

AWS re:Invent

NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

Migrating to purpose-built databases for microservices

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Agenda

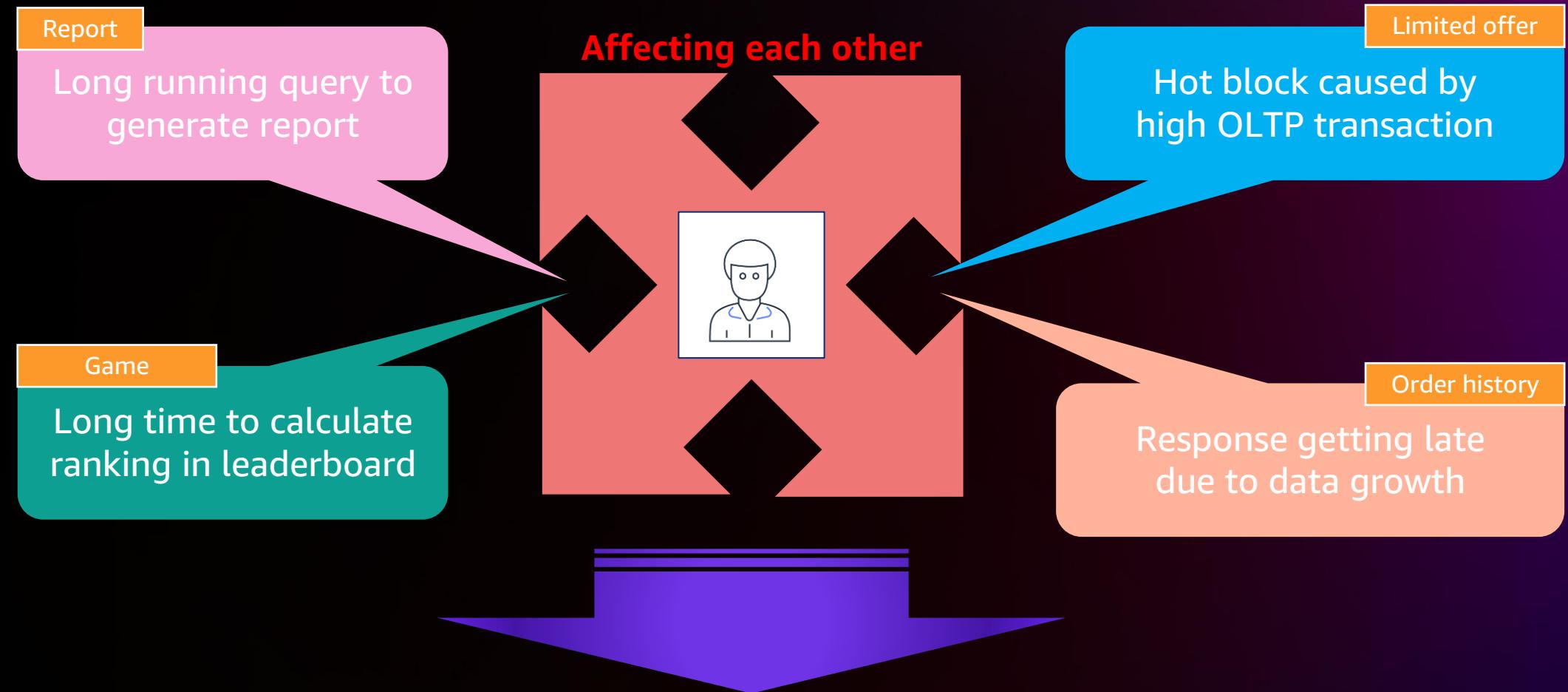
Customer pain points in monolithic architecture

