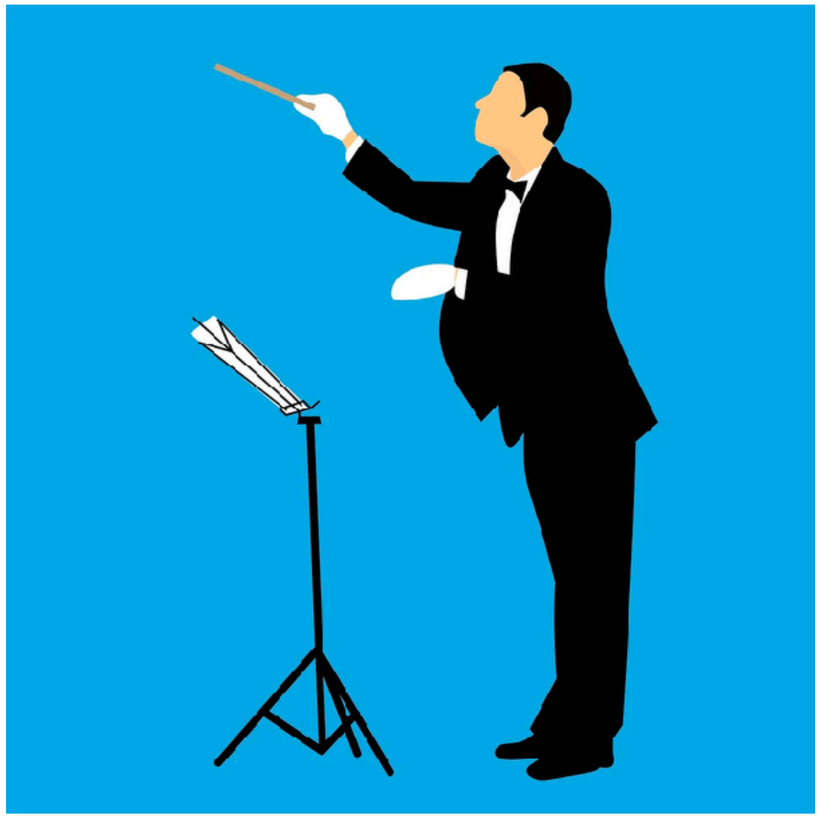
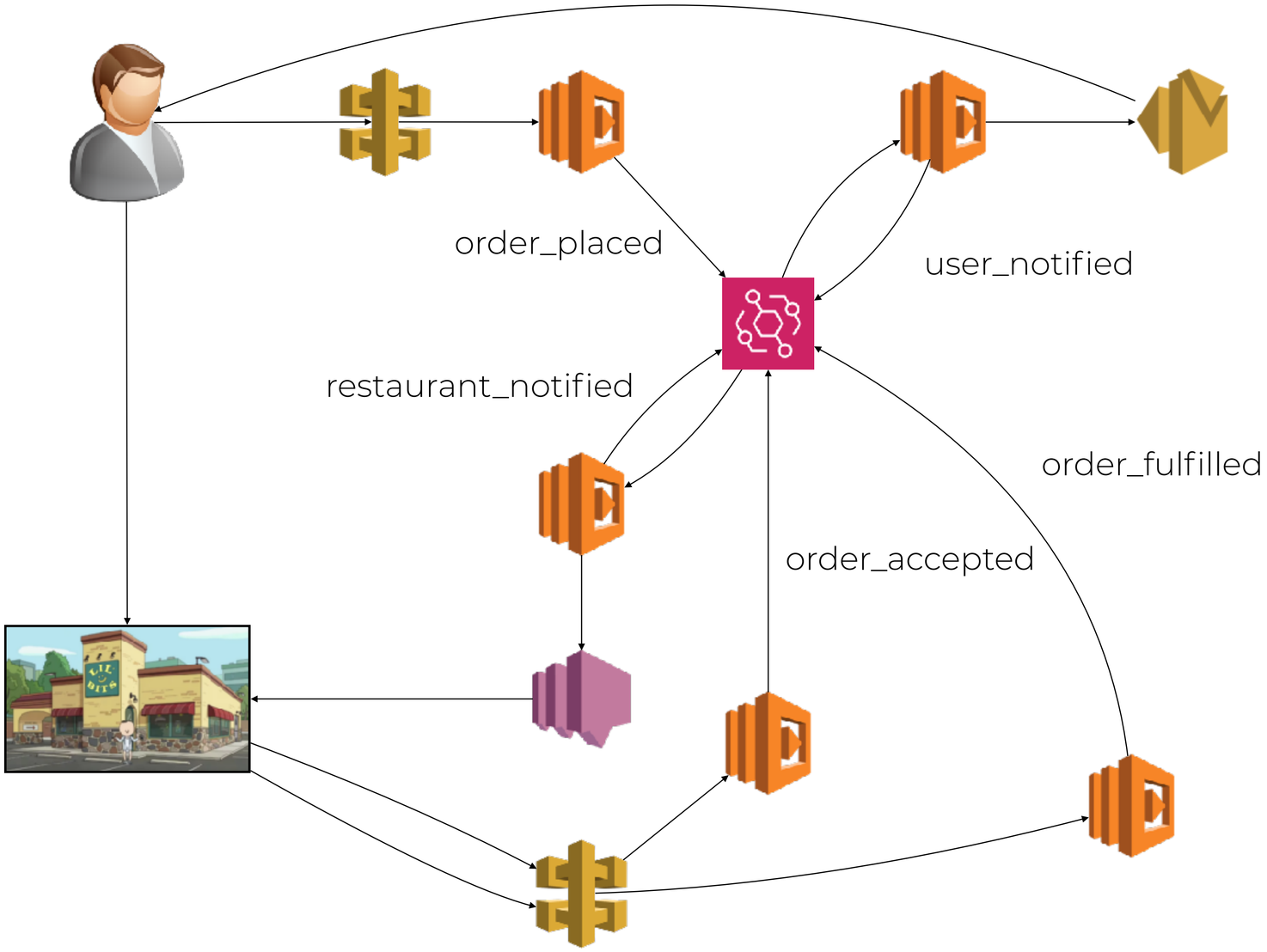
Orchestration



