

AEROSPIKE  
**NEXTGEN**  
**NOW**  
SUMMIT '20

MAKING  
 **PlayStation**<sup>®</sup>  
MORE  
PERSONAL

**Suresh Bathini**

VICE PRESIDENT, SOFTWARE ENGINEERING,  
PLAYSTATION  
SONY INTERACTIVE ENTERTAINMENT

HI, I'M SURESH WORK AT  
SONY INTERACTIVE ENTERTAINMENT – MAKER OF PLAYSTATION®

2012

PlayStation®  
Network to the  
Cloud

2014

PlayStation® 4  
Launch

2016

Resiliency thru  
Multiple regions

2018

Unlock  
company-wide  
data

2020

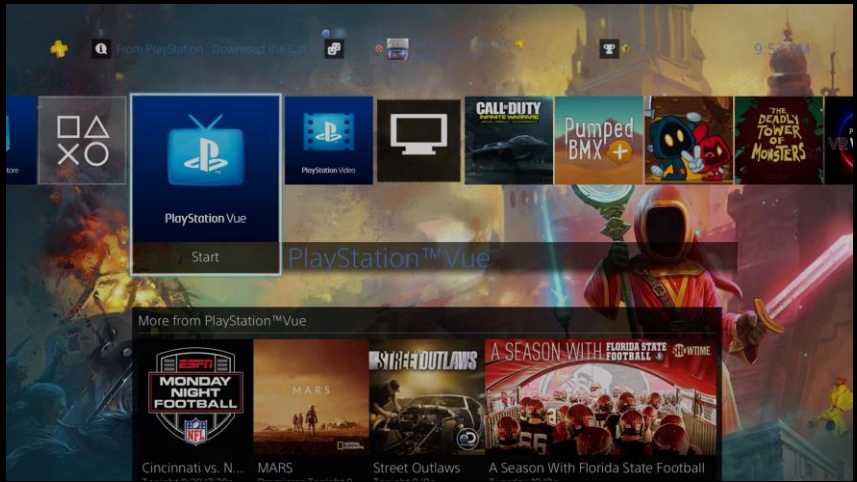
Machine  
Learning for  
Player  
Experiences



