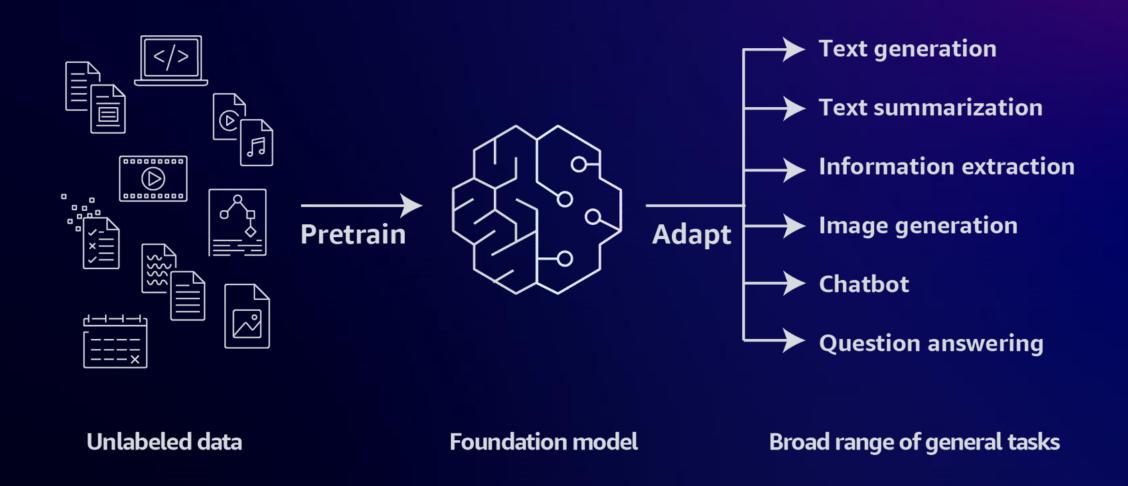
# Foundation models and large language models

