# Emerging Tech, Practice, or Process Chosen

## B1. Summary and Importance

<https://d1.awsstatic.com/whitepapers/serverless-architectures-with-aws-lambda.pdf>

“Serverless Architectures with AWS Lambda” is a white paper authored by various members of the AWS Lambda team at Amazon Web Services. The report provides a broad overview of Lambdas features and recommendations on how to build with a serverless mindset. Our company desires to take a cloud-native approach to handle software and infrastructure requirements. AWS Lambda markets itself as a “Function as a Service” service, where code can be broken down into micro-services and are not dependent on the cloud application. The paper then discusses serverless best practices, how to develop in the cloud, and configuration practices.

<https://d1.awsstatic.com/whitepapers/lambda-architecure-on-for-batch-aws.pdf>

“Lambda Architecture for Batch and Stream Processing” is another white paper coauthored by the AWS Lambda team members. This paper describes best practices and approaches on how to handle streaming data and batch processing. Data ingestion, transformation, and export are critical parts of our application requirements. This paper discusses the pros and cons of the service while also outlining methods used to achieve desired results. Double Go will be ingesting a lot of service providers and user data that will need to be calculated in near time, and streaming this data through AWS Lambda provides the required compute power at a low cost. Development time is also reduced as there is no infrastructure to maintain.

<https://docs.aws.amazon.com/whitepapers/latest/security-overview-aws-lambda/security-overview-aws-lambda.pdf#document-revisions>

“Security Overview of AWS Lambda” is again written and updated by the team at AWS. This paper on security provides a deep dive into security best practices and is aimed toward new adaptors of the service. The article describes having no servers to manage, the shared responsibility model, a staple in the AWS ecosystem, and how lambda has many different AWS services that it can utilize in its use and function both up and downstream. When Double Go designs systems, we take our security posture very seriously as we handle users’ sensitive data, and need to ensure that best practiced and followed. Great security starts with security focused design.