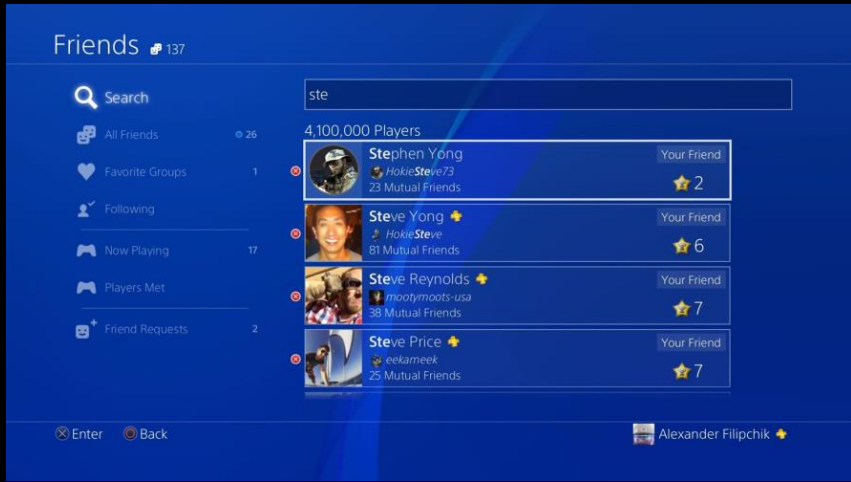
Games



Store

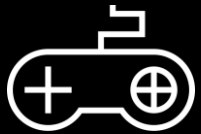


Video



Social

# PLAYSTATION® TODAY



**103 MILLION**  
Monthly Active Users



**38.8 MILLION**  
PS Plus Subscribers



**5 MILLION**  
VR Headsets Sold



**\$21 BILLION USD**  
Revenue

# UNLOCKING PERSONALIZATION

Get the data > Understand players > Get personal

# AVAILABLE, RESILIENT & SECURE

**300+**

Micro  
Services

**Millions**

Requests  
