 Other Elements of a in-house Implementation

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**Other Elements of an in-house Implementation**

Along with acquiring the adequate hardware to satisfy the current requirements, there are other components which require attention. In many cases these are considered the drawbacks of purchasing your own hardware.

**Failure management - Disaster management**

It is important to plan for any events that may occur and affect the system performance. These events include; hardware faults, power outage, system overheating, and any natural disaster. Therefore, a disaster or recovery management plan would be necessary. However, such plans are usually the responsibility of the client to develop, this depends on whether the client determines that the information is vital, and that creating the plan is a necessity. The plan must also comply to the venue’s health and safety policies.

Common solutions are to have; the servers in a temperature monitored room, a fire suppression system in the event of a fire, a generator that kicks in automatically to supply power to the servers during an outage, back-up servers to take place when one stops working and daily back-ups of data, the list goes on, but these are the most significant regulations.

In the case of MATHEX competition, the current paper-pen system would not be discarded as last resort back-up plan.

**Maintenance**

It includes regular hardware and software checks, to ensure the system is up to date and working to specifications. The solution may also undergo updates, for bug fixes and adding features, these will require testing.

Maintenance may also be extended to other parts of the system, such as the options mentioned in the failure management section above.

Further information can be found at: <http://sebokwiki.org/wiki/System_Maintenance>.

**Cost to run the equipment.**

We assume that the servers and its peripherical devices will not be located at the venue and will need to be moved from place to place, which will also infer set-up costs and tests.

Maintenance of the system will also generate costs as well as possible hardware faults.

**Durability**

A computer also has a lifespan, which is usually estimated between 3 to 5 years, but it is subjective. It will depend on how it is used, how often it is used, and how it is maintained.

There are many systems in existence that have been running for several years and will likely still live for many to come with the appropriate maintenance.

However, replacing parts is to be expected, which will incur further costs.