
Slack Enterprise Key Management

Senior to Staff Lessons

Audrei Drummond (they / them)
@awedrei



Disclaimer!!



Okay, so what is
**Slack Enterprise Key
Management?**





Enterprise Key Management (EKM)

Essentially Bring Your Own Key to Slack

More security conscious customers could control access to their sensitive data

Example Policy

```
{
  "Effect": "Allow",
  "Principal": {"AWS": "arn:aws:iam::123456789098:root"},
  "Action": ["kms:Decrypt", "kms:GenerateDataKey"],
  "Resource": "*",
  "Condition": {
    "StringEquals": {
      "kms:EncryptionContext:O": "ED14RK2GJ"
    }
  }
}
```

Example Policy

```
{  
  "Effect": "Allow",  
  "Principal": {"AWS": "arn:aws:iam::123456789098:root"},  
  "Action": ["kms:Decrypt", "kms:GenerateDataKey"],  
  "Resource": "*",  
  "Condition": {  
    "StringEquals": {  
      "kms:EncryptionContext:0": "ED14RK2GJ"  
    }  
  }  
}
```

Example Policy - File

```
{  
  "Effect": "Deny",  
  "Principal": {"AWS": "arn:aws:iam::123456789098:root"},  
  "Action": ["kms:Decrypt", "kms:GenerateDataKey"],  
  "Resource": "*",  
  "Condition": {  
    "StringEquals": {  
      "kms:EncryptionContext:O": "ED14RK2GJ"  
      "kms:EncryptionContext:C": "C7WEH8120"  
    }  
  }  
}
```

Acme Sales ▼ 🔔

👤 Tina Chen

🔍 1 ☰ All Unreads

🗨️ Threads

🔍 2 **Starred**

- 🏠 # acme-fun 🔒
- 🟢 # sales-team 🔒
- 🏠 # sales-random 🔒

+ **Channels** +

- 🏠 # acme-culture 🔒
- 🏠 # competitive-intel 🔒
- 🏠 # customer-feedback 🔒
- 🏠 # marketing-metrics 🔒

Organization Channels

- 🏠 # announcements 🔒
- 🏠 # help-benefits 🔒
- 🏠 # help-it 🔒

Direct Messages +

- 🟢 slackbot
- 🟢 Tina Chen (you)
- 🟢 Sara Culver
- 👤 Zack Sultan, Matt Kump

Apps +

- 🟢 Google Drive

#sales-team

★ | 👤 90 | 🗨️ 1 | 📄 The art of the deal.



This message can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This message can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This file can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This message can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This message can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This message can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This file can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This message can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This file can't be shown

Your admins have suspended everyone's access to this content. [Learn more](#)



This message can't be shown

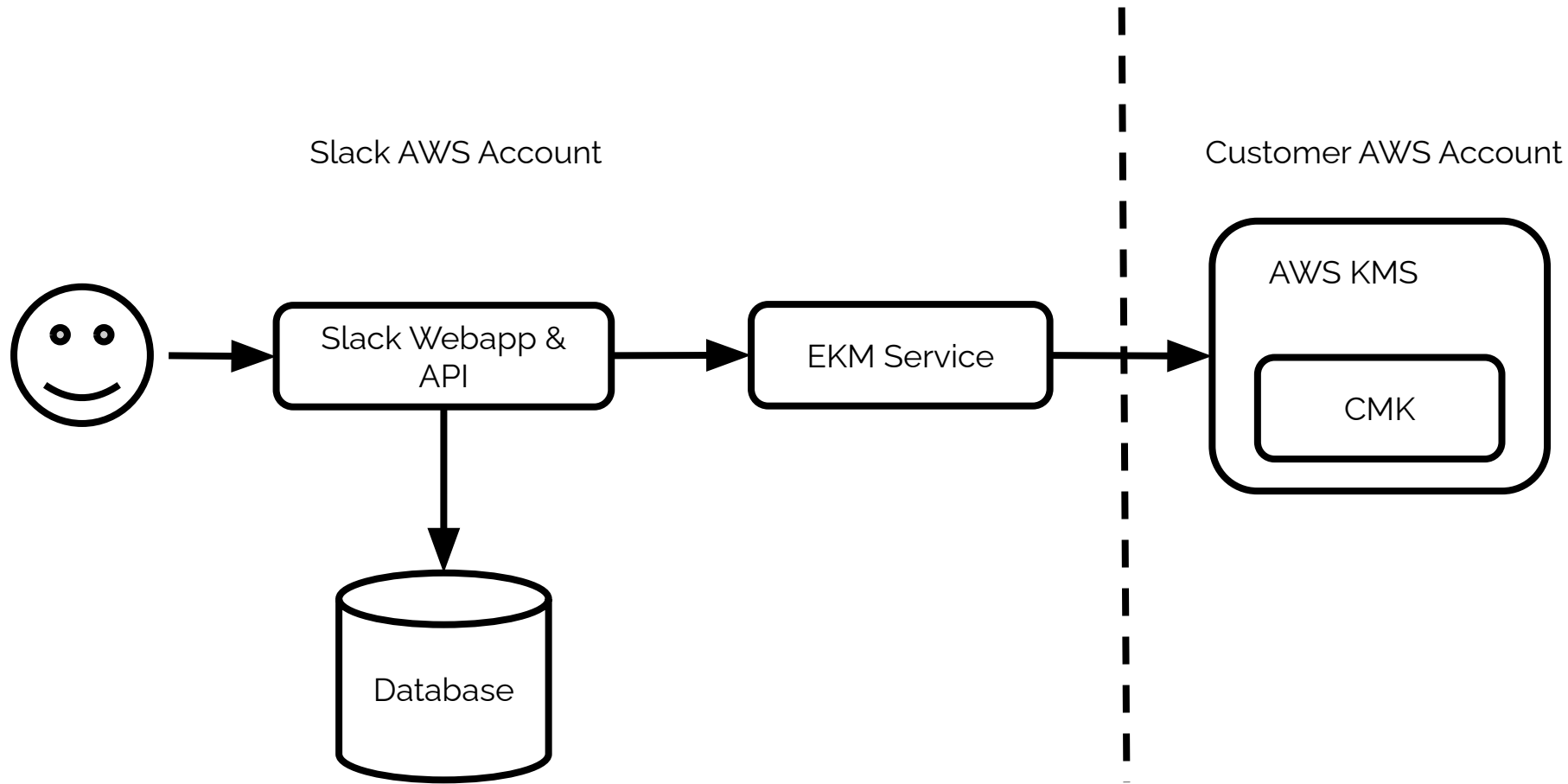
Your admins have suspended everyone's access to this content. [Learn more](#)

