## aws summit

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ETECH005

## Feature or function? Using feature flags in AWS Lambda

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# About the speaker

Adrian Lee Enterprise Solutions Engineer



### About LaunchDarkly

2014

Year founded

4000+

Customers

600+

**Employees** 

>20%

of Fortune 100









#### **MCR** GoPro ıntuıt Pearson Square SoFi **₩ A** ATLASSIAN SAP QVC TRUECar. **\***nab **UKG** SENTARA° pitney bowes vodafone bnz\*\*\* meetup IBM STASH **♦** Santander° \* PRET \* **□toast** (H) HashiCorp databricks NORTHERN TRUST **ULTA** Advance | --xero color itv **samsara** MERCARI LogMelin ((I) JLL RE/MAX MGM RESORTS **\*athena**health **RYANAIR TOYOTA** in vision C.H. ROBINSON

### What is a Feature Flag?

#### **Decision Point**

**IF Statement** 

 A <u>decision point</u> in code whose behavior can vary during runtime based on <u>external input</u>.



#### **Feature Flags**

#### **Decision Point**

#### **IF Statement**



```
"key": "bob@example.com",
        "custom": {
                 "groups": ["aws"],
                 "inBeta": true
then
        /*show the one-click checkout feature */
```

#### **Feature Flags**

#### **Decision Point**

#### **IF Statement**



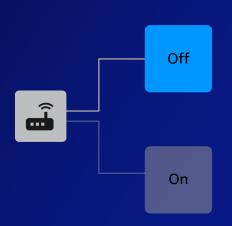
```
else
        /* show the old feature */
```

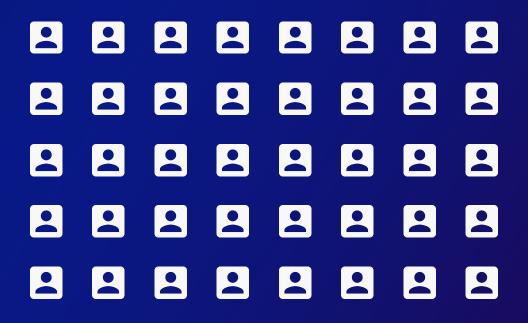
## Deploy when you want

## Release when you're ready



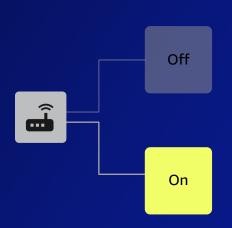
## ToggleBank w/o feature flags







## ToggleBank w/o feature flags







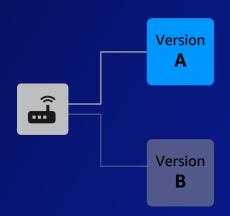


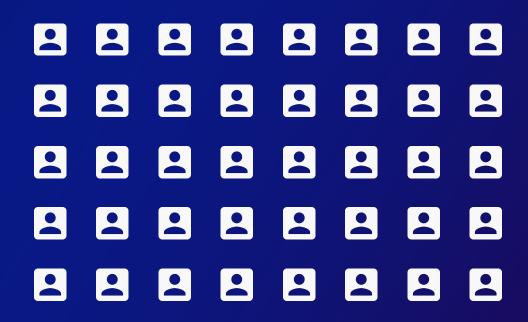






### **ROLLBACK NOW!! :(**







### ToggleBank w/ feature flags:)

**New approvals functionality** 



#### **Early access customers**





## Releasing a new feature w/ feature flags

New approvals functionality





10% Premium customers

#### **Premium customers**





## Releasing a new feature w/ feature flags

**New approvals functionality** 





50% Premium customers

#### **Premium customers**





## Releasing a new feature

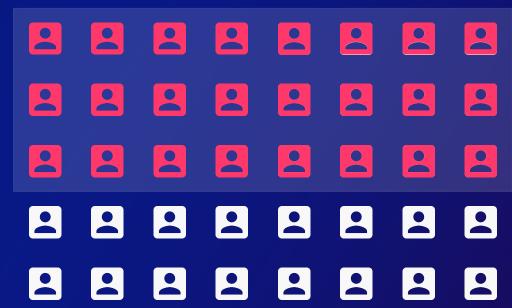
**New approvals functionality** 





100% Premium customers

#### **Premium customers**



### Managing stress during deployments



Source: State of Feature Management report



## But wait how does this help in modernizing applications?



# Challenges with application modernization

- X Business disruption
- Inability to control end-user experiences
- X Costly outages
- Unknown cost and performance impacts



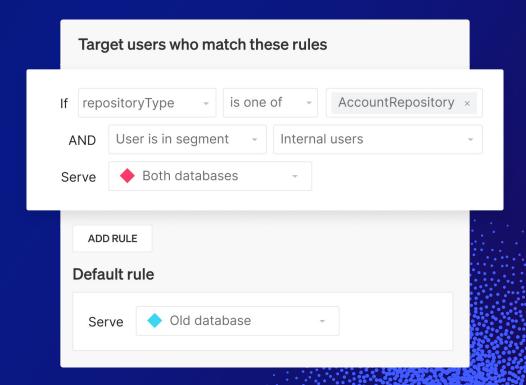
## How feature management helps

- ✓ Break initiatives into manageable milestones
- Migrate gradually, with precise control
- Reverse changes instantly
- Quickly validate new components



## LaunchDarkly for App Modernization

- Migrate to the cloud faster by rolling out and testing traffic incrementally
- Re-architect cloud applications more safely with lower costs and better performance
- Scale confidently with APIs that support you now and in the future





### **TRUE**Car

# Migrating 500 websites to AWS

- Migrated 500 websites to AWS with zero infrastructure-related downtime
- Employed LaunchDarkly + Lambda@Edge to manage complex routing
- Went from deploying 1x per week to 20x per day







## Thank you!



Please complete the session survey

**Adrian Lee** 

Enterprise Solutions Engineer LaunchDarkly