Choreography


order_placed
user_notified
restaurant_notified
order_fulfilled
order_accepted

Pros

resilience: processes are loosely-coupled

scalability: can scale processes independently

simplicity: each process only needs to know its input and output

Cons

Pros

resilience: processes are loosely-coupled

scalability: can scale processes independently

simplicity: each process only needs to know its input and output

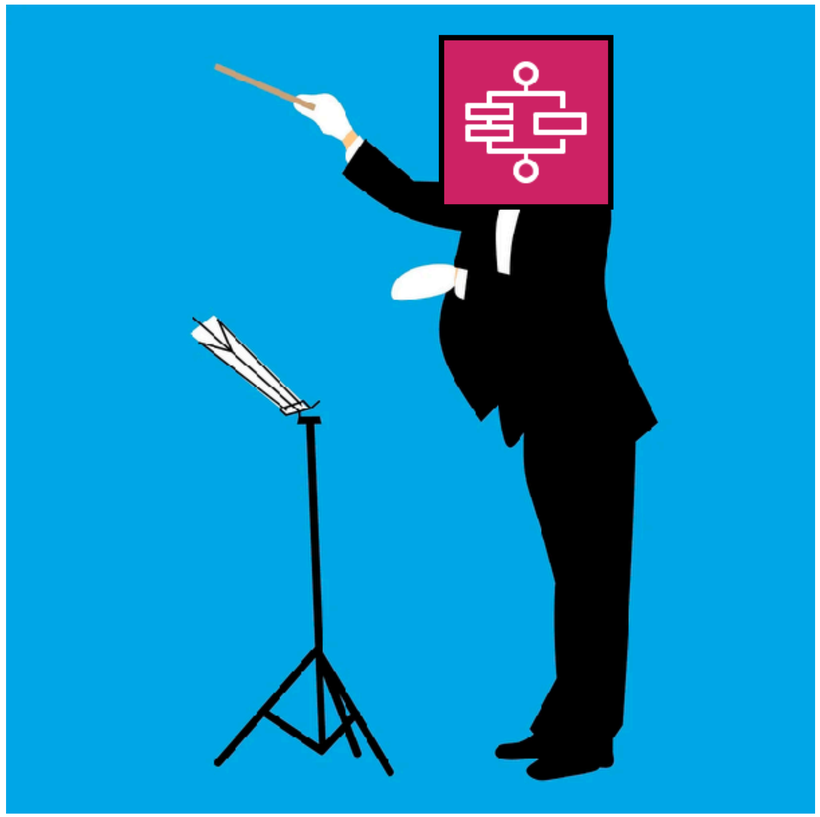
Cons

observability: end-to-end monitoring and reporting is hard

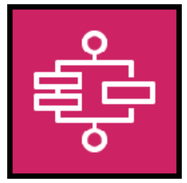
resilience: error handling, timeouts, etc. are hard to implement

ownership: are these really separate processes, or steps within ONE workflow?