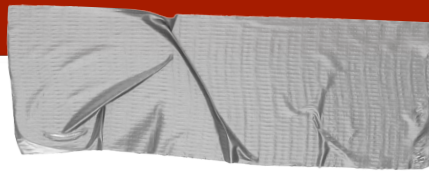




CHICAGO
1111

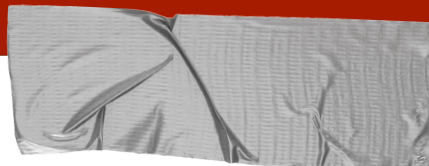
Open
Mon
Tue-Thur
Fri-Sat
Sunday





1. Prototyping is your friend

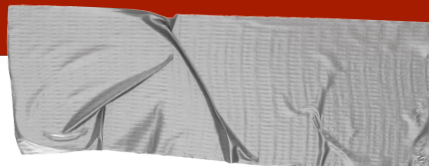
Especially when you're changing how the product of your company fundamentally works



1. Prototyping is your friend

Especially when you're changing how the product of your company fundamentally works

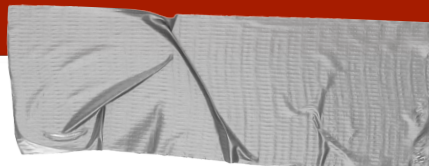
→ Start to explore the corners of the problem



1. Prototyping is your friend

Especially when you're changing how the product of your company fundamentally works

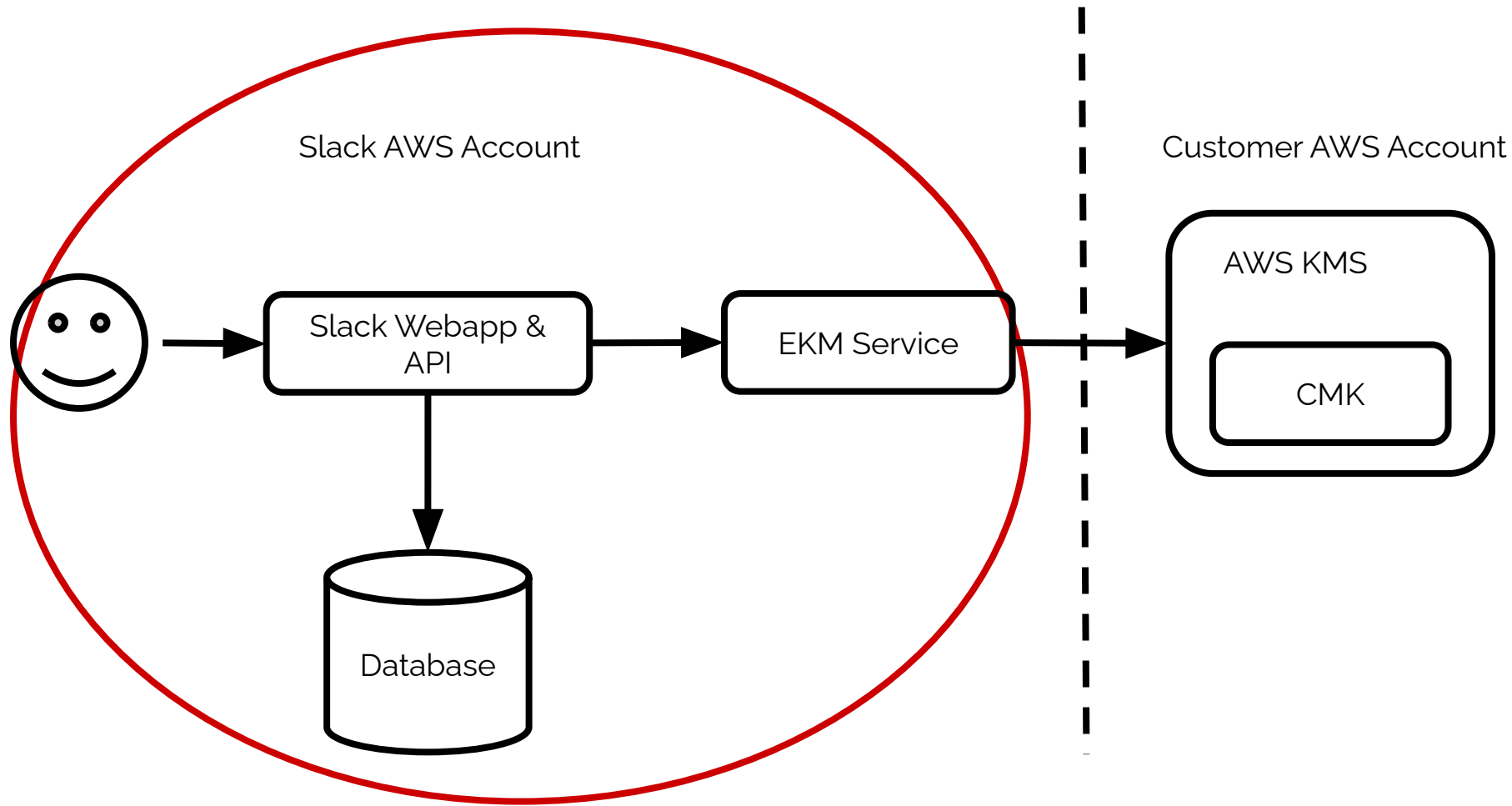
- Start to explore the corners of the problem
- **Reduce unknown unknowns**



1. Prototyping is your friend

Especially when you're changing how the product of your company fundamentally works

- Start to explore the corners of the problem
- Reduce unknown unknowns
- **Improve estimations**