Benefits of a purpose-built database

Virtual customer: Octank's technical debt

Hands-on labs: 4 scenarios

Customer pain points in monolithic architecture

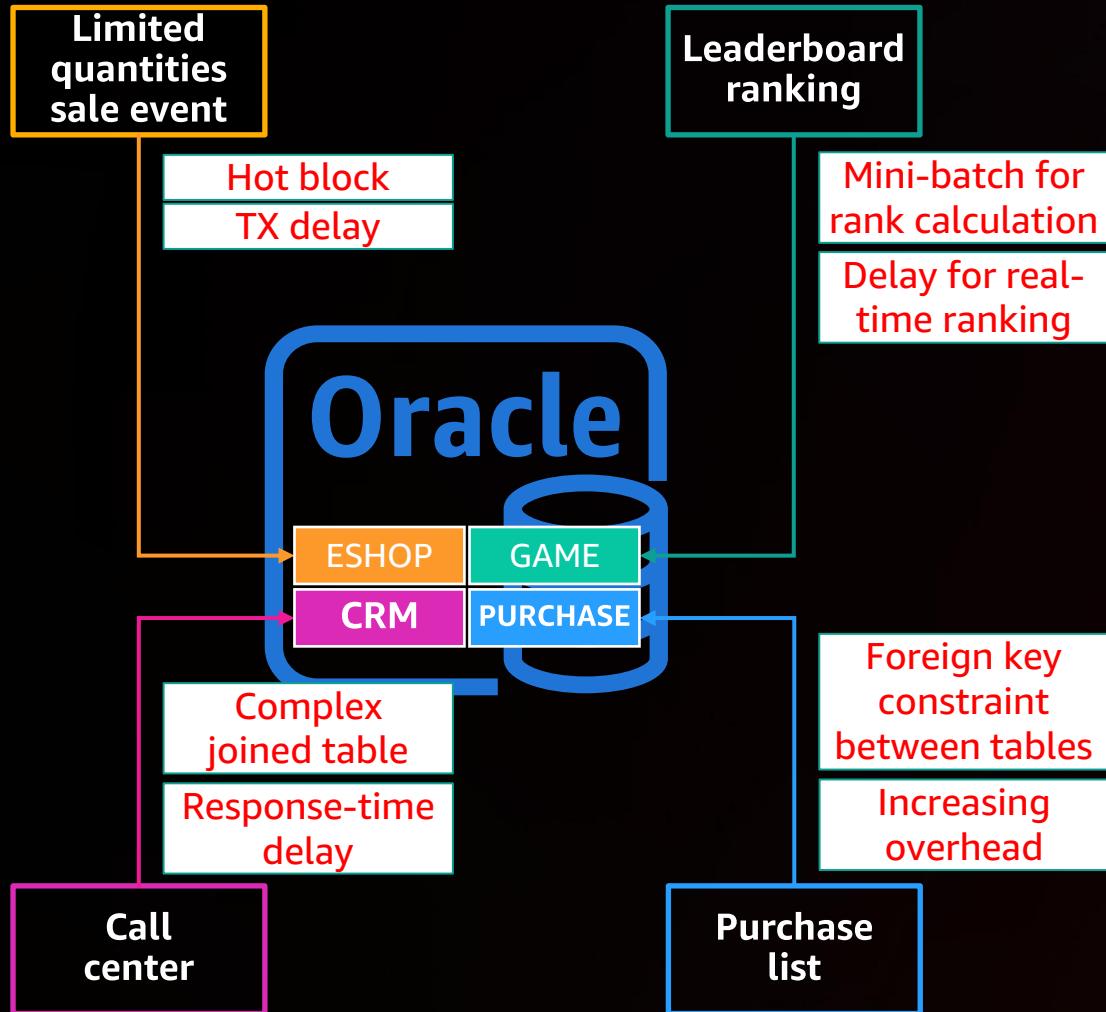


Getting worse in monolithic architecture

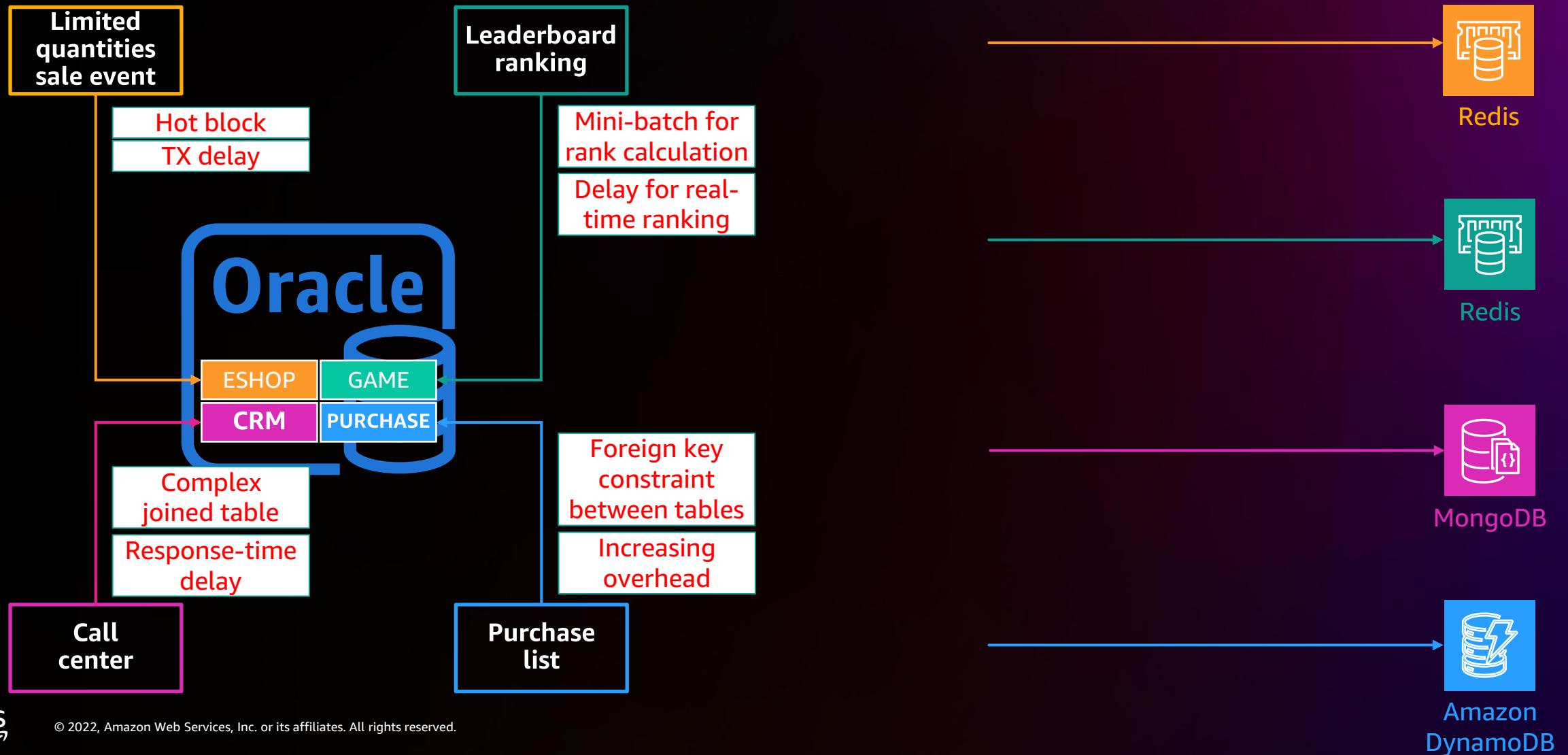
Benefits of a purpose-built database

Key/value store DB	Fast ingestion and fast retrieval of data
JSON or document DB	Content management, article or event logging
In-memory DB	Removing hot block
Columnar DB	Aggregation and analytics
API-based DB	Easy development
NOSQL – schemaless	Fast development and fast deployment
...	And so on . . .

