**Priyanka Manivannan – Moving Fishtank LTD to AWS Cloud**

Introduction

Fishtank LTD produces post-production VFX work for feature films, providing services to Broadcasters in EMEA and LATAM. Ryan Pothecary, FiskTank Ltd's new CTO, is embarking on a new IT strategy which involves moving from third party data centres to the cloud to help resolve current IT issues. The cloud uses a network of remote servers hosted on the internet to store, manage, and process data, rather than a local server or a personal computer. In this documentation, I will outline the problems currently faced by FishTank LTD, and how moving to AWS cloud can help resolve these issues split out by short, medium and long term goals. The main benefits include protection from technical disasters, scalability, cost efficiency and focus on innovation. Furthermore, this document will explain how you can seamlessly migrate to the cloud as a new user. Finally, it will outline any objections and cultural issues faced along the way during this project.

Main Problems

1. No disaster recovery in place – Disaster recovery is an organisation’s plan to protect its IT systems and data from disaster and allows businesses to recover and minimise downtime and losses. FishTank LTD is currently at risk of this, and operations could halt.
2. Inefficient IT resource scalability for fluctuating demands – High demand and tight timescales are leading FishTank LTD to interruptions in projects and reducing customer service.
3. Addressing business expansion to keep up with demand – FishTank LTD foresee an increase in customer demand and have long-term plans expand to North America and APJC.

Migrating to the cloud

Migration is moving data or software from one location to another. First to seek the benefits of AWS cloud you must migrate all data from the third-party data centres to AWS cloud. In order to continuing serving customers while any migration to the cloud takes place, it is required to choose the correct migration strategy. Strategy Rehost (also known as lift and shift) will move applications to the cloud without making changes to the application. Although objections may arise asking about the disruptions and downtime, Rehost will ensure you will not need to be concerned with application compatibility and performance disruption as your applications will continue to serve users while migration takes place.

Benefits

Short-term benefits

**Disaster recovery DR**

By migrating to the AWS cloud, FishTank LTD will benefit from fast, secure solutions for disasters. Cloud DR will allow FishTank LTD to back up virtual environments, ready in the case of disruption and ensure business continuity. This will ensure customer experience and business reputation are kept high. AWS has a range of disaster recovery plans to back up your data available. I would recommend Backup & Disaster Recovery as a service and AWS Elastic Disaster Recovery . The Backup & Disaster recovery as a service uses the S3 (Simple Storage Service) for backups as it provides a good baseline for backing data without high operational costs. The con of this service is that it could take a longer time to recover depending on the data. To combat this, I have also recommended AWS Elastic Disaster Recovery, where you can use this for important data as it has a rapid recovery rate, and high security and will allow business continuity. Although this service is priced higher, I believe it should be used to minimise losses due to downtime. Thus, I would recommend Backup & Disaster Recovery and AWS Elastic Disaster Recovery combined to ensure DR. Furthermore, continue to evaluate and monitor this usage and cost as this might need to be changed as the business shifts.

**Low cost**

Unlike moving data centres moving to the cloud requires no upfront expense so it will be less of a cost to move to the AWS cloud. When using the cloud, you only pay for what you use which in comparison to data centres will save you cost. Data centres require a high up-front cost as well as purchasing more hardware to ensure seamless usage for peak times and time spent creating maximum utilisation plans for data centres. This can lead to high amounts of spending which reduces the opportunity for finances to be used more efficiently e.g. innovation. Therefore, low upfront costs, reduced planning and pay-as-you-go policies allow for a smoother and financially efficient transition into the cloud.

**Scalability**

Switching to the cloud will help with adaptability to the growing business. Physical data centres on the other hand can be expensive and hard to scale. Switching will help resolve the issue currently faced where timescales can be short and FishTank must sacrifice customer satisfaction to meet deadlines. Now, scaling can increase or decrease depending on business needs.

Medium-term benefits

**Cost Reduction**

Over time as the cloud switch has been made, the company will benefit from economies of scale. Economies of scale are proportionate savings in costs gained by expanding their scale of production. Expansions will happen because, in the short term, FishTank is now able to respond to more customers and lower variable expenses through switching from data centres. This means that they can use their profits to reinvest in more IT developments to keep growing as a business.

Long-term benefits

**Scalability and globalisation**

As previously mentioned, scalability is made easy with AWS cloud as it is relatively cheap and instant so can increase quickly with customers demand and grow the business smoothly removing barriers to globalisation. This is crucial for FishTank as they have predicted increased customer demand in North America and APJC. On the other hand, if the demand decreases, there is no charge to remove systems which makes keeping up with peaks as well as troughs easy and affordable. The long-term benefit of moving to the cloud is building future-proof applications to ensure a business's success.

Cultural Issues Switching to the Cloud

Current IT staff at FishTank do not know AWS Cloud and, therefore, might have some resistance to switching from data centres due to a change in processes. I would recommend sharing the benefits outlined here with staff and using the AWS training available. In addition, you should sign up for an AWS support plan to aid in a smoother transition. It provides 24/7 customer service, AWS documentation, technical papers, and support forums.

Conclusion

In this documentation, I have outlined the short, medium, and long-term benefits of moving FishTank LTD to AWS Cloud by finding solutions to their problems. Throughout the report, I have touched on any objections and cultural issues which may be faced and how to tackle them. Overall, by moving FishTank to the AWS cloud they can benefit from low costs, become more customer-focused and have a disaster recovery plan. To continue to reap the benefits from AWS cloud continue to monitor costs to ensure they are kept at a minimum and make use of the AWS support plan.