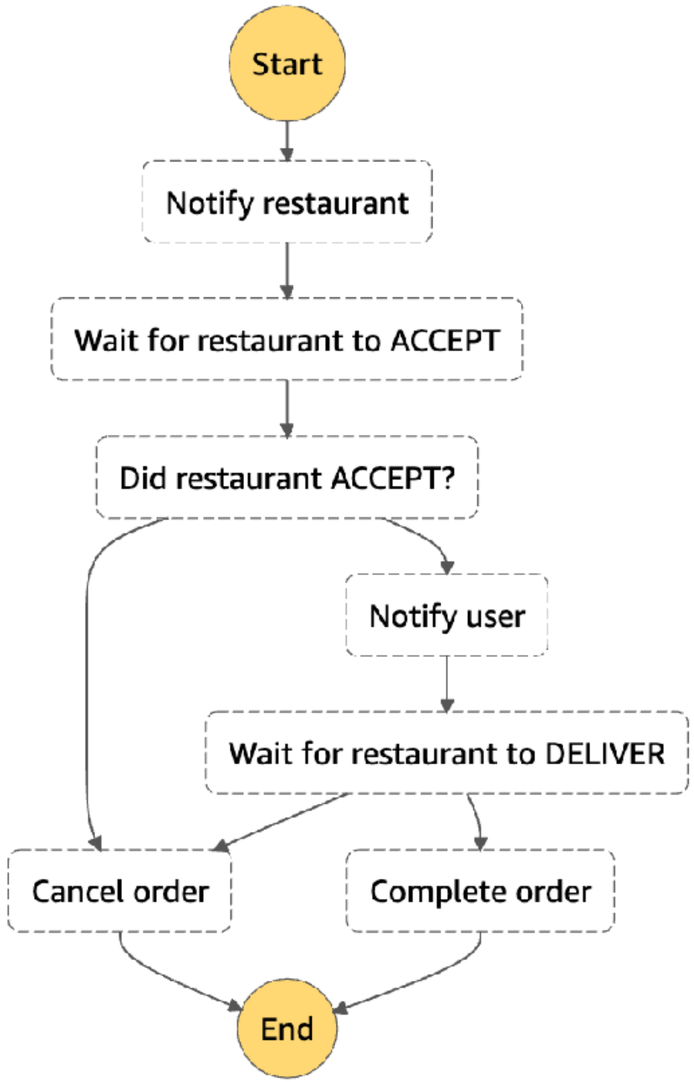
Orchestration



Choreography



Step Functions



Pros

observability: end-to-end monitoring and reporting is easy and provided

resilience: error handling, timeouts, etc. are easy to implement

ownership: workflow is a standalone entity in the system

Cons

Pros

