

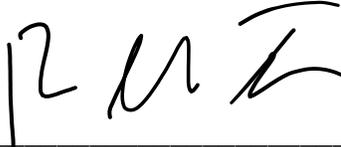
**Sociotechnical Synthesis**

**STS 4600**

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**Ricardo Marin**

**Computer Science**

Signature  Date 04/28/21

Ricardo Marin Jr

\_\_\_\_\_ Date \_\_\_\_\_

Richard D. Jacques

## **Introduction**

For my project, I focus on two topics: a way to approach different elements of the Cloud and how the Cloud impacts small businesses. These topics are closely related as the technical project looks at the research that is trying to improve the current state of the Cloud market. This is important since the Cloud has had a massive change in how everyone interacts with the internet and conducts business. As the market grows, there has been increased competition in the Cloud market; researchers have used this as motivation to look at improvements for both the cloud provider and cloud customer. Thus, the technical report closely examines the work that has been conducted in the past decade towards solving this important problem. The STS research paper reflects on the current state of the Cloud and the impacts made on small businesses in the United States.

## **Project Summaries**

The technical report focused on four main categories of research to improve the Cloud. These categories: pricing, load balancing, task scheduling, and resource allocation are all vital to a successful cloud business for both providers and customers. The techniques presented would often benefit both involved, but in some circumstances only one would be prioritized. However, a major flaw with the research found was the inability to scale to real life cloud business scenarios. One technique in particular, multi attribute price bidding, is very promising, but is very complicated. Therefore, any major change to the cloud market must be taken gradually to minimize confusion and negative impacts.

The STS research paper is a thorough reflection of the changes made by the Cloud's impact on small businesses. The paper produces a brief but focused history of the Cloud and the recent improvements that have been made. Thankfully, the Cloud has brought significant

improvements to both small and large businesses, but there are some drawbacks. One major concern was the amount of power that a cloud provider can exert over a customer, including the ability to singlehandedly destroy even a moderately sized business for a decent amount of time. Therefore, the paper suggested for the use of more protections for customers in the event of a termination.

## **Conclusion**

Both papers worked side and side to identify current problems in the Cloud market and showcase potential improvements. These issues have the ability to impact every person who interacts with the internet, thus the need for improvements is substantial. There are many shareholders involved with such a big userbase, thus the need for balance will always be tough to meet. However, both papers are encouraged by the improvements being suggested and believe that the market will continue to improve over the next decade.