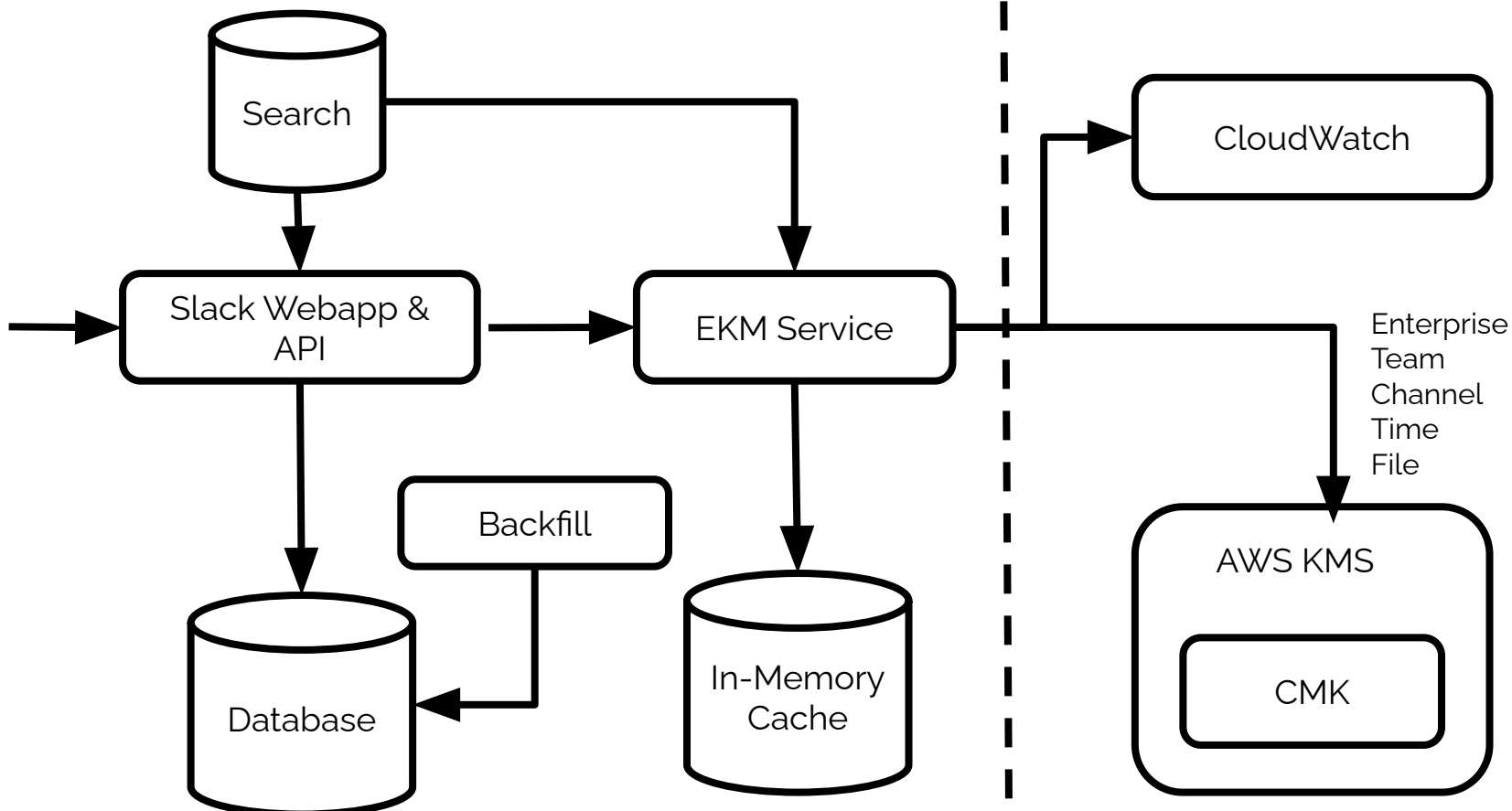
Clients

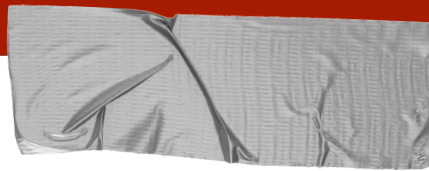
Slack AWS Account

Customer AWS Account



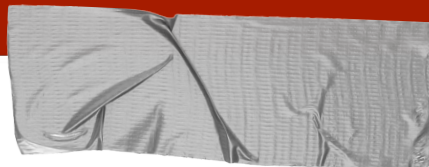
Electron
iOS
Android





2. Share your legos

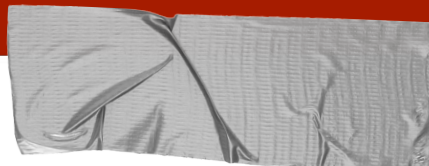
Being selfish in the beginning can be good,
but to deliver, you'll need help



2. Share your legos

Being selfish in the beginning can be good, but to deliver, you'll need help

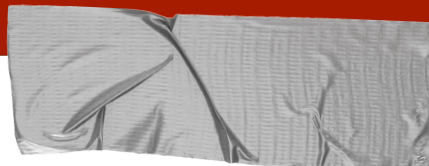
→ **Help grow other engineers**



2. Share your legos

Being selfish in the beginning can be good, but to deliver, you'll need help

- Help grow other engineers
- **Improve project management skills**



2. Share your legos

Being selfish in the beginning can be good, but to deliver, you'll need help

- Help grow other engineers
- Improve project management skills
- **Focus on the tasks that need to be done by you**