Octank's technical debt



How to remedy



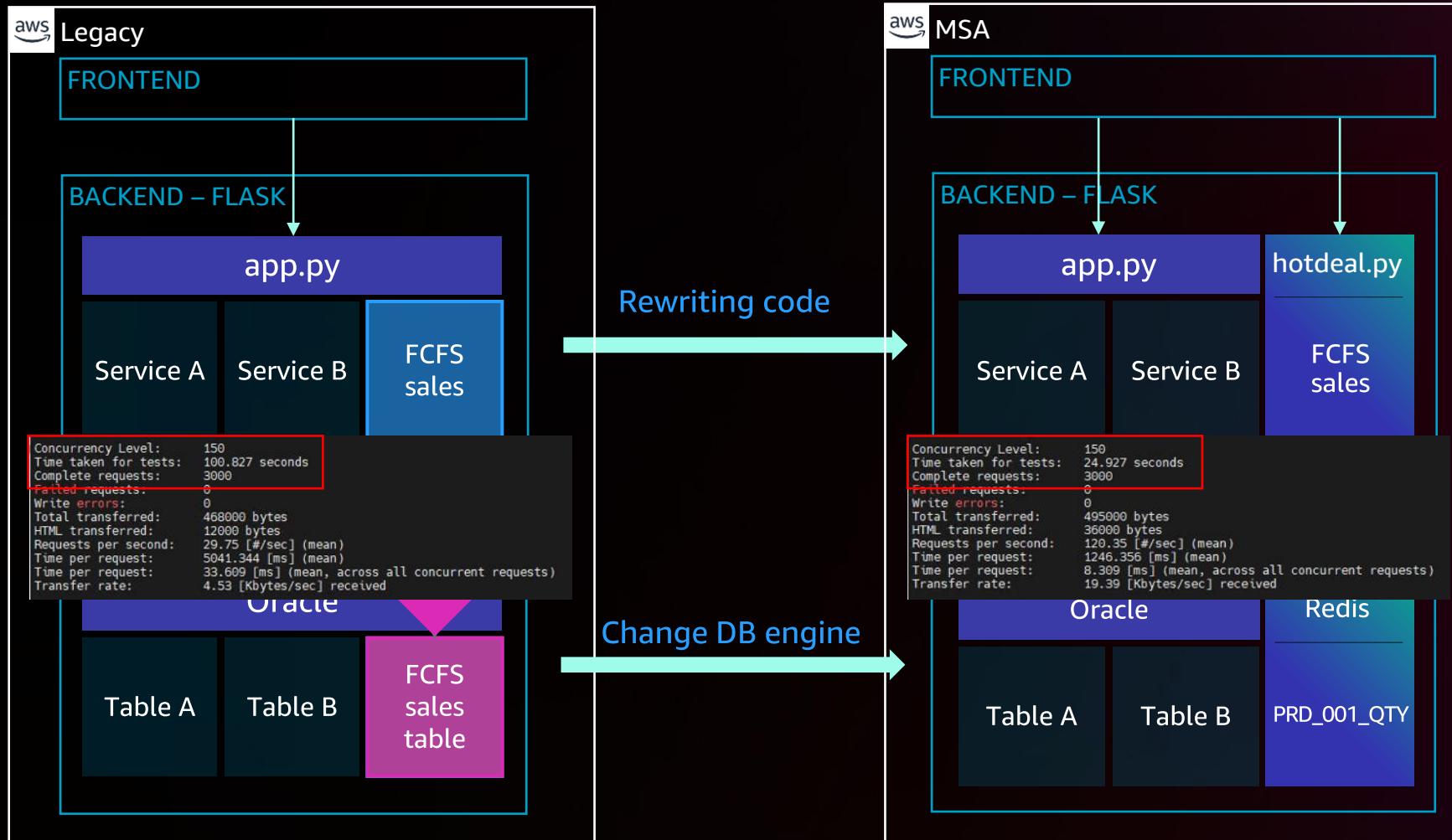
Hands-on labs



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Hands-on lab 1

ACCELERATE LIMITED OFFER USING REDIS



