

# Assignment 11 - Aidan Sharpe

## Dalek Incorporated Cloud Migration Recommendation

Dear Dalek Incorporated,

I have assessed the possibility of migrating company data to a cloud-based service. Below, I have outlined some advantages and disadvantages of this possible migration.

### Advantages

- Short-Term Cost

Leasing server space on a cloud computing platform is often cheaper than running local servers. Since data centers are designed to be cost-effective, it may cost less money in the short-term to switch to a cloud provider.

- No on-site server management personnel

The cloud is essentially just someone else's computer. While your company will still have to manage its data, the hardware management will be done by the cloud provider.

- Space savings

After a potential migration to the cloud, the space taken up by the server rack can be repurposed.

- Set and forget

If systems are properly automated, maintenance would be minimal. This would allow for better resource allocation.

- Large scale protections

Many cloud providers offer protection packages to better protect their users. This could help minimize attacks on Dalek Incorporated services.

- Network security

If Dalek Incorporated were to be attacked, a cloud-based system would be isolated from the Dalek Incorporated network. A self-hosted solution would reside in the network and possibly make the entire network vulnerable.

### Disadvantages

- Lack of control

Using the company's own computer allows for custom hardware and more software options. Cloud computing platforms can be restrictive with what kinds of software are run on them.

- Larger target

Since Dalek Incorporated is a smaller company, a local server will be a much smaller target than a large data center.

- Long-Term Cost

If Dalek Incorporated increases in size, it may be worthwhile to allocate resources to non-cloud-based data. Having in house staff could optimize the hardware and software configuration for the company's specific needs. This custom approach could save costs better than any general-purpose cloud provider.

- Less Dependence

If a potential cloud provider has a server outage or goes out of business, the data and services associated with Dalek Incorporated would also go down. Without proper backups there would likely be data loss.

### **Recommendation**

Since Dalek Incorporated is such a small company, a cloud-based solution seems fairly fitting. If there already exist technology staff, however, it could be a better option to focus on increasing the efficiency of the company's server system. See this article by Tech Target for some tips on increasing efficiency. If the company continues to use a self-hosted approach, I would recommend using a DDOS protection service such as cloud flare to better protect company resources.

Sincerely,

Aidan Sharpe

Tech Target article: <https://www.techtarget.com/searchdatacenter/tip/Four-ways-to-reduce-data-center-power-consumption>