

## **IT HAZARD.**

**By James Collins.**

**As the Corporation grew, problems appeared in the Information Technology (IT) department. Because I was a technical director, the CEO assigned the task of restructuring and reorganizing the department to me and told me to fix the problems. Everyone in the Corporation knew the list of problems as many formal meetings discussed them and attempted to identify solutions. The old saying that a camel is a horse designed by committee was appropriate in this venue. Very few of the directors had any technical knowledge of computers so their solutions were limited.**

**For my first meeting I brought all of the IT managers together in my conference room and asked them to list the problems, as they knew them, on the blackboard. Every manager could comment and add details or thoughts on the matter. This went on for two days. At the end of the presentations, I summarized what I had heard and asked what I considered a key question.**

**“Ladies and gentlemen, you have over 400 computers under your supervision. Can you show me a copy of your network map?”**

**“What's a network map? We don't have any maps that I know of at all,” said the department manager.**

**"You have to have a map of every computer in all of our buildings showing the interconnection from each computer to the network server, and to every other device attached to that computer. Can you show me a copy of that for any of the buildings?"**

**"No, we were never asked to do anything like that and I've never heard of it being done here."**

**"You now have new marching orders. I want network maps of each of the buildings started first thing tomorrow morning with the plan to have everything completed within one week."**

**"Where do we start first? This building is huge."**

**This question told me I was dealing with a task-oriented manager, not a goal-oriented manager. The difference being a goal-oriented manager will just ask what you want done and when you want it and then he or she without any other direction completes the job successfully. The task-oriented manager will do anything you ask, and do it well, but requires specific instructions because they do not know what to do without guidance. The latter should never advance to manager, but they are very competent staff people.**

**"Start with the northeast corner of each building and work it out from there. Report to me each morning at nine o'clock to let me know how the task is proceeding. Thank you very much, now go back to work."**

**The following morning, the first report came in and the manager himself was embarrassed.**

**"Jim, we started with the first computer against the wall in the northeast corner of the building. Apparently, it was there three years ago and management asked to move that computer in a restructuring, to the other side of the building, more than 300 feet away. A new cable ran the whole length of the building to reinstall the computer. Last year, that department relocated back to its original area. They needed another new cable, which ran in parallel 300 feet back to its original position. If we had a map, we would have known we did not need the last 300 feet, all we required was a 4-foot jumper. It looks like the map will help us a lot. We now plan to pull out the 600 feet of cable and put it in back in inventory."**

**Late that afternoon, four of the IT supervisors rushed into my office very flustered.**

**"Jim we had a near fatal accident. One of our guys tugged on a cable we were pulling out of the overhead and a repeater weighing 30 pounds fell out of the overhead, crashed through the drop ceiling and smashed on the ground in the main corridor of the factory. It just missed a worker walking down the corridor. We have security closing everything off and we have all the people walking around away from this area until we know what we are working with. Initially, it appears that a repeater was put in the overhead to enhance the signal being sent to the remote computer because it was so far away from the server but we never knew it existed."**

**"Put everyone into hardhats. Cordon off the area and notify the Foreman of the floor that that corridor is dangerous. Bring in three crews of four technicians each and assigned them to examine that entire corridor above the dropped ceiling from end to end. Do not let anyone yank a cable until you know what is on the other end. I want you to personally supervise the operation and then we will set up a procedure for checking all the ceilings in all the buildings."**

**The following day, the main corridor opened again to the workforce and a meeting convened to find out what happened. Apparently, when they moved a computer from one end of the building to the other, there was insufficient signal amplitude on the lines. Then IT installed a repeater about midpoint to enhance the signal sent to the new location. The second time the computer relocated, they installed another repeater. In each case, they merely balanced the machine on a joist but did not secure it. The dropped ceiling covered everything so no one noticed the repeaters up on the beams**

**That day, they either removed or secured eight repeaters in overhead locations, any of which could have fallen caused by vibration, thus removing potential hazardous conditions.**

**The network maps proved invaluable. They reclaimed and removed thousands of feet of cable from cable racks. The IT department now identified each of the computers, they verified its location, and scheduled regular maintenance to enhance operations. The number of repair calls, tracked over a few years fell because the complexity of the overall network system went down. Once each of the network maps existed for each building, the maps became formal documents under configuration control and the overall operation of the corporation improved.**

**THE END**