observability: end-to-end monitoring and reporting is easy and provided

resilience: error handling, timeouts, etc. are easy to implement

ownership: workflow is a standalone entity in the system

Cons

complexity: have to learn yet another AWS service

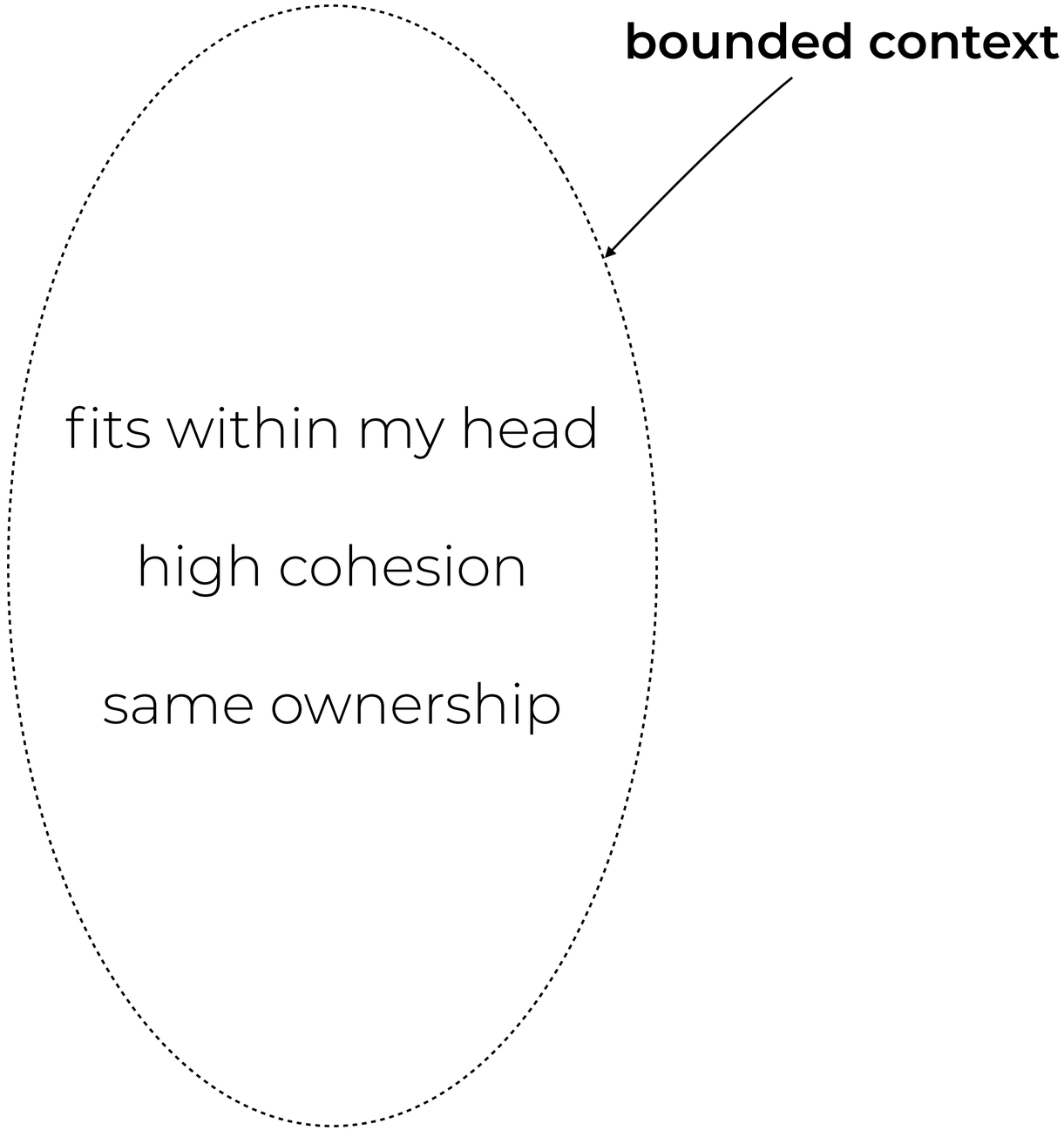
cost: Step Function is kinda expensive (but justified in this case)

