

# **Using Event Driven Architecture to Transform Core Banking**



## Acceleration of digitization:

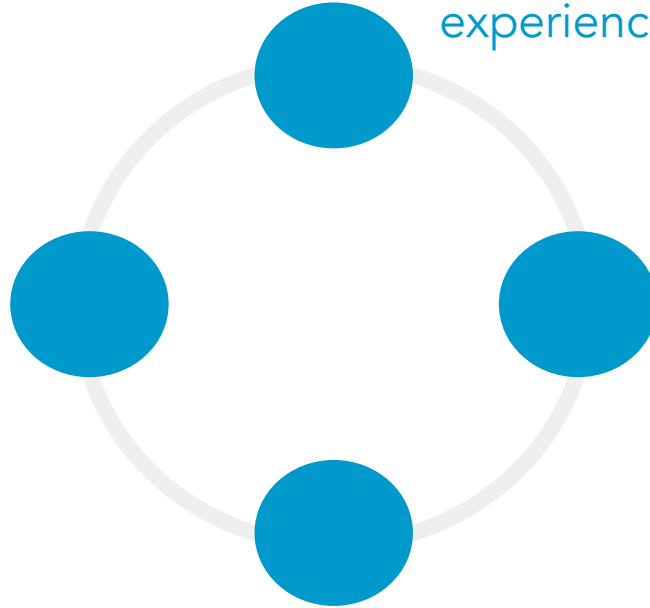
- Traditional companies are becoming software companies, whether they like it or not!
- Customer experience demands are shifting
- More interaction with machines
- Machines are making simple decisions (and are better at it)

*Banking is quickly shifting to meet the challenge. The question is, are they quick enough?*

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# Key Premises

We can't quickly replace legacy with greenfield



Customers demand ever better user experience at an increasing pace

Regulation is here to stay; "you can't fight the man"

Finance emits hundreds of events, many worth acting on!

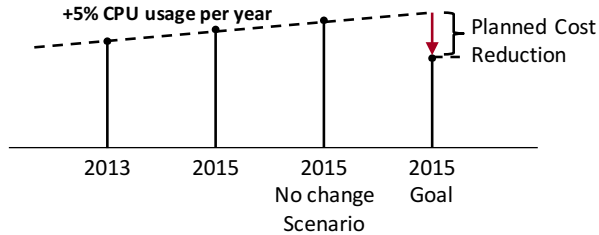
# Case Study

# The Business Situation of nearly every bank



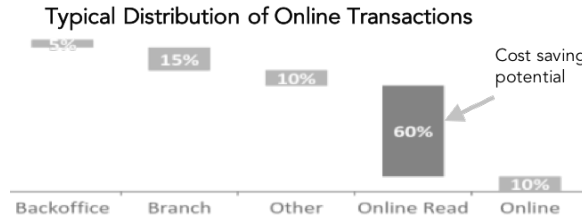
## Rising Mainframe Costs

Rapidly increased over last years. Ongoing increase of +5% CPU usage per year



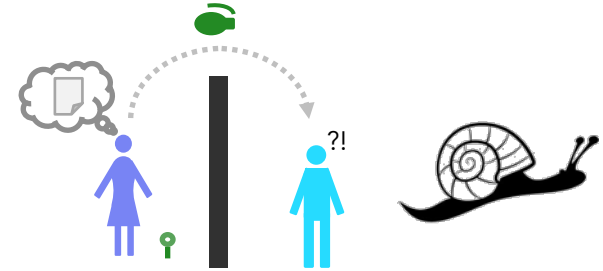
## More Devices more Channels

80% of online transactions from mobile devices  
~60% of overall transactions are read-only request



