Cloud architecture = the practice of applying cloud characteristics to a solution that uses cloud services and features to meet an organization's technical needs and business use cases.

Solution/applying blueprint

**AWS well architected framework**

6 pilar:

1. Operational excellence pillar
2. Security pillar
3. Reliability pillar
4. Performance efficiency pillar (maximize performance & manage efficiency)
5. Cost Optimization
6. Sustainability pillar (maximize efficiency & reduce waste)

AWS WA Tool = review status. Akses ke best practice AWS Architect

**Best Practices for building solutions on AWS**

Design trade-offs (increase cost & complexity)

Implementing scalability (can handle changes in demand)

Automating your environment (infrastruktur bisa respon lebih cepat untuk aplikasikan perubahan)

= Using IaC (build, test, deploy application)

Treating resources as disposable (upgrade app & manage underlying software)

Using loosely coupled components (dwsign with independent components, can handle both layers d)

Designing services, not servers.

Choosing the right database solution

Avoiding single points of failure

Optimizing for cost (stop services if they’re not in use)

Using caching (efficienly reuse previously retrieved or computed data)

Securing your entire infrastructure.

**AWS Global Infrastructure**

* Regions (geographical area)
* availability zones
* local zones (storage, database. Each local zone location is the extension of region)
* Data centers (online and serving customers)
* Point of presents (**Edge Location** [popular content can be served quickly to customers] & **Regional edge cache** [bring the content closer to customer])