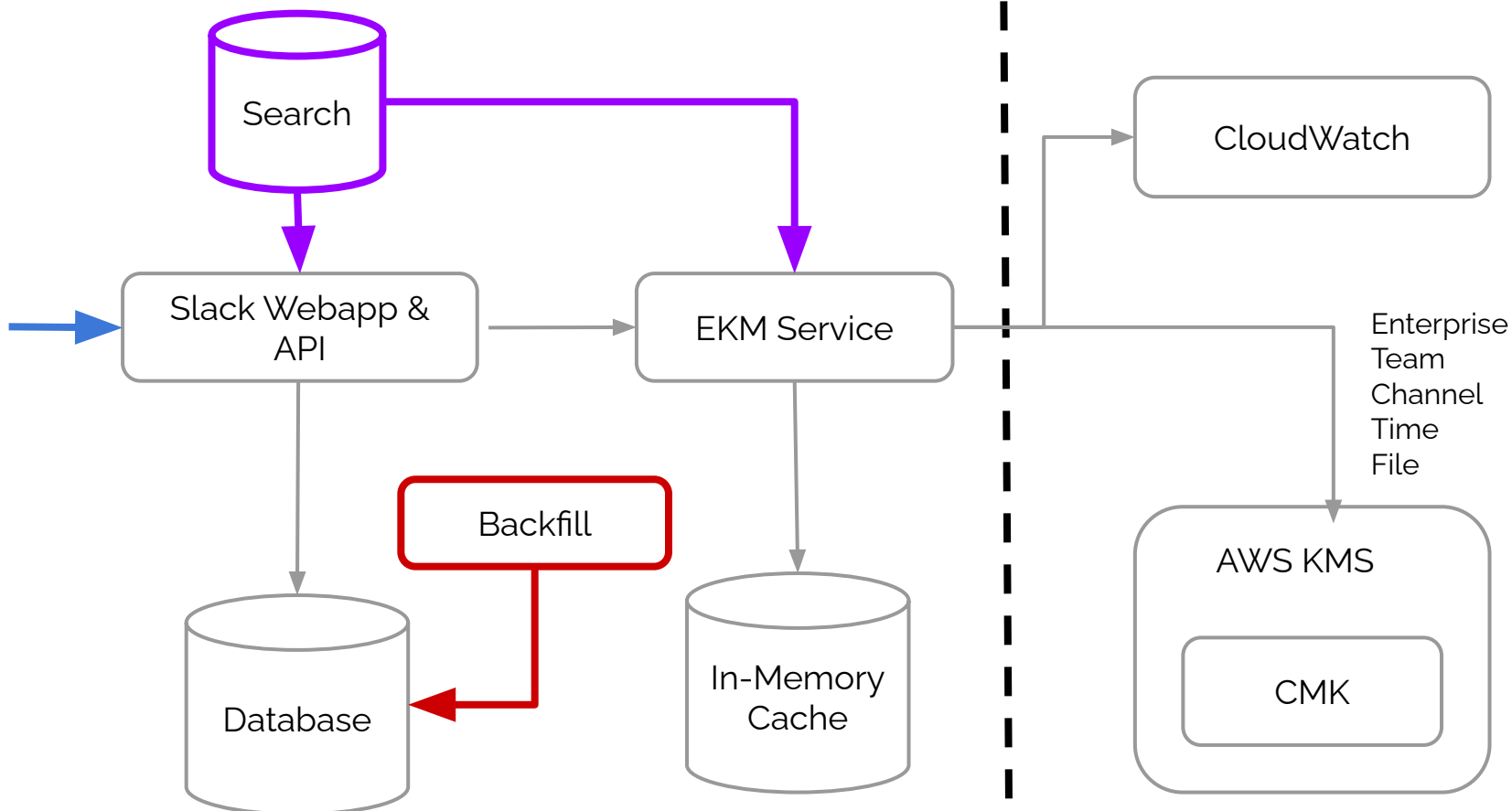
Clients

Slack AWS Account

Customer AWS Account



Electron
iOS
Android





3. Automate repeated tasks

Automate as much as you can. Computers are your friend :)



3. Automate repeated tasks

Automate as much as you can. Computers are your friend :)

→ **Backstop process failures**



3. Automate repeated tasks

Automate as much as you can. Computers are your friend :)

- Backstop process failures
- **Ease of use helps with adoption**



3. Automate repeated tasks

Automate as much as you can. Computers are your friend :)

- Backstop process failures
- Ease of use helps with adoption
- **Help ensure correctness**

What if the concrete implementations were generated?

```
////////////////////////////////////  
//  
// Serious psuedocode below  
//  
////////////////////////////////////  
  
type ContentManager interface {  
    · defineScope() EKMScope  
    · encryptRow() error  
    · decryptRow() error  
}
```



4. Don't over engineer

Just because you can build it, doesn't mean you should



4. Don't over engineer

Just because you can build it, doesn't mean you should

→ **Might miss customer use cases**



4. Don't over engineer

Just because you can build it, doesn't mean you should

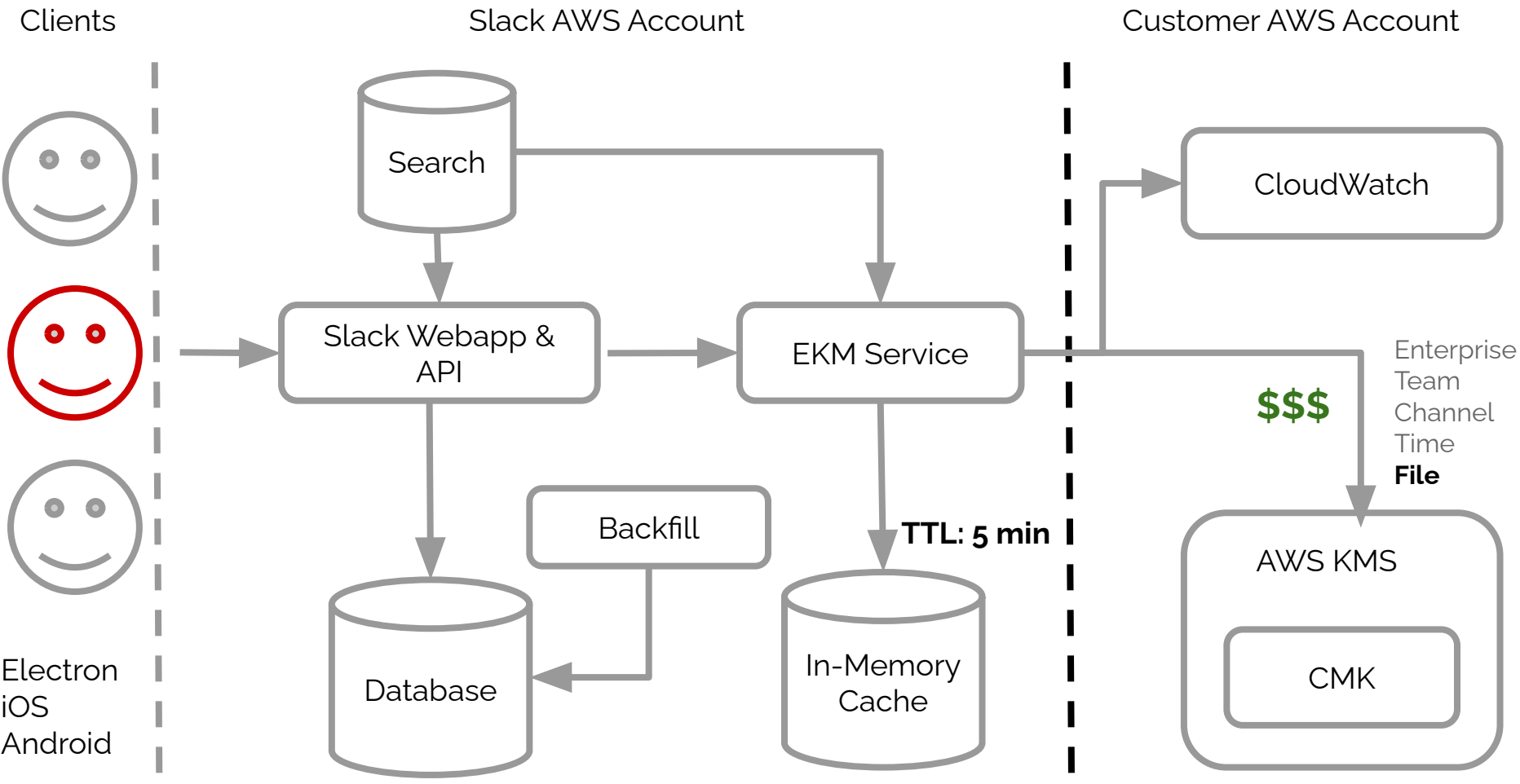
- Might miss customer use cases
- **Impact your architecture**