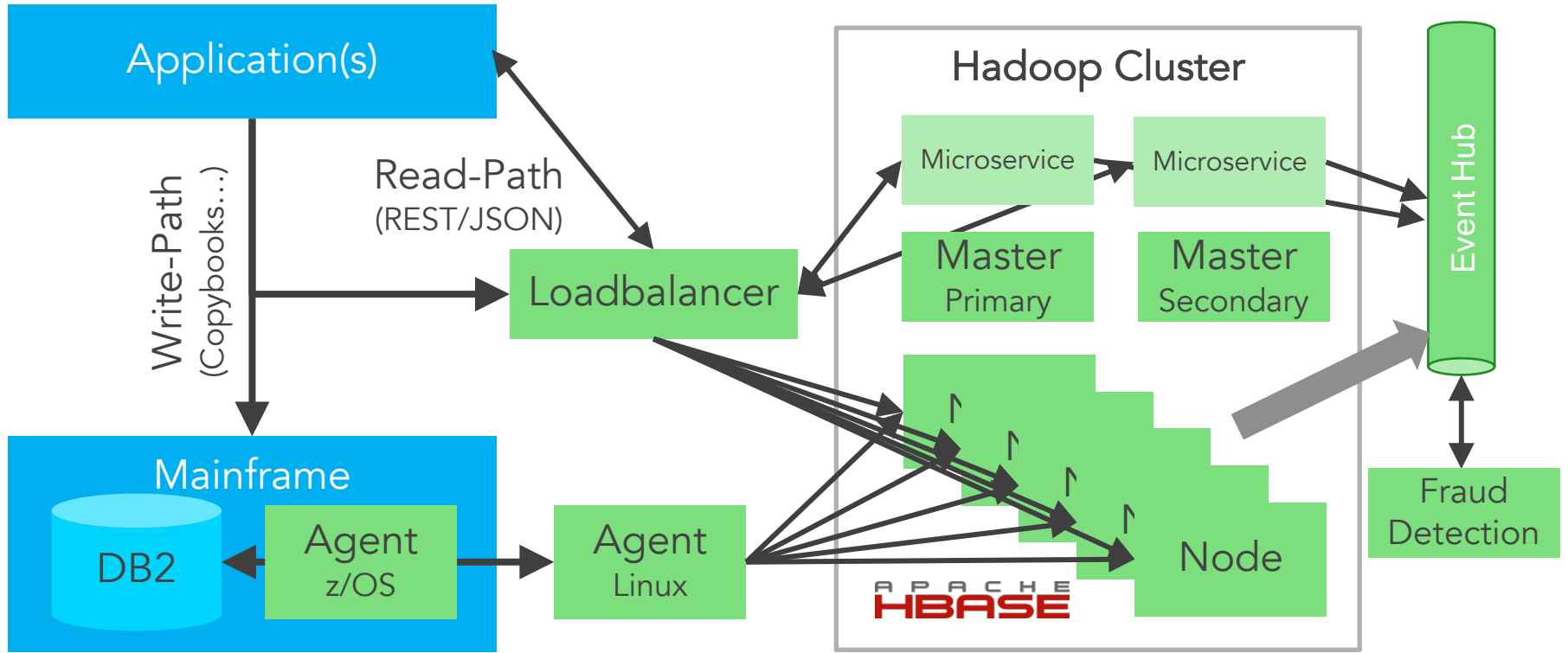
## Slow Innovation

New products and services take months/years to deliver  
The business watches fintech with increasing fright



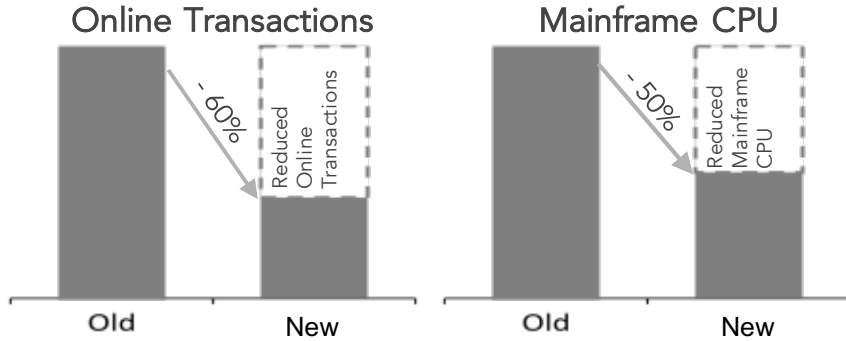
*Banks are becoming software companies whether they like it or not, but often their digital product leaves a lot to be desired*

