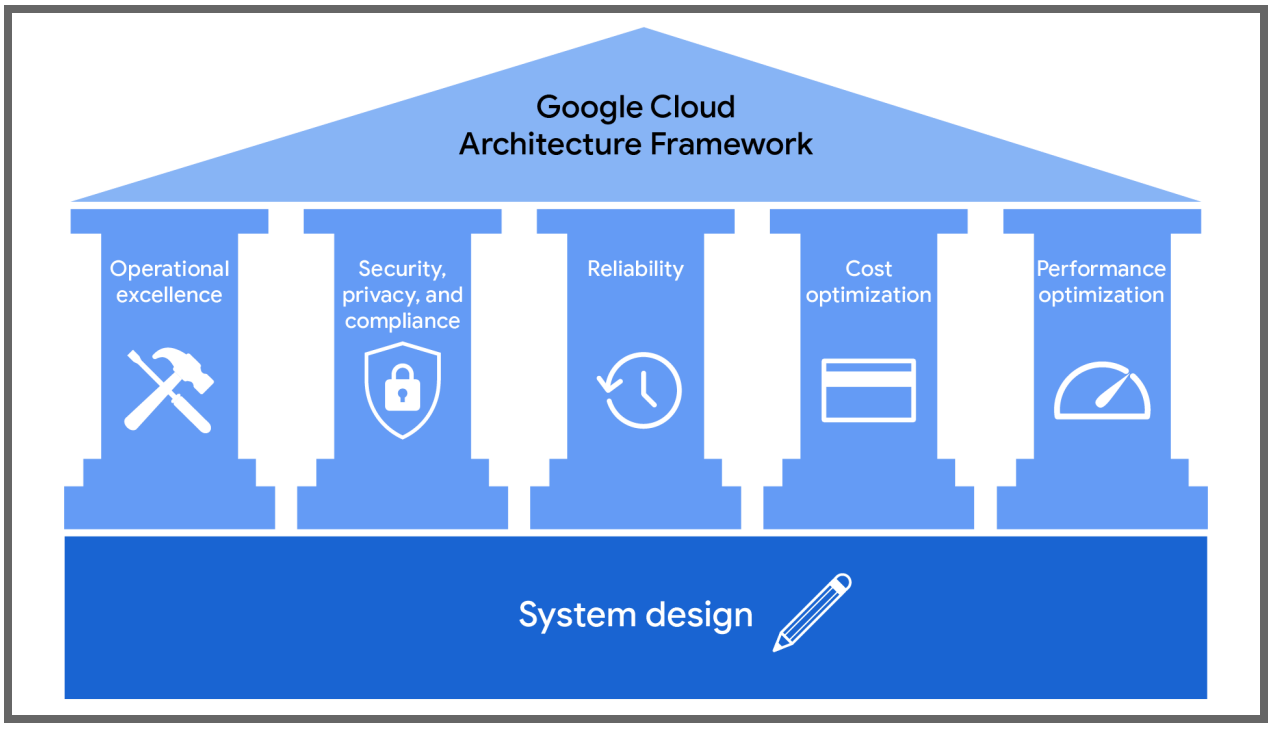
The Google Cloud Architecture Framework

Throughout your journey you've learned more about cloud architecture and how it builds the cloud. How a cloud architecture's various components and technologies are arranged is what allows organizations to pool, share, and scale resources over a virtual network. So, understanding how to create and operate cloud systems is a large part of your job as a cloud data analyst. Luckily, the Google Cloud Architecture Framework can help you develop and use cloud systems that are secure, efficient, resilient, high-performing, and cost-effective. In this reading, you'll learn more about the six pillars of the Google Cloud Architecture Framework, and how the framework can guide you through the cloud design and deployment processes.

The six pillars

The six pillars of the Google Cloud Architecture Framework include: system design; operational excellence; security, privacy, and compliance; reliability; cost optimization; and performance optimization. Each of these pillars represent design considerations that can guide your work in the cloud.



1. **System design** is the foundation of the Google Cloud Architecture Framework. When designing your system, you must define the architecture, components, modules, interfaces, and data needed to satisfy cloud system requirements, as well as continue to learn about the products and features that support system design.
2. **Operational excellence** determines how efficiently you deploy, operate, monitor, and manage your cloud workloads.
3. **Security, privacy, and compliance** involves ensuring your data is secure in the cloud, your information is private, and that your design aligns with organizational standards.
4. **Reliability** means that your system is designed to handle your workloads in the cloud.
5. **Cost optimization** maximizes your business investment in cloud architecture for your organization.
6. **Performance optimization** means that, in your design, you are continuously honing your cloud resources to promote optimal performance.

Key takeaways

As a cloud data analyst, a large part of your job will be designing, implementing, and using cloud solutions. As you interact with cloud architecture, having a design framework can help guide your understanding of the system so that you can break down tasks into manageable priorities. As you continue your learning journey, you can use the six pillars to frame your understanding of various cloud architectures.