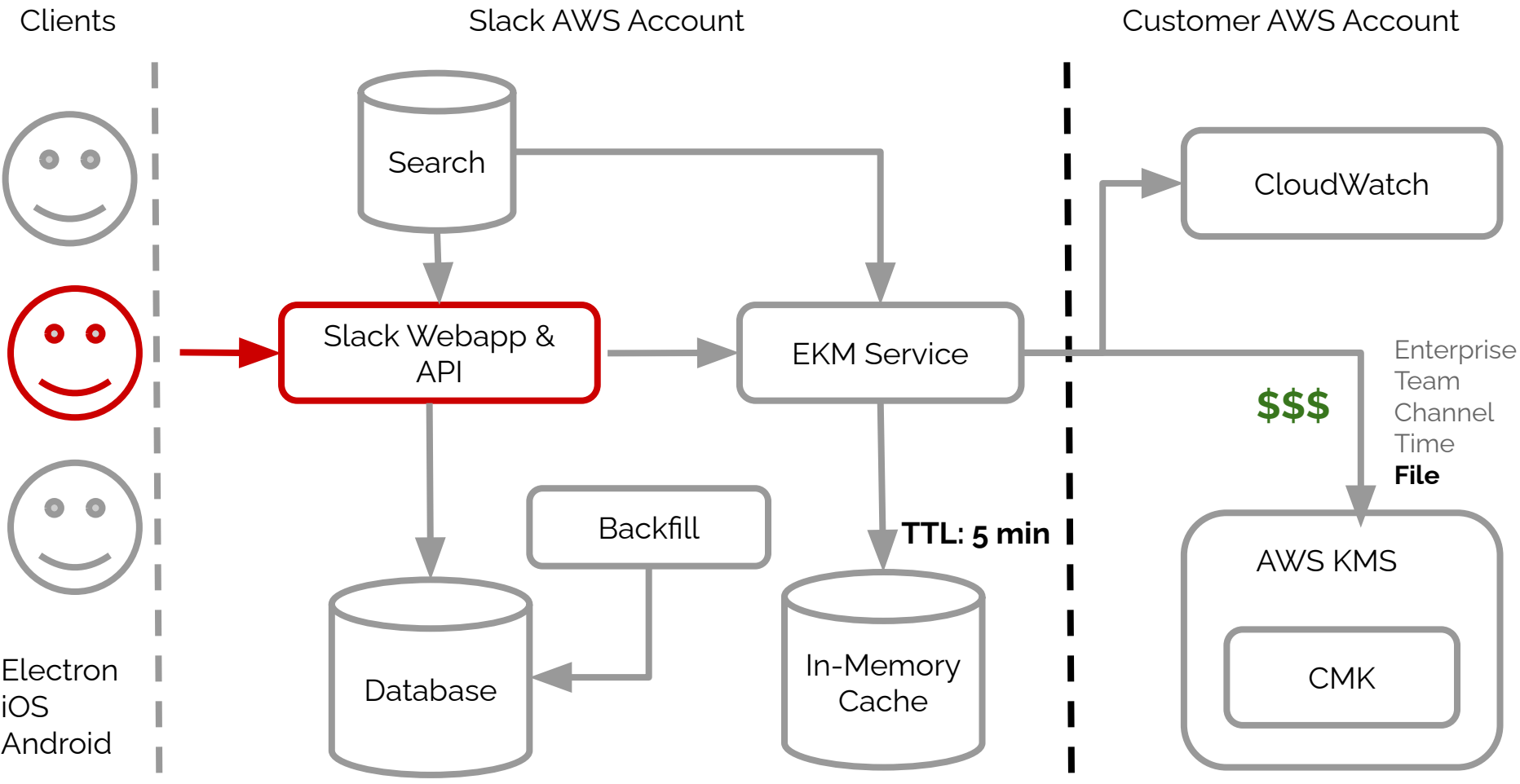


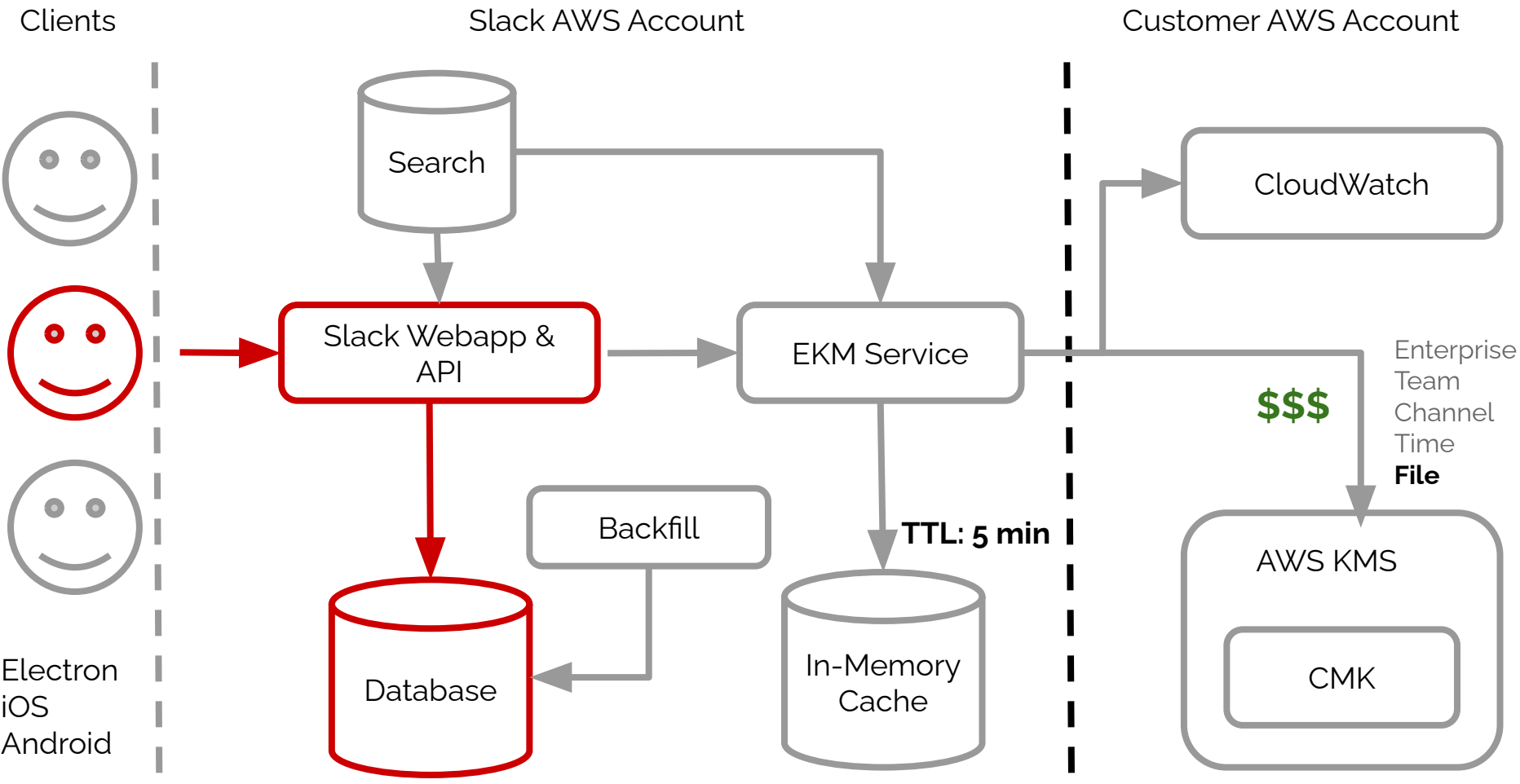
4. Don't over engineer

