



TechFite

Adoption Plan Proposal

D088 Final Assessment

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CONTENTS

Part A. Organizational Need	3
Part B. Emerging Technology Solution	3
Part C. Adoption Process	4
C1. Scope	4
C2. Track	4
C3. Rank	4
C4. Evaluate	4
C5. Evangelize	4
C6. Transfer	4
Part D. Technology Impact	5
Part E. Technology Comparison	5
E1. Advantages of Humio	5
E1. Advantages of Splunk	5
E1. Disadvantages of Humio	5
E1. Disadvantages of Splunk	5
Part F. Adoption Success	6
Part G. Sources	7



PART A. ORGANIZATIONAL NEED

TechFite manufactures medical devices and is now working with NASA on a project that would allow humans to thrive in space longer. TechFite seeks to work with other countries' space programs, such as the European Space Agency and the Canadian Space Agency. This international growth may result in the opening of overseas subsidiaries. TechFite will work with new institutions and organizations to expand their operations, which poses an increased security risk.

Given that the company is already required to comply with FISMA and NIST, the IT staff is particularly concerned about security. TechFite Administrators need a new and robust system to scan the logs of all incoming network traffic that passes through the firewalls to comply with industry standards and mitigate the security risks associated with its expansion. TechFite must keep these logs for at least a year, which means the company will require massive data storage space. The company must automate the ingestion, compression, and storage of log data to achieve these objectives.

PART B. EMERGING TECHNOLOGY SOLUTION

I recommend that TechFite purchase Humio's log management solution because its data ingestion pipeline uses artificial intelligence features to compress log data by 5-20x, resulting in less storage and lower transfer fees. Humio's engineering team recently completed a one petabyte-per-day benchmark test in which they processed 30 million logs per second (Humio Unveils New Streaming Benchmark 1+ Petabyte of Data a Day, 2022).

Humio is classified as an emerging Gartner Maturity Level because it is a first-generation technology that industry leaders are only now learning how to use to gain a competitive advantage.

By using Humio, TechFite will be able to go from its current level of scanning 10,000 log files per week to virtually limitless log scanning capabilities. Humio offers both an AWS-hosted SaaS solution and an on-premises solution, which means TechFite will be able to log everything in all operating environments while dramatically saving on storage and administrative costs.



PART C. ADOPTION PROCESS

I have chosen the Gartner STREET method as the adoption process, which uses six steps called scope, track, rank, evaluate, evangelize and transfer.

C1. SCOPE

The scope defines the current business issue and opportunity and the organization's goals, such as supporting critical corporate objectives. The scope for TechFite is to address the manual security logging process.

C2. TRACK

Tracking is the second stage, and it entails going out and looking for technologies intended to serve the scope stated in the previous step. TechFite is investigating cloud-based automation solutions, specifically Humio, as part of this strategy.

C3. RANK

The third stage, Rank, analyzes the second step results to rank the technologies and the vendors that provide them. TechFite is considering other vendors besides Humio, such as Splunk and logz.io, and open-source solutions such as the ELK stack (ElasticSearch, LogStash, and Kibana).

C4. EVALUATE

The rankings are used during the evaluation stage to generate a proof of concept for the top contenders to understand the implementation process better and assess potential hazards. TechFite is making a proof-of-concept comparison of Humio and Splunk's costs, efficiency, and business model fit.

C5. EVANGELIZE

Evangelization is a vital stage of any emerging technology's adoption cycle, focusing on getting buy-in from teams and champions within those teams. For TechFite, this entails educating and empowering employees about the benefits of automatic log ingestion.

C6. TRANSFER

In the transfer step, an internal team takes over operational and deployment duties for the technology. During this final step, TechFite hands off control of the Humio log ingestion solution to the team that will maintain it.



PART D. TECHNOLOGY IMPACT

As with any new technology, there are advantages and disadvantages. One advantage of this technology is that it automates log storage, which means fewer employee hours spent manually doing the work. On the other hand, a disadvantage of this new technology is that it requires trained engineers to configure the Humio environment and logging pipelines. One way to address this issue is to use Humio's Professional Services team, which has the necessary skill set to expedite the onboarding process. Another way to address this issue is to have TechFite's engineers upgrade their skills through Humio's training programs and webinars.

PART E. TECHNOLOGY COMPARISON

I will compare Humio with Splunk Enterprise.

E1. ADVANTAGES OF HUMIO

One advantage that Humio has over Splunk Enterprise is the compression ratio that Humio can achieve, thus enabling TechFite to store more logs in less storage space. Another advantage of Humio is their unlimited ingest pricing model, which means the price you pay never goes up with the volume of logs you import into the platform.

E1. ADVANTAGES OF SPLUNK

Splunk Enterprise's main advantage over Humio is that it is a more mature technology, with many more technical resources available and more people with the skill set required to operate the system. Another advantage of Splunk Enterprise is its tiered pricing model, which can be cheaper than Humio for smaller deployments.

E1. DISADVANTAGES OF HUMIO

The main disadvantage of Humio, when compared to Splunk Enterprise, is the complexity of the onboarding process, as there are far fewer resources and trained experts available. Another disadvantage is that Humio can be more expensive than Splunk Enterprise if TechFite doesn't meet the break-even level of log volume, where Humio becomes the cheaper option.

E1. DISADVANTAGES OF SPLUNK

Splunk Enterprise's main disadvantage is its lower compression ratio compared to Humio, resulting in higher costs for long-term log storage. Their other significant disadvantage is that Splunk Enterprise uses an index-based storage model, which has an enormous impact on the speed at which you can search your data.



PART F. ADOPTION SUCCESS

During the initial 30-day trial period, the most important metric we will consider is whether Humio can achieve its published compression ratio of 15-20. TechFite will be able to store many more logs within their current infrastructure rather than incurring the cost of using alternatives such as AWS S3, with only four terabytes of storage allocated for local log storage. TechFite will compare the volume of log files stored at the start and end of the trial period to determine the compression ratio achieved by Humio. Based on that metric, TechFite will decide whether to use Humio as an automated log storage solution.



PART G. SOURCES

Humio Unveils New Streaming Benchmark 1+ Petabyte of Data a Day. (2022, March 8). CrowdStrike.Com; www.crowdstrike.com.
[https://www.crowdstrike.com/press-releases/crowdstrikes-humio-platform-unveils-scalability-benchmark-streaming-over-one-petabyte-of-data-per-day/Splunk vs.](https://www.crowdstrike.com/press-releases/crowdstrikes-humio-platform-unveils-scalability-benchmark-streaming-over-one-petabyte-of-data-per-day/Splunk%20vs.%20Humio)

Humio: 5 questions to ask when evaluating log management platforms. (n.d.). www.humio.com. Retrieved April 16, 2022, from <https://www.humio.com/whats-new/blog/splunk-vs-humio-5-questions-to-ask/>

