes a significant amount of equipment and planning. This is because many of the rooms are interconnected and networked through a telecom closet and equipment closet.

Calculations

From hands-on three alone the total investment would be eight thousand five hundred and fifty dollars. Then calculating the amount for all products in hands-on four totaled six thousand three hundred and seventy-nine dollars. Which brings a combined total of fourteen nine hundred and twenty-nine dollars and seventy-two cents.

ROI Analysis

When we are calculating the return, we can assume that the return will be higher than the cost over a given period. This is why I choose a number that is still higher than the initial investment cost which was twenty thousand. The investment length I chose was ten years. Given this information, we can expect to see an investment gain of slightly over five thousand with a return on investment of nearly thirty-four percent. If maintenance costs remain the same throughout the duration, we can use the investment gain towards the maintenance.

Conclusion

This is a large investment over the span of a decade but it is for a great cause that allows students and faculty alike to operate in an intensive working environment. This will take into account the thousands of personnel that use this building on a day-to-day basis. With this investment, we can large amounts of traffic being created at no slowdown for the overall building. There can be dozens of computer labs operating at the same time with no problem. Every room and office in the building will have direct access to the internet with cat5 cables and keystone jacks for said cables. With all the products from hands-on 3 and 4 purchased we can see a significant increase in usage throughout the building and for many years onward.

Sources

https://www.calculator.net/roi-calculator.html?beginbalance=14929.72&endbalance=20000&investmenttime=length&investmentlength=10&beginbalanceday=03%2F04%2F2023&endbalanceday=12%2F31%2F2027&ctype=1&x=74&y=15