# High Level Architecture



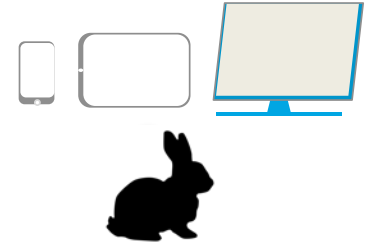
Existing New

# Cost Savings + Market Leading Capabilities



Event Hub

Fraud Detection



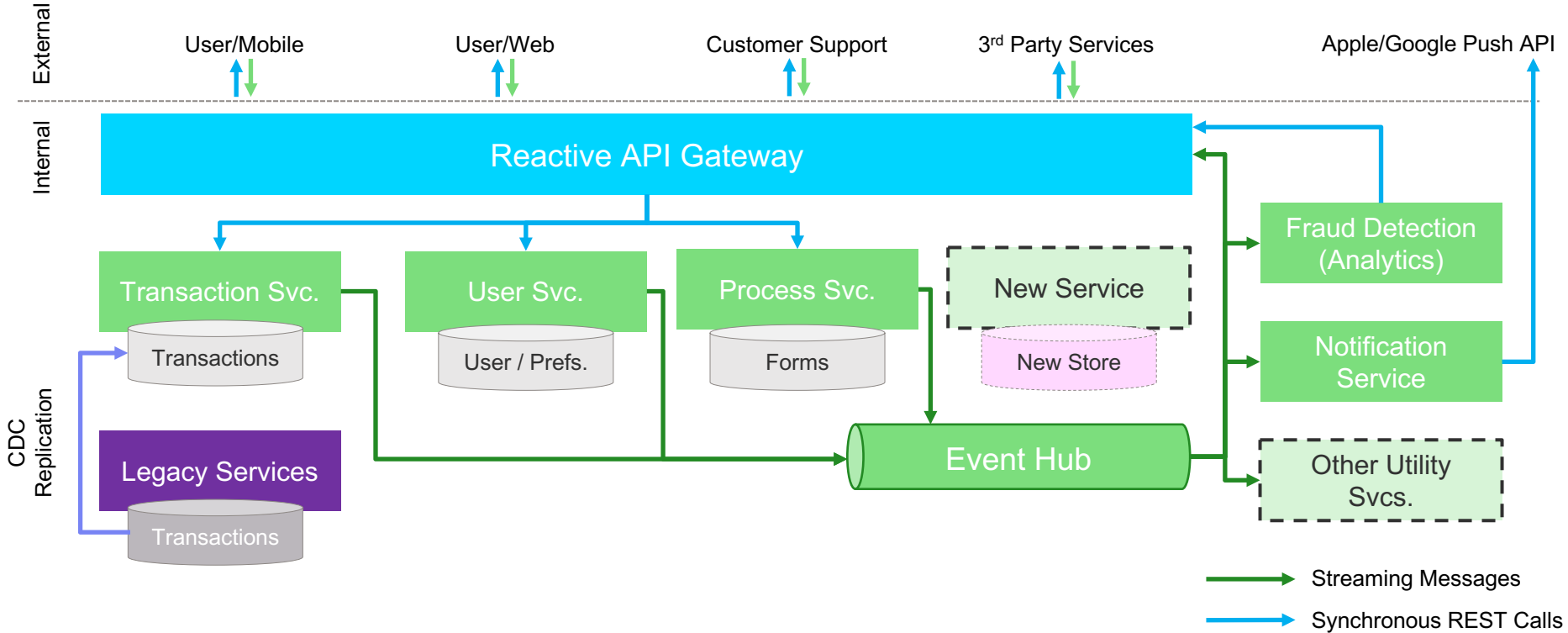
- 50% reduction in mainframe CPU, 50% reduction in ongoing mainframe cost
- went from planned expansion to reduction in hardware

