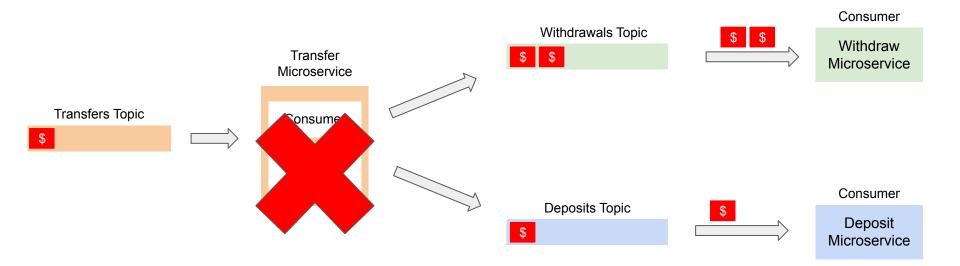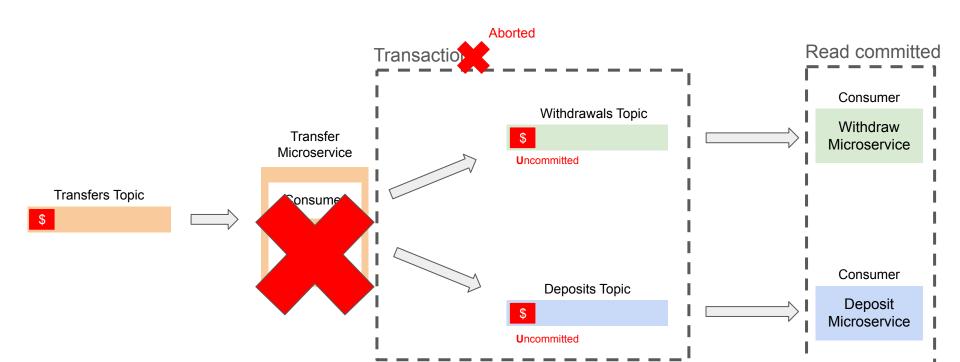# Kafka Transactions
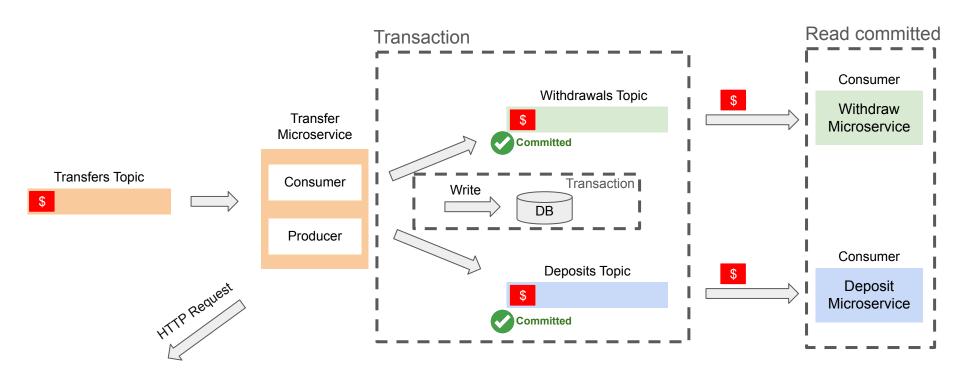
Introduction

Why use transactions in Apache Kafka?

- All or nothing
- Exactly once
  - Idempotent Producer,
  - Transactions

Transfers Topic

Transfer Microservice

Consumer

Withdrawals Topic

Consumer
Withdraw Microservice

Deposits Topic

Consumer
Deposit Microservice

Transfers Topic

Transfer Microservice

Consumer

Transaction

Aborted

Withdrawals Topic

$

Uncommitted

Deposits Topic

$

Uncommitted

Read committed

Consumer

Withdraw Microservice

Consumer

Deposit Microservice

Transfers Topic

Transfer Microservice

Consumer

Producer

HTTP Request

Remote Service

Transaction

Withdrawals Topic

✔ Committed

Write   Transaction

DB

Deposits Topic

✔ Committed

Read committed

Consumer

Withdraw Microservice

Consumer

Deposit Microservice