

Executive Summary

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Statement of Need

With Don & Associates expanding to other states in the region, there will be a need to develop resources. A successful expansion will require the new sites to access resources and communicate with currently available assets to the primary office. Development can be costly if each new site buys and installs new servers and other IT solutions, including maintenance and labor. Migrating to the cloud allows Don & Associates to eliminate some expansion costs, including buying hardware for each new site, hiring technicians to maintain the hardware, and any overhead costs required for upkeep (Milano, 2013), while also allowing for centralized management of data.

Cloud Service Providers

Cloud Computing has three main models, Infrastructure as a Service (IaaS), Software as a Service (SaaS), and Platform as a Service (PaaS) (Leading Edge, 2021). The most common model is IaaS which offers basic infrastructure such as servers, networks, and data storage, removing the need for hardware at the office, providing a cost-effective solution for IT needs. PaaS provides the infrastructure but focuses on application development. Finally, SaaS provides a service, usually on a subscription basis, that is managed from a remote location so that businesses do not have to concern themselves with maintaining the software or hardware. There are three major cloud service providers that Don & Associates should consider, Amazon Web Service (AWS), Microsoft Azure, and Google Cloud Platform (GCP).

AWS was one of the first early adopters of cloud services (Veritis, 2021), has a large selection of services to choose from, including computing, databases, content delivery and storage, and networking, and is often used as a benchmark for quality cloud services. However, AWS has a reputation for downplaying hybrid cloud offerings (Carey, 2020), although they recently shifted from this ideology. The large number of services can be overwhelming for businesses just moving to the cloud but is managed easily with the AWS Console.

Another large provider is Azure. Azure uses the large Microsoft-managed datacenters to build, deploy, and manage their services (Veritis, 2021), including computing, networking, data management, and performance. If a company already uses Microsoft services like Windows Server, then using Azure will allow for a much easier transition and compatibility with current software across the company. Unfortunately, one of the most significant issues with Azure is that they are known to suffer from outages, leaving companies and services unavailable (Carey, 2020).

The last of the largest providers is GCP. GCP uses full-scale encryption of all data and communication channels and tends to have a more user-friendly interface, lower costs, and flexible options (Veritis, 2021). GCP is most prominent when it comes to machine learning, cloud-native applications, and other optimized applications for use with a cloud service. When it comes to enterprise uses, GCP falls short compared to the other two providers. GCP has an immature enterprise focus, which shows during contract negotiations, discounts, independent software, and support (Carey, 2020). Although GCP has shown improvement in this area, it is still one of their most significant weaknesses.

Recommended Plan

For Don & Associates regional expansion, I recommend using Amazon Web Services. Being one of the oldest cloud services, AWS provides an adaptable, secure, and cost-effective service to efficiently manage cloud products (Arunkumar, 2019). AWS makes use of regions and availability zones to provide services based on location. This will make Don & Associates' expansion in the Northeast Region easier to manage by providing specific services as needed and only if necessary.

Impact of Recommended Plan

Using the AWS Infrastructure will allow for an easy expansion while keeping equipment costs and space requirements to a minimum. With AWS management console, management of services will be easy to supervise and implement. Some disadvantages of using AWS include common cloud problems such as downtime, privacy, limited control and backup protection, technology limitations, and limited knowledge from your current team (Sabo, 2017). However, most of these limitations are taken care of by the service provider. With some investment into your employees, they can be trained quickly on the AWS Console, which will result in an effective expansion.

References

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