**Snowflake Pricing:**

Snowflake uses a **pay-as-you-go pricing model** based on **three main components**:

**1. Storage Costs**

* You pay for the amount of data stored in Snowflake (structured + semi-structured).
* Data is stored in compressed, columnar format.
* Pricing: Usually around **$23–40 per TB per month** (varies by cloud provider & region).**2. Compute Costs (Virtual Warehouses)**
* Compute is billed per **credit**.
* Each **Virtual Warehouse size** consumes credits per hour:
  + X-Small = 1 credit/hour
  + Small = 2 credits/hour
  + Medium = 4 credits/hour
  + Large = 8 credits/hour … (doubles each time)
* Credits are charged **per second**, with a 60-second minimum.
* Example: If a Medium WH runs for 15 minutes, it consumes 1 credit (¼ of 4).

**3. Cloud Services Costs**

* Covers query parsing, optimization, metadata management, security, etc.
* Typically **<10% of compute usage**.
* Not charged separately in most cases — bundled with compute.

**🔹 Other Pricing Factors**

* **Data Transfer**: Cross-region or cross-cloud data sharing costs extra.
* **Features like Time Travel & Fail-safe**: Longer retention increases storage cost.
* **Edition-based Pricing**: Standard, Enterprise, Business Critical — higher editions allow longer Time Travel, security features, etc.

Snowflake pricing is consumption-based and mainly depends on storage (how much data you keep), compute (credits used by virtual warehouses), and cloud services. Compute is usually the biggest cost driver since warehouses run queries and ETL pipelines. In my projects, I optimized costs by using auto-suspend and auto-resume, separating warehouses for reporting vs ingestion, and resizing warehouses only during peak workloads.”

Storage is 2 types on- demand (pay for usage month to month) and capacity( pay for usage upfront) and the best practice is starts with on demand and later switch ti capacity, once more clarity on storage usage estimates.