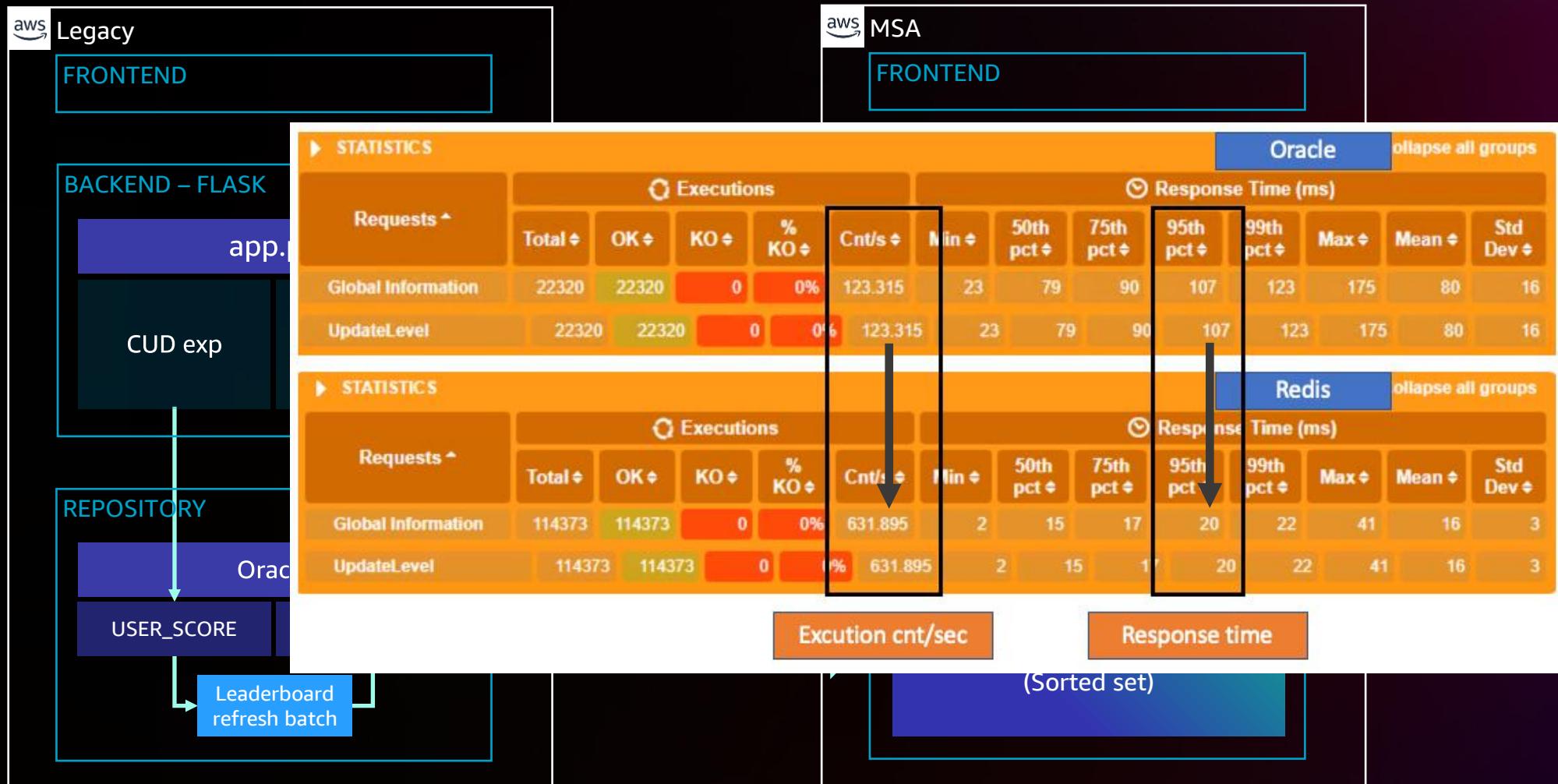
Eliminating a hot block

Offloading FCFS business

Minimizing effort for
rewriting code

Hands-on lab 2

REAL-TIME LEADERBOARD USING REDIS



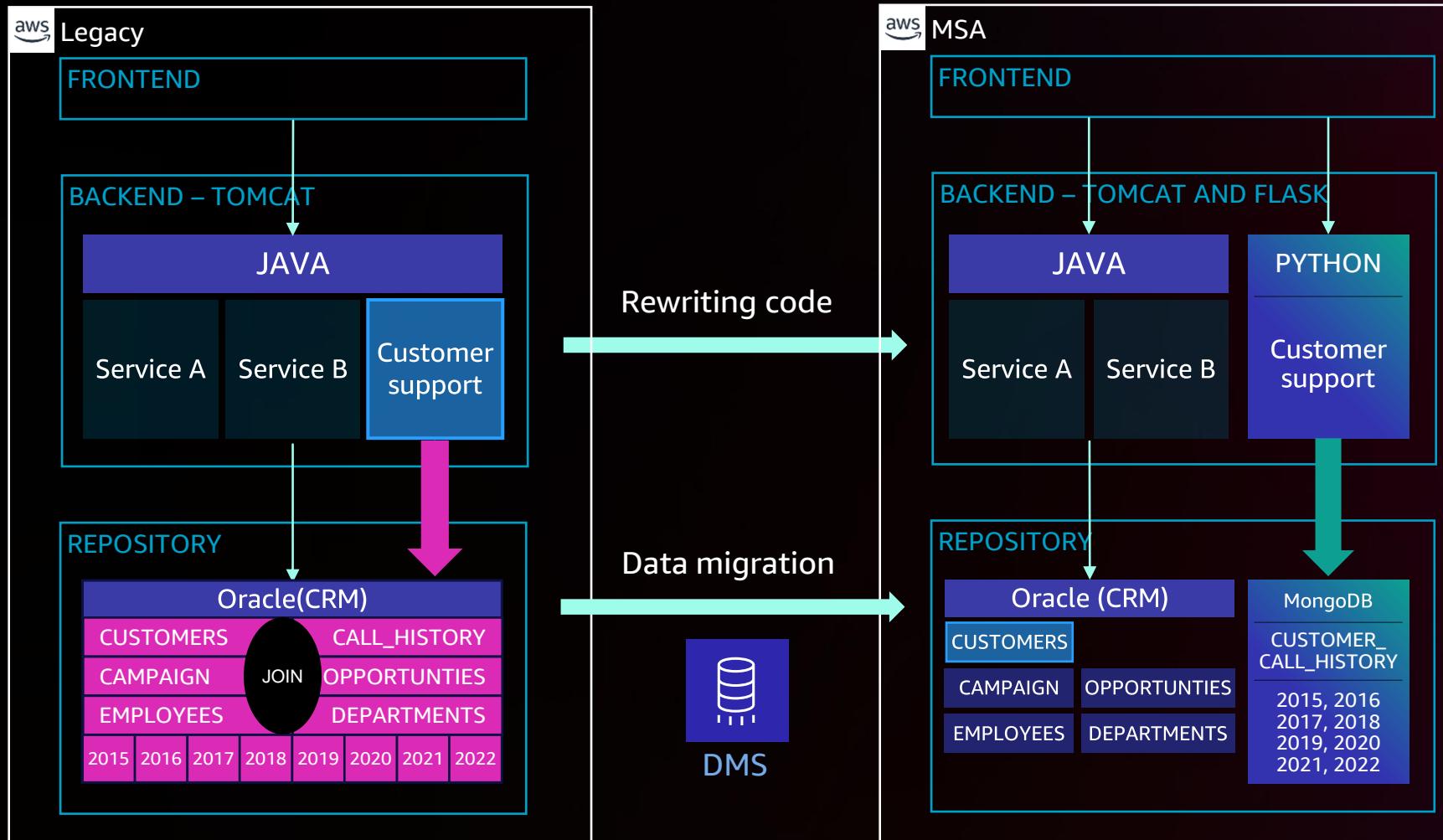