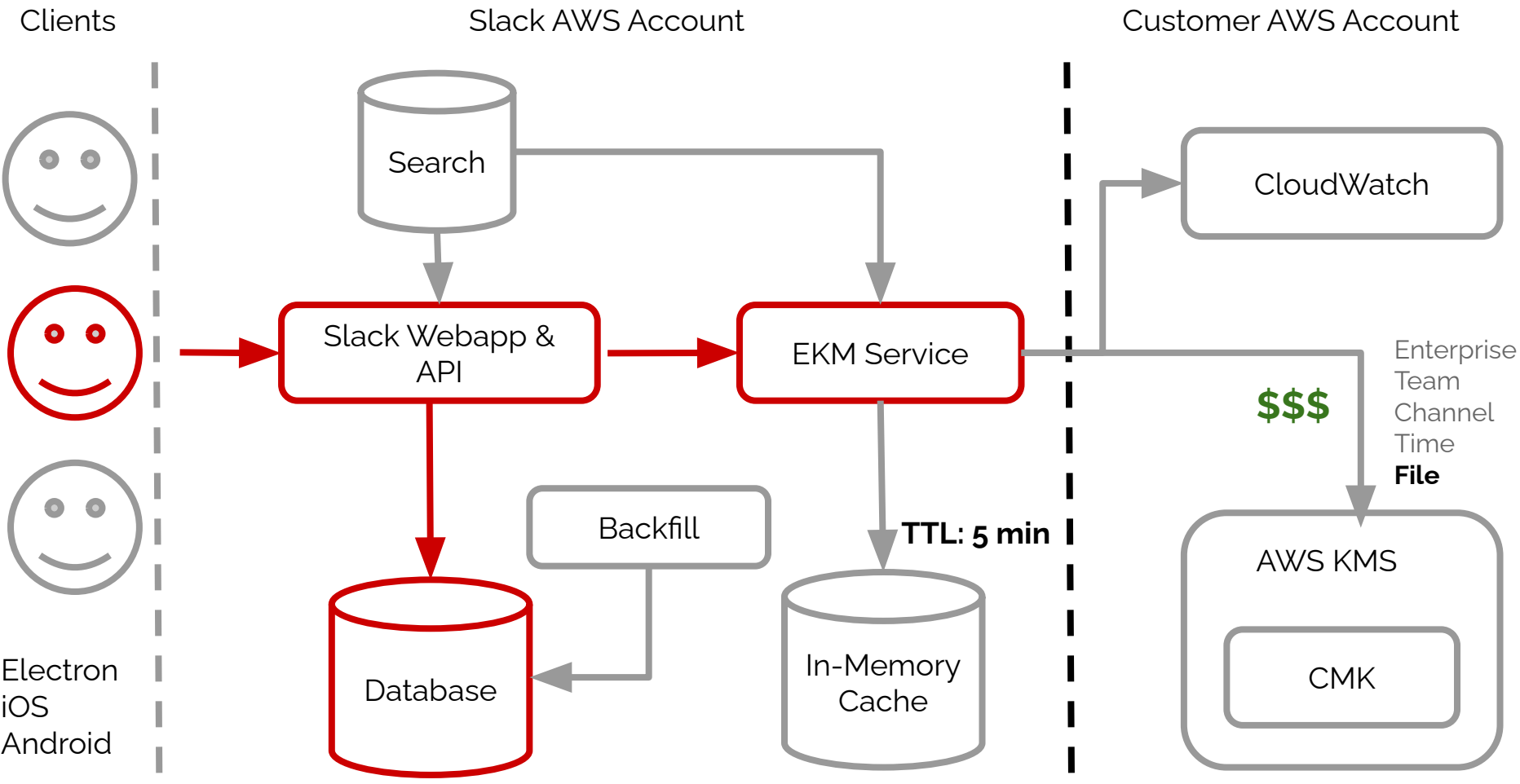
Just because you can build it, doesn't mean you should