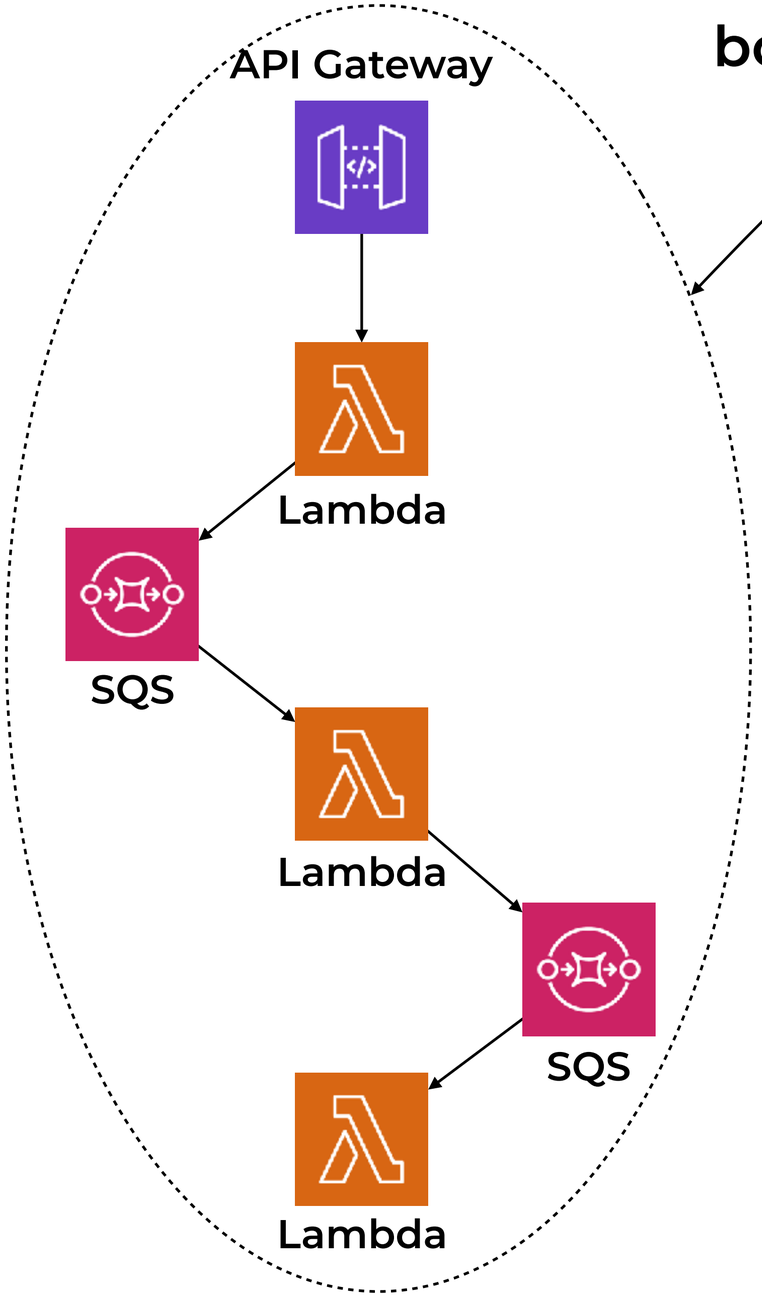
scalability: Standard Workflows has regional limits on transitions/s [soft limit]

Rule of Thumb

orchestration within a bounded-context

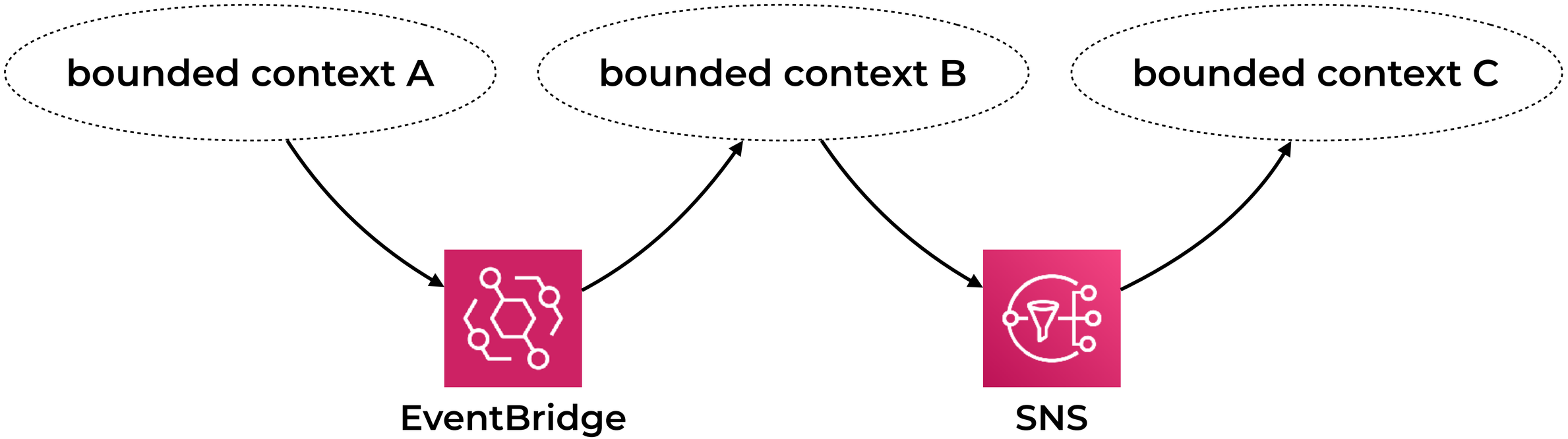
choreography between bounded-contexts


bounded context
fits within my head
high cohesion
same ownership



bounded context

the workflow doesn't exist as a standalone concept, but as the sum of a series of loosely connected parts