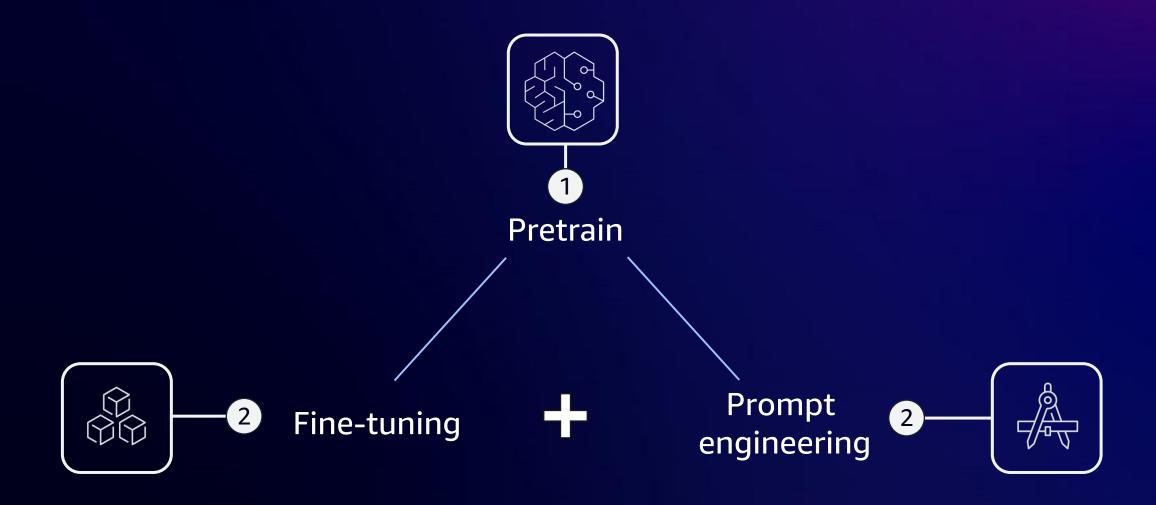


#### How does a foundation model function?



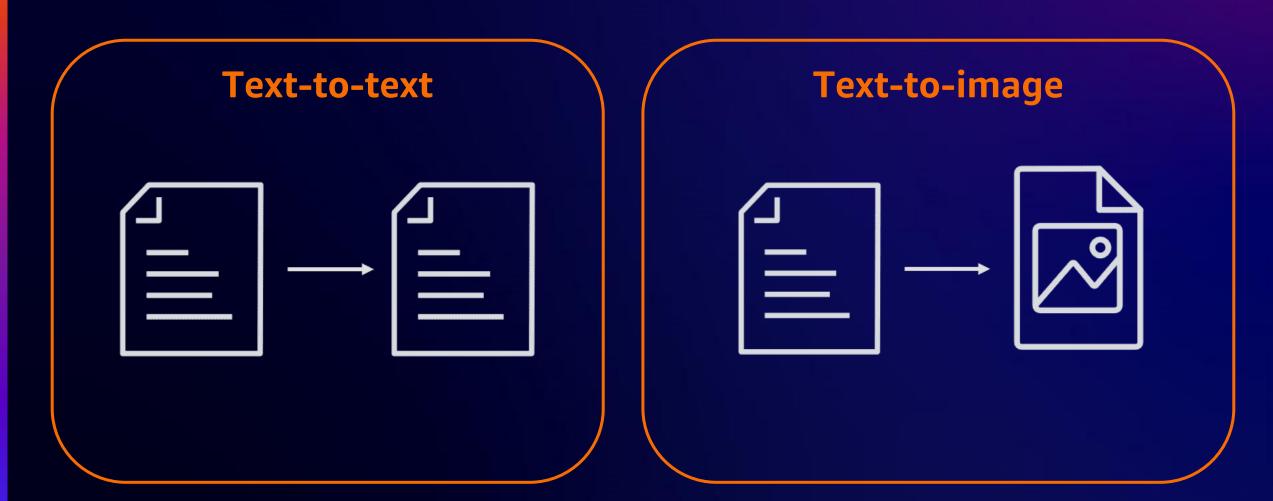


# **Training FMs**



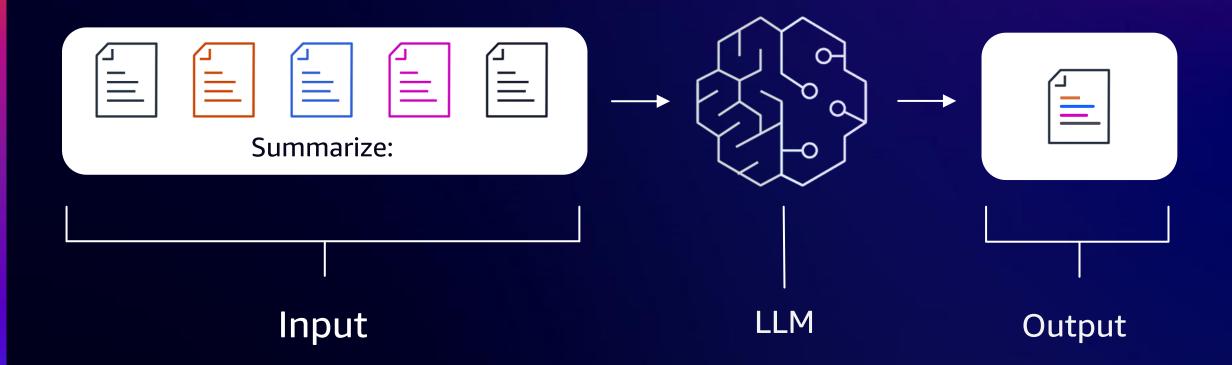


# Types of FMs





## Large language models



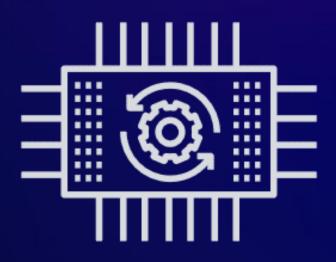


#### Transformer architecture

- 1. Encoder converts input into embeddings
- 2. Decoder consumes embeddings and emits output text

#### Key features:

- Parallelizable
- Takes less time to train

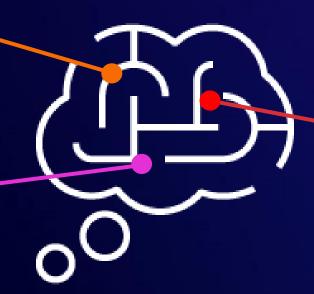




### **Neural networks**

Embedding

**Feedforward** 



Attention mechanism



#### LLM use cases



#### Improves customer experience

- Chatbots
- Call analytics
- Agent assist



## Boosts employee productivity

- Conversational assist
- Code generation
- Automated report generation



#### **Enhances creativity** and content creation

- Marketing
- Sales
- Product development
- Media and entertainment
- News generation



### Accelerates process optimization

- Document processing
- Fraud detection
- Supply-chain optimization