- Implemented fraud detection capability in 4 weeks, well short of 7 month deadline 😊
- went from planned expansion to reduction in hardware

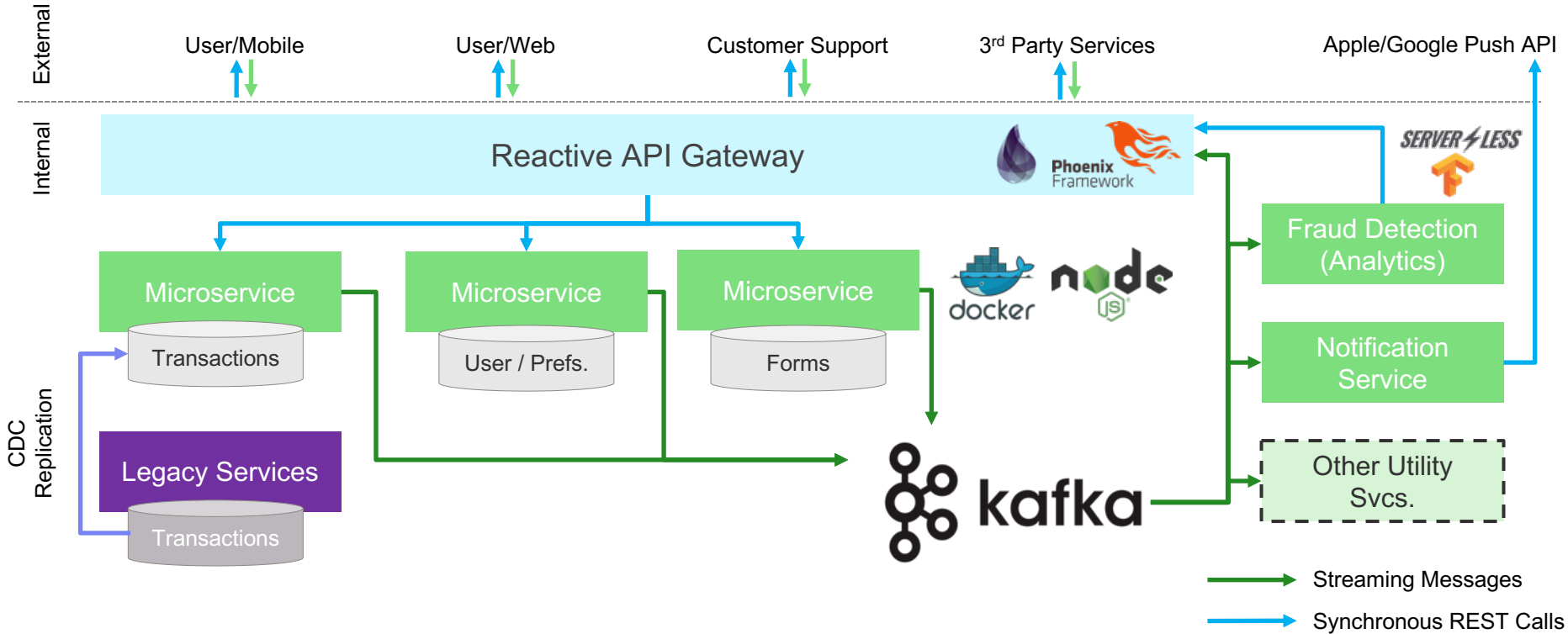
# A Reference Architecture



# Logical