the leaderboard

ing for machine

ing for operation

Hands-on lab 3

SEPERATION OF CRM REPORT SERVICE USING MONGODB



Simplify complex queries

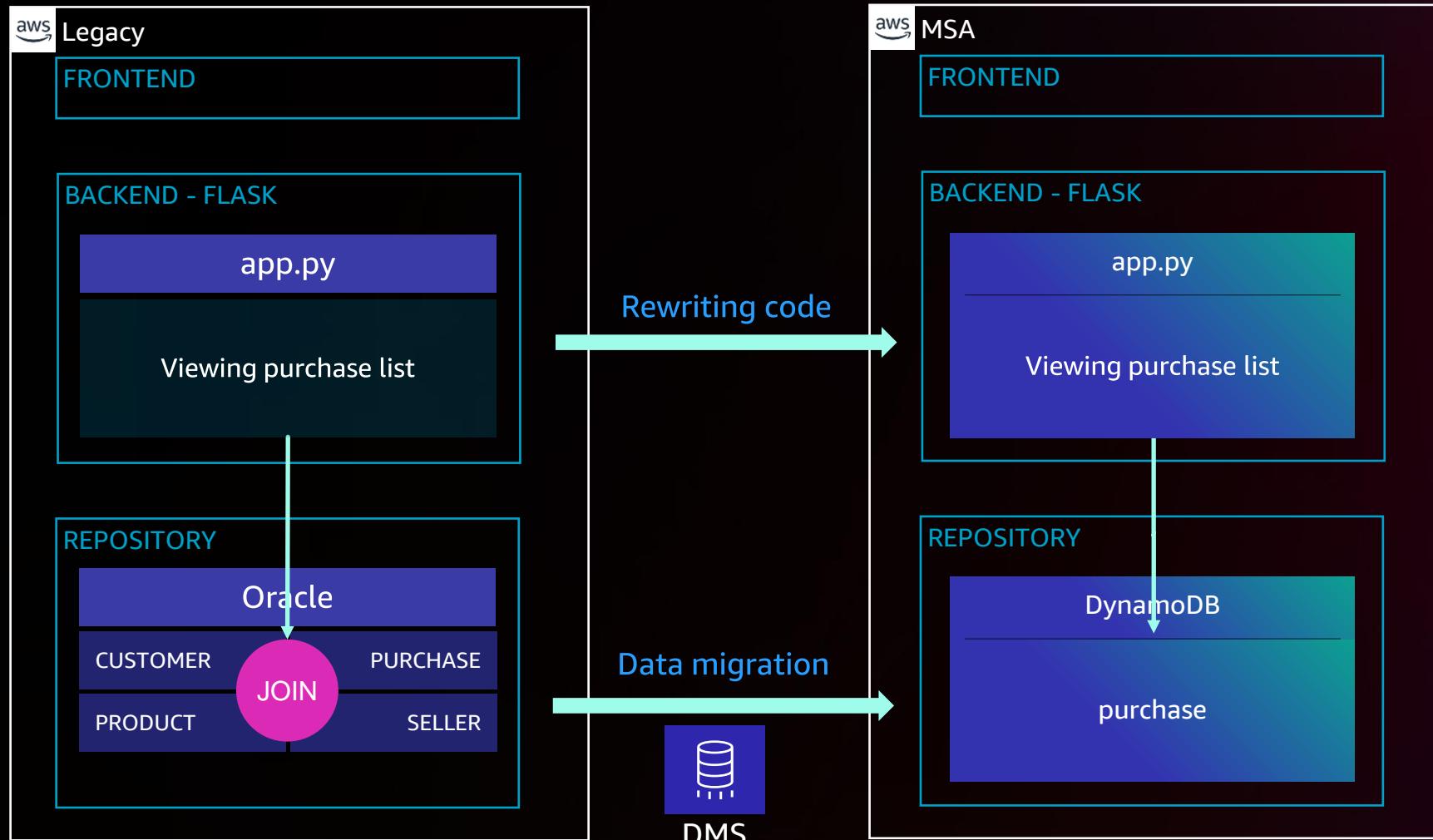
Offload read workloads

Easy to develop

Easy to migrate data

Hands-on lab 4

MIGRATING AN ORDER SERVICE TO MONGODB USING DMS



Consistent latency

Scalability

Flexible schemas

Thank you!

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