**Security**

Level 1: We need to ensure that the hardware can only be accessed by employees. Customers should not be allowed to access or use any company systems outside of approved means.

Level 2: We need to ensure proper network/data encryption. We should also develop or invest in firewalls or network intrusion detection.

Level 3: We should ensure that anything that is not needed be turned off and disabled. We do not want to leave any applications or programs running that are not in use as that is an easy way in.

Level 4: For files, we need to ensure proper encryption and that only approved users have the authority and permissions to use/view certain things. Making user groups is an easy way to do this.

Level 5: We need to set the proper policies and procedures in place so that everyone is on the same page regarding security.

Level 6: Education of the new system is the most important in terms of user security. We should also have a well-kept list of users and roles. Having more complex password requirements can also help.

**Backup**

For a backup policy, I think we should utilize incremental backup. I think it hits a good balance of keeping what we have and backing up what has changed. This way we aren’t constantly backing up everything which is very time consuming and can be taxing on the system. I think doing this at the end of the work day is all that would be necessary.

**Maintenance**

I think that we as an IT staff should handle maintenance of the system. We have a small operation in the grand scheme of things so I believe that if we hire an employee or two specifically for maintenance would be a fine path. They would be in charge of system updates, troubleshooting, or aiding user requests. I think hiring or assigning dedicated staff will offset most cons.

|  |  |
| --- | --- |
| In-House | Outsourced |
| Pros: Know the business, can respond quickly, more control | Pros: experts in their field, always available, cost-effective, quality of work? |
| Cons: more expensive, additional hiring/training, not always available, may fall behind | Cons: less control, communication problems, quality of work? |

**Cost**

Please spreadsheet

