In Summary based on “AWS Well-Architected Framework.pdf”, consist of asking questions about pros and cons to fulfill the customer demands and requirements to design a well foundation of cloud environment. There should be discussions with the architects, developers, and operations team members to ensure all the standards and concerns of improvements are met based on importance.  
These are the five pillars of designing a well foundation to expand based on customer demand, Operational excellence, Security, Reliability, Performance Efficiency, and Cost Optimization.   
  
 As for “Operational excellence” is to undertake customer demands on operational procedures and processes to be improving by monitoring the system at an optimal running state. You have the option to script operations procedures and automate based on particular events to reduce human effort. You can keep a record of procedures on a document to follow standards to improve performance or recover from a failure occurrence. Only make small changes at a time in case you need to reverse the changes after testing the workload. There should also be failure scenarios anticipated and tested in order to have procedures to approach them in case of an actual failure on the cloud environment. These are example questions from the on “AWS Well-Architected Framework.pdf”:

1. What factors drive your operational priorities?
2. How do you design your workload to enable operability?
3. How do you know that you are ready to support a workload?
4. What factors drive your understanding of operational health?
5. How do you manage operational events?
6. How do you evolve operations?

AWS provides CloudTrail service to check the logs based on time or date of an occurrence. You can also use CloudWatch service to set alarms based on particular events that are important to identify an issue.   
You can also find products under AWS Marketplace to assist.

The next pillar is “Security” to ensure protection on data on the cloud environment or on transit outside virtual private network as well. Roles, groups and policies can be use in IAM to improve security and assign minimal privileges to the user to do his/her duties. You can use encryption and keys to access storages or instances on the cloud environment. You should also simulate security events to run AWS tools to capture a breach quickly. There should be standards that must be follow to ensure security on every layer of the cloud. How are you protecting access to instances, storage and AWS resources? This is important pillar to recover and protect data from unauthorized users.

The third pillar is “Reliability” of a cloud environment to recover from a downfall from network issue or failure of a scenario with an instance or storage for example. Implementation of automation procedures based on tested scenarios or experiences to sustain availability. Scale up the resources based on the capacity needed, no guessing. Good questions to ask during the foundation stage based from the pdf file:  
 1) How does your system adapt to changes in demand?   
 2) How are you backing up your data?  
 3) How are you planning for disaster recovery?

AWS Config. Service can be use to audit the logs based on the workload and background processes. This can help to get a bigger picture of what is required.

As for “Performance efficiency” is to keep up with the performance demands from a customer  
by accommodating system requirements, and selecting the best network layout and servers. You should be able to make changes based on usage consumption or decommissioning servers that are no longer need. In AWS cloud, you can use Regions to deploy data centers to improve latency on data. Maybe you can use Lambda or DynamoDB, serverless architecture of the cloud for faster performance. The four best practices areas are selection, review, monitoring, and tradeoffs. As for selection is to select the best suited AWS service based on server or serverless based on the workload and acceptable latency.  
As for review, you need to understand the performance bottlenecks and take advantage of regions, availability zones based on edge locations. As for monitoring, you can use CloudWatch to provide alarms based on thresholds. You can also use Lambda and write up a function to trigger a notification.  
As for tradeoffs, you can trade latency, storage, durability, region for better performance.  
  
 As for “Cost Optimization”, you must be aware of AWS services cost and remove unnecessary cost by using monitoring AWS Cost service to ensure you do not exceed your budget. You should use tags for your storage like on S3 buckets and instances on EC2 or on VPC to include these on the cost expenditures report from AWS. How are you monitoring your usage and spending on AWS services?   
This is important in order to leverage what AWS services are using up the most cost.  
Adjustments on the cloud environment is to reduce the cost. Keep reviewing your procedures to ensure they are the most cost effective as supply and demand changes over time. You should also run performance test to reduce cost.

The foundation of the cloud environment and these pillars are important to recover or expand quickly based on a customer demand. Constantly testing the cloud environment and discussing the constraints with other team members enhances the cloud environment. It is important to select the correct model for the cloud to grow with the changes. You must take advantage of the available AWS services based on your workload and essential pillars for sustainable cloud environment.