per second

**100B+**

Data events/day

**60+**

Database  
clusters

Multiple  
Regions

# FACING DATA CHALLENGES

1

MULTIPLE  
DATA ISLANDS

2

MANY DATA  
FORMATS

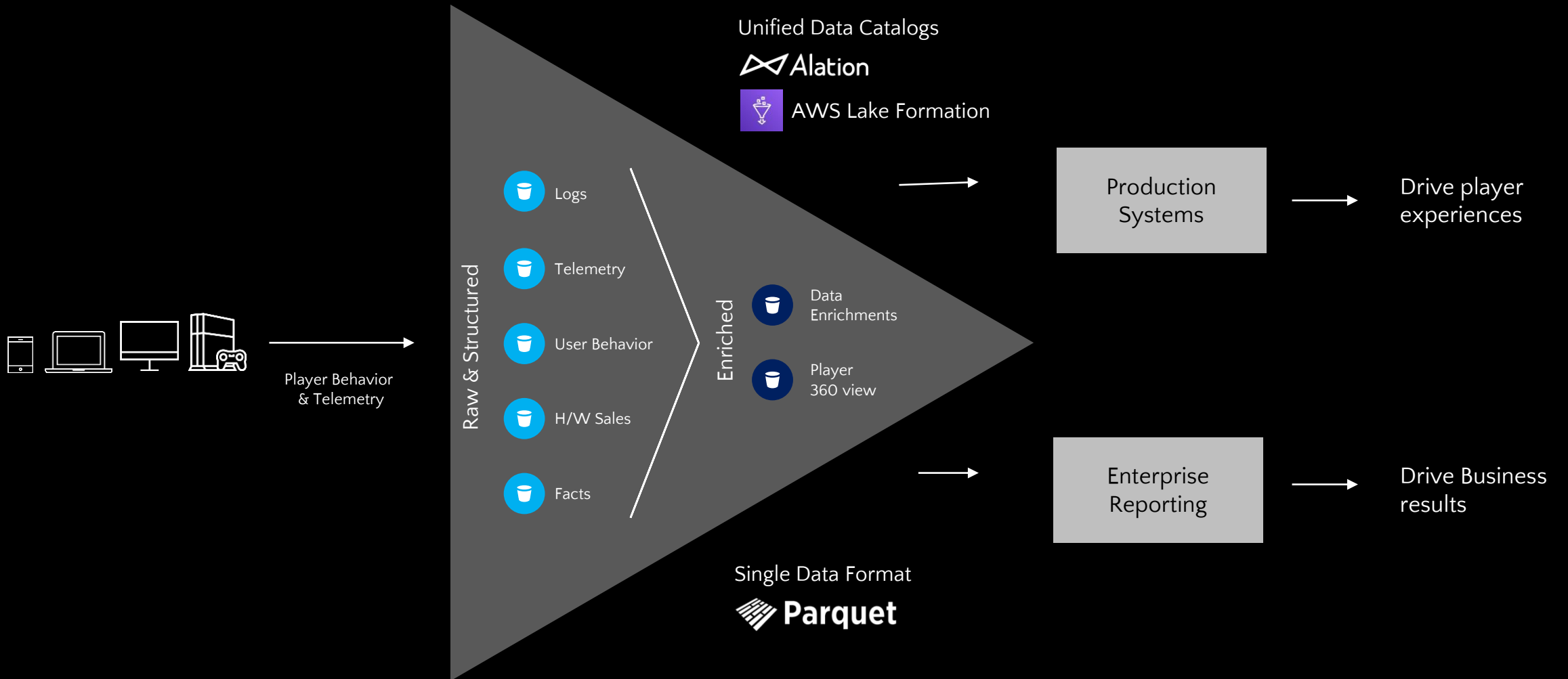
3

NO DATA  
DICTIONARY

4

IMMATURE USE OF  
DATA

# SONY DATA OCEAN

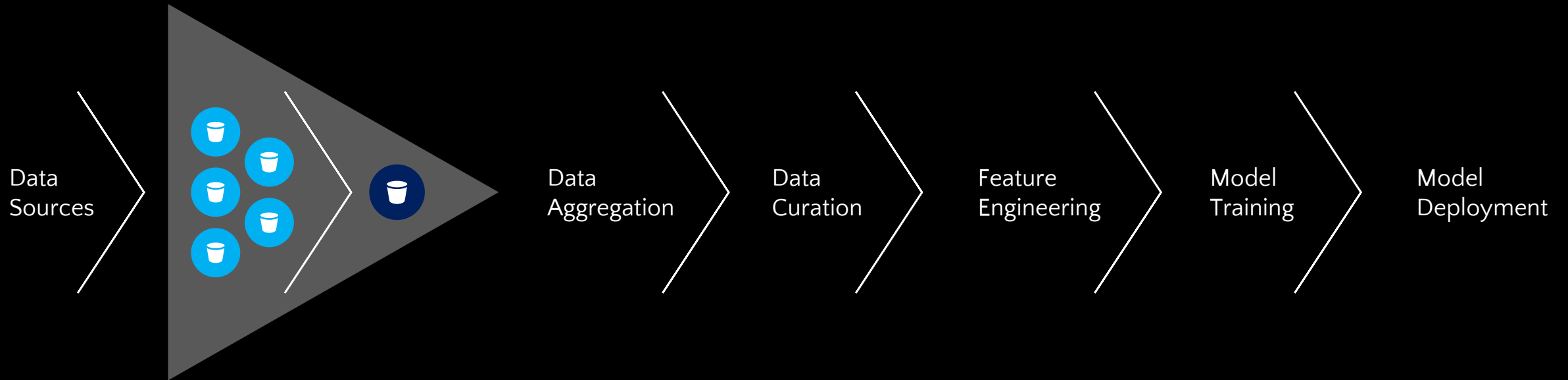




# UNLOCKING PERSONALIZATION

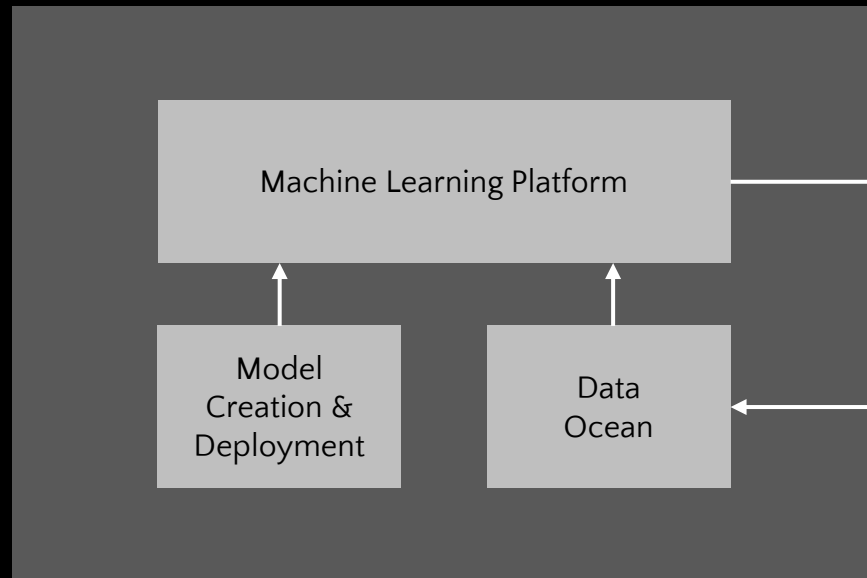
Get the data > [Understand players](#) > Get personal