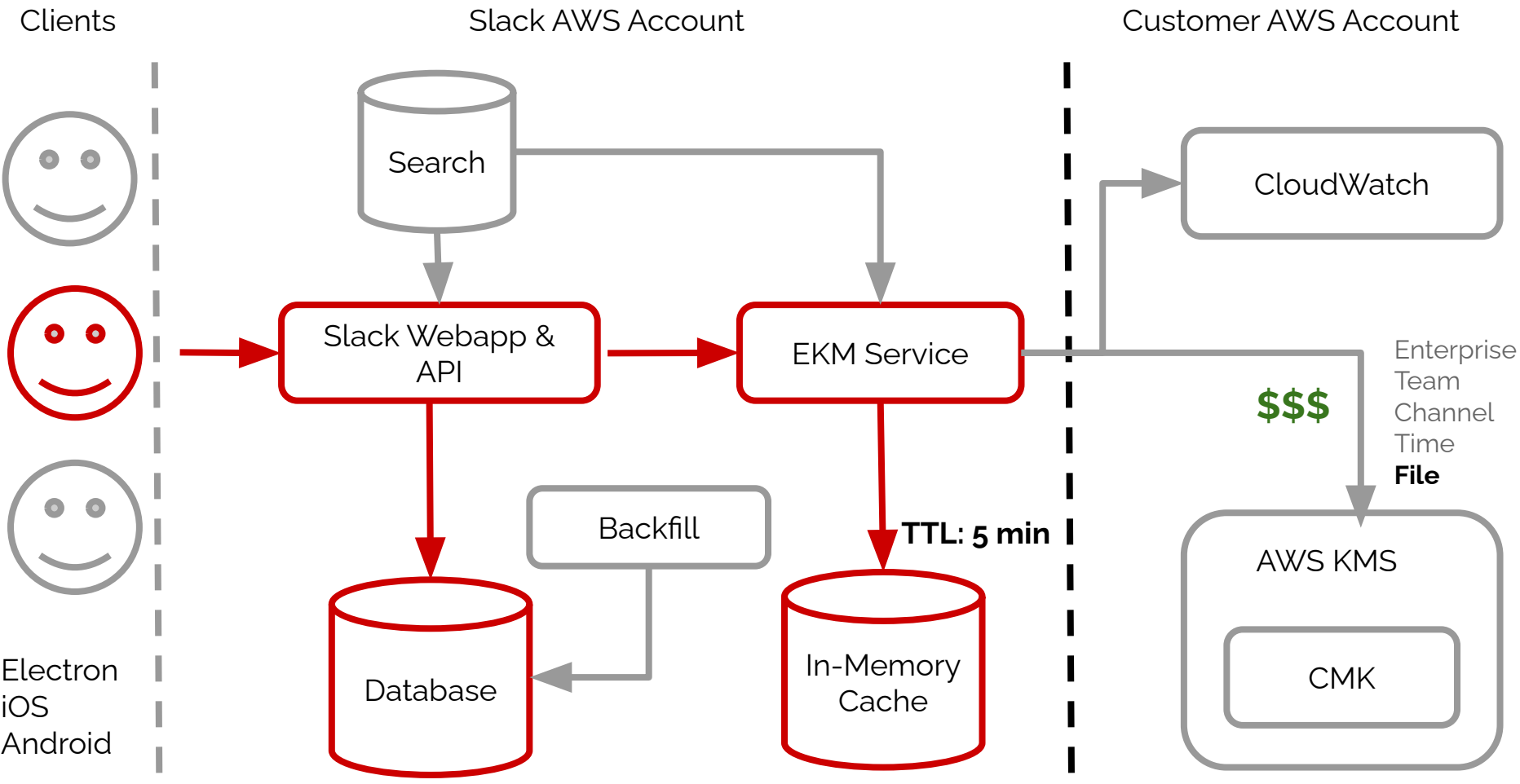
- Might miss customer use cases
- Impact your architecture
- Increased costs