bounded context A
bounded context B
bounded context C
EventBridge
SNS

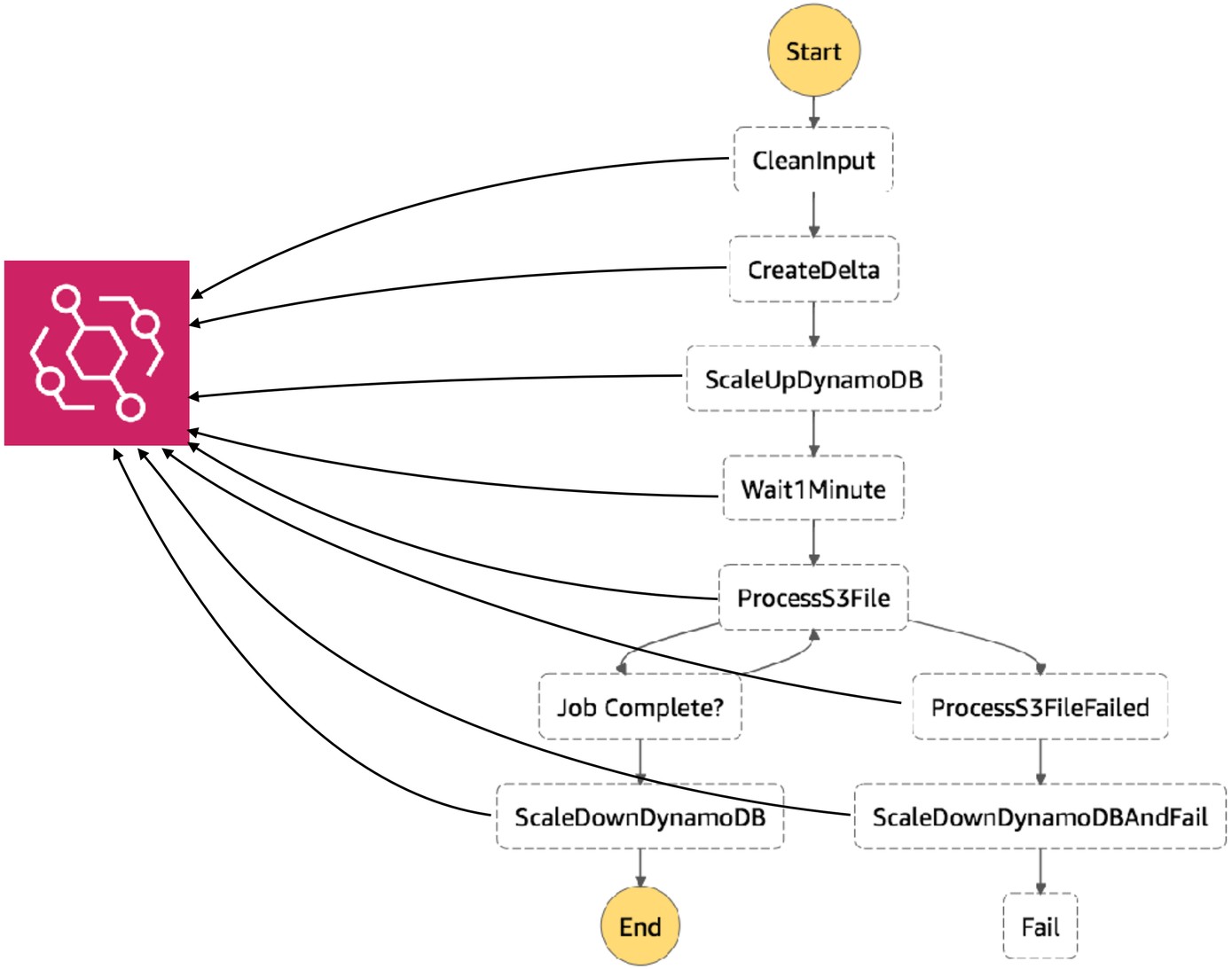
5 REASONS WHY YOU SHOULD USE EVENTBRIDGE INSTEAD OF SNS

SNS and SQS have been the goto options for AWS developers when it comes to service integration. However, since its (much needed!) rebranding, EventBridge (formerly CloudWatch Events) has become a popular alternative.

If you're still on the fence, then allow me to give you **5 reasons why you should consider using EventBridge instead of SNS**.

https://lumigo.io/blog/5-reasons-why-you-should-use-eventbridge-instead-of-sns

don't forget to emit events from the workflow



Rule of Thumb

orchestration within a bounded-context

choreography between bounded-contexts