# MACHINE LEARNING OPPORTUNITIES

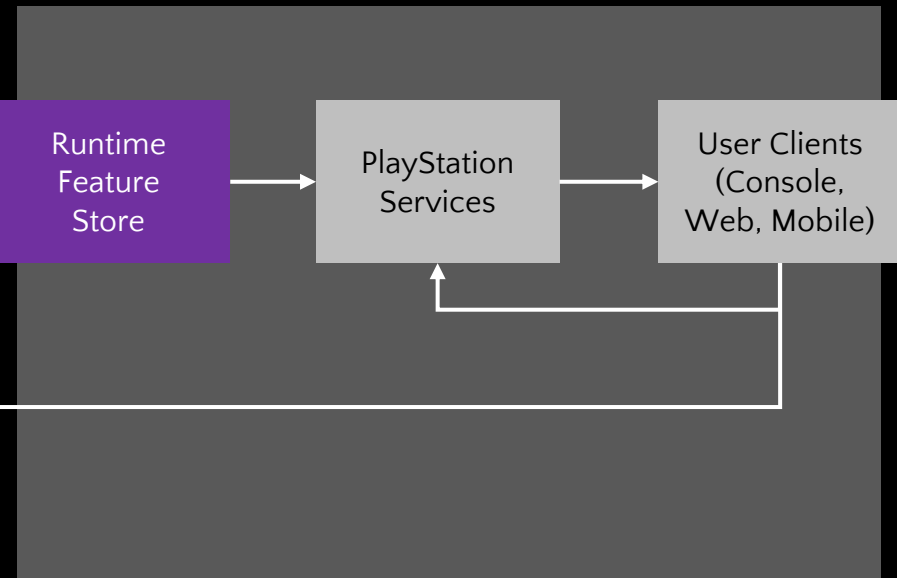


# PLAYSTATION® PERSONALIZATION

## MODEL TRAINING



## PREDICTION



# FEATURE STORE REQUIREMENTS

**100+**

Million  
Users

**5TB+**

Data  
Storage

**100+**

Features  
per user

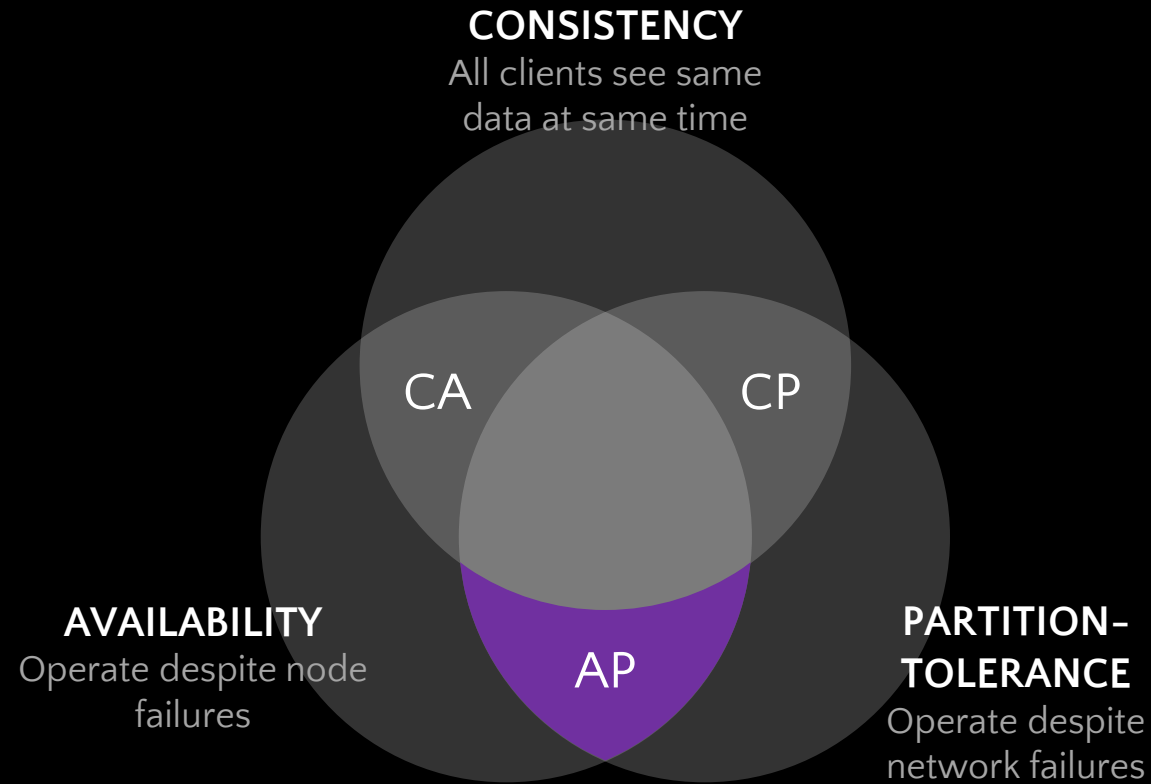
**<10ms**

Data  
Retrieval

**Low TCO**

Total Cost  
of Ownership

# RIGHT STORE TECHNOLOGY – CAP THEOREM



# SELECTING THE RIGHT STORE TECHNOLOGY



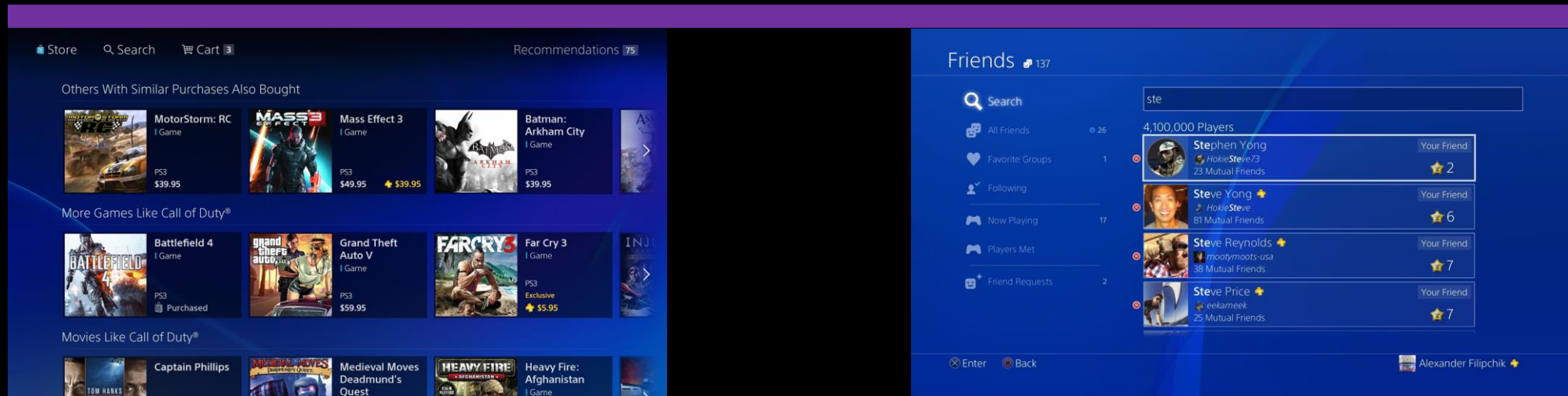


	Aerospike	Couchbase	Cassandra
Type	Flash-optimized In-memory DB	JSON Based Document Store	Wide-Column Distributed DB
Primary DB model	Key-Value Store	Key-Value Store	Key-Value Store
Implementation	C	C	Java
Sharding	Automatic		
Availability	+	+	+
Resiliency	+	=	=
TCO	+	=	=
Operational overhead			

# UNLOCKING PERSONALIZATION

Get the data > Understand players > **Get personal**

# BETTER CUSTOMER INSIGHT = RICHER FEATURES



Game Recommendations

Friends





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