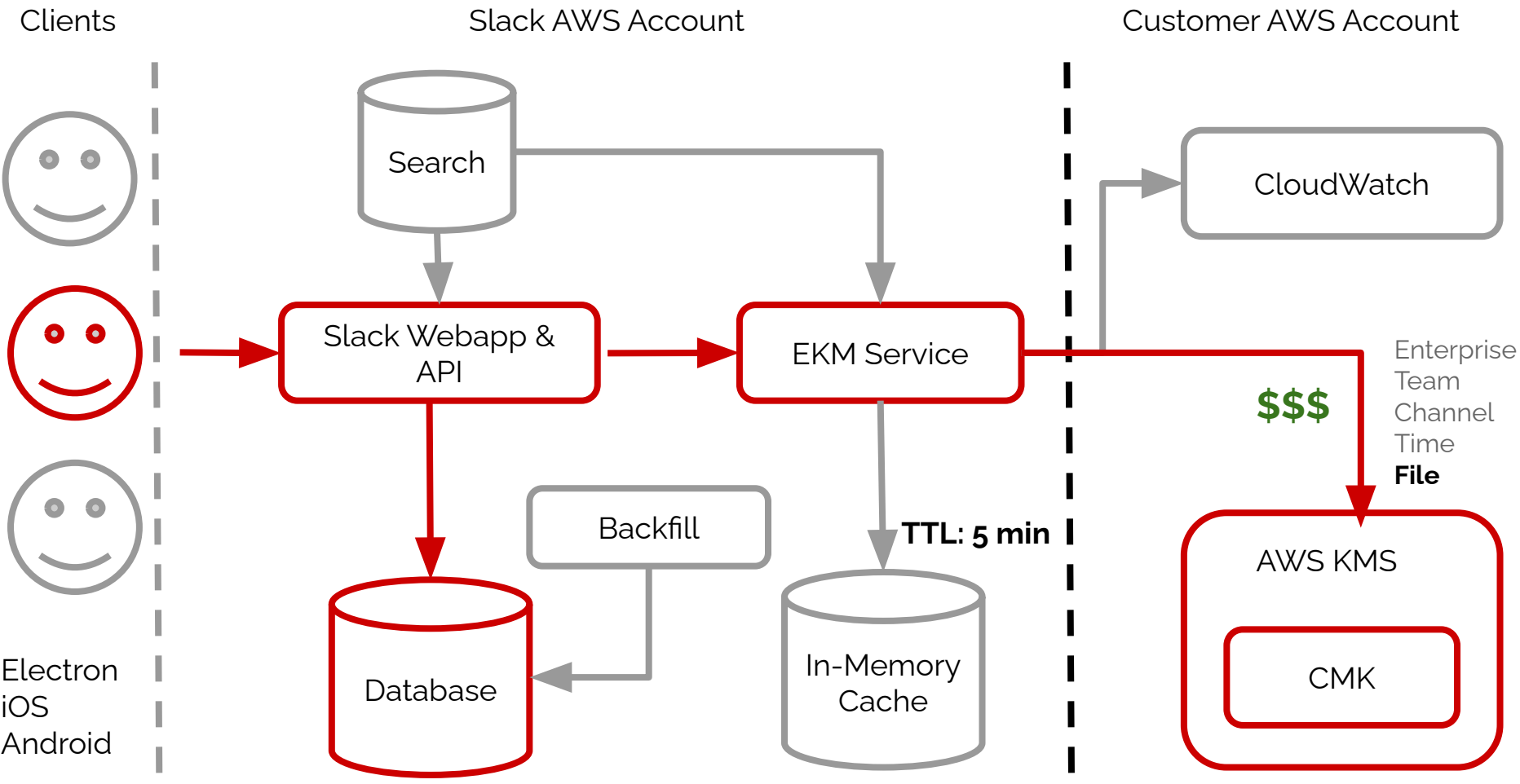














5. Know your audience

Your audience will vary and so will their interest



5. Know your audience

Your audience interests will vary and so will their interest

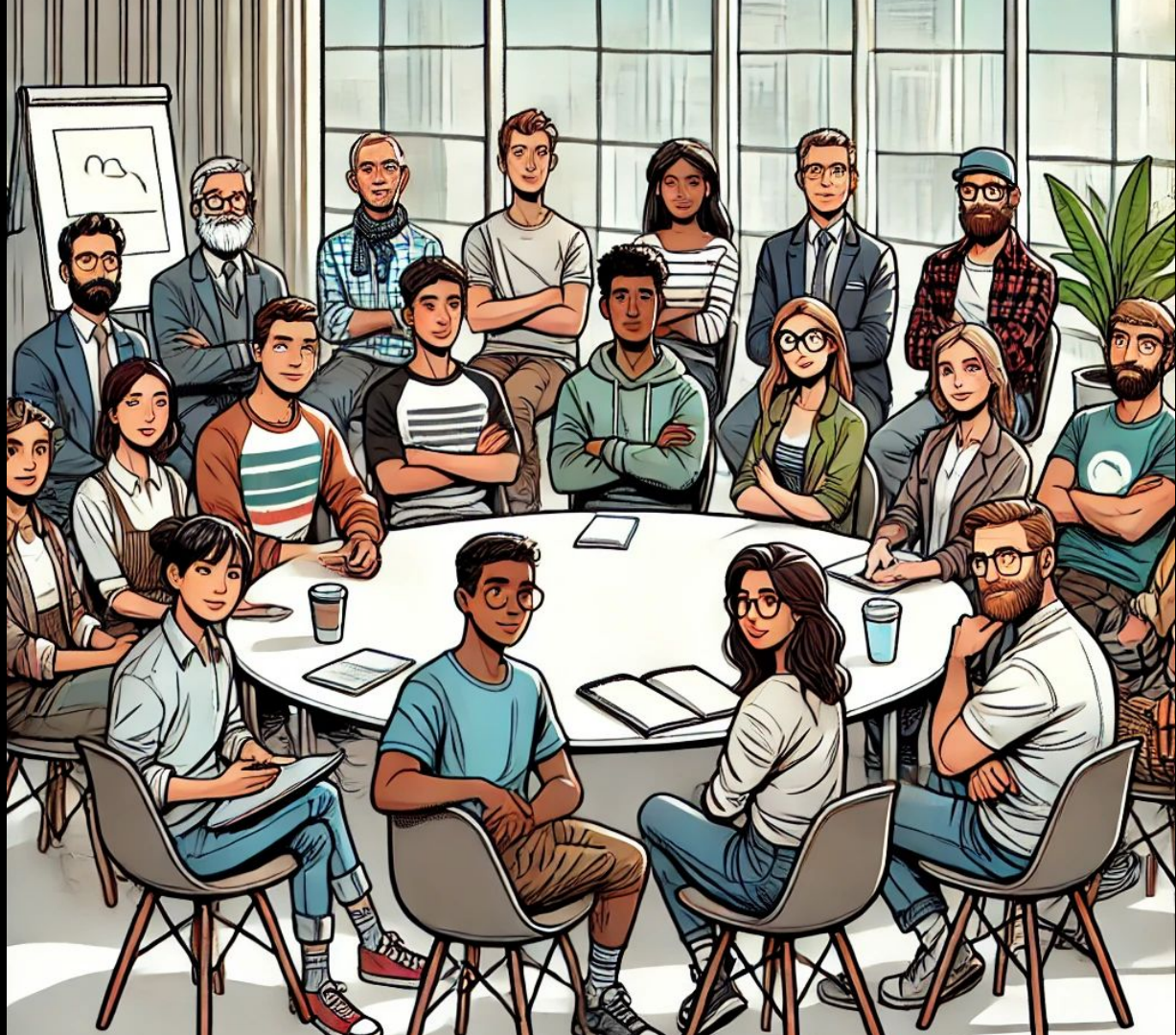
→ **Understand who is in the room**

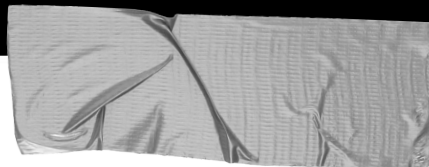


5. Know your audience

Your audience interests will vary and so will their interest

- Understand who is in the room
- **Share the right information based on the audience**





Slack EKM: Senior to Staff Lessons

- **Prototyping is your friend**
- **Share your legos**
- **Automate repeated tasks**
- **Don't over engineer**
- **Know your audience**