Components

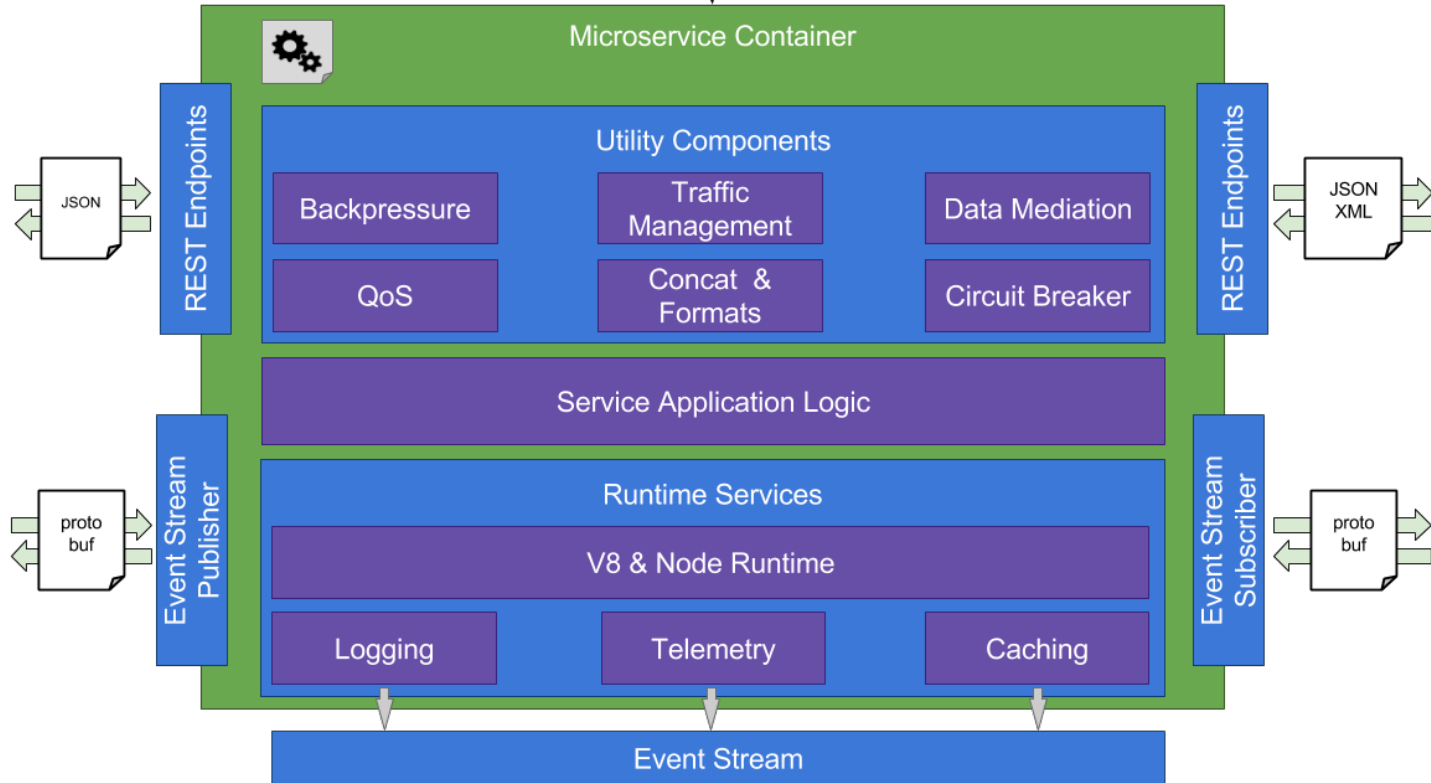


# Technologies



→ Streaming Messages  
→ Synchronous REST Calls

# Inside a Microservice



# Extending to Other Industries: Decouple, Isolate, Hollow, Replace