GDC

Providing Decision Support Throughout Games' Lifecycles Leveraging Big Data

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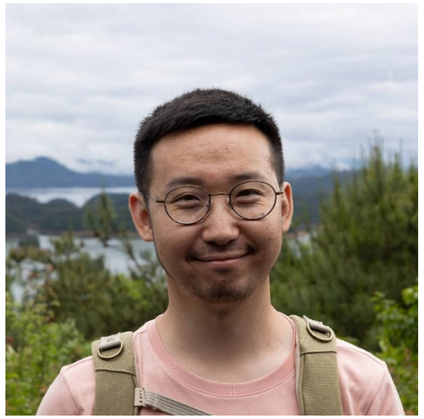
Introduction

/Speaker



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Data Mining Engineer

Thuderfire UX Team, NetEase

/Topic

Providing Decision Support Throughout Games' Lifecycles Leveraging Big Data

- Providing Decision Support
- The UX team work behind
- Data as Service

Part.1 Providing Decision Support

Game’s Life-Circle

Reasearh → Developing → Testing → Release

Research&Developing Period

- Is there a market blank?
- What kind of game is more popular?
- What kind of game brings more revenue?
- How does players think of the role?
- How does players like the skin/clothes of the characters?
- What kind of players should we focus on?
- …

Reasearh

Developing

Testing Period

- Is this game competitive enough?
- Does the volunteers like the roles/stories/scenes?
- How many time would a volunteer spend on it?
- How much money would a volunteer pay for it?
- Is it possible for a volunteer to recommend this game to his/her friends?
- …

Testing

Release Period

- How many players do we have?
- How does the game behave generally?
- DAU / PCU
- Revenue / LTV / ARPU / ARPPU
- Retention
- Online role num(especially for mmorpg games)
- …

Part.2 The UX Team Work Behind

The UX Team Work Behind

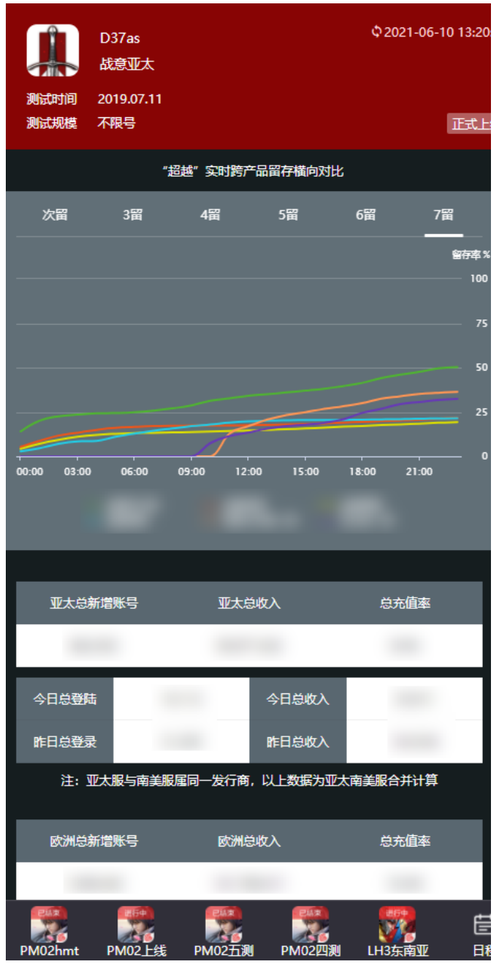
Real-time Data Platform

Offline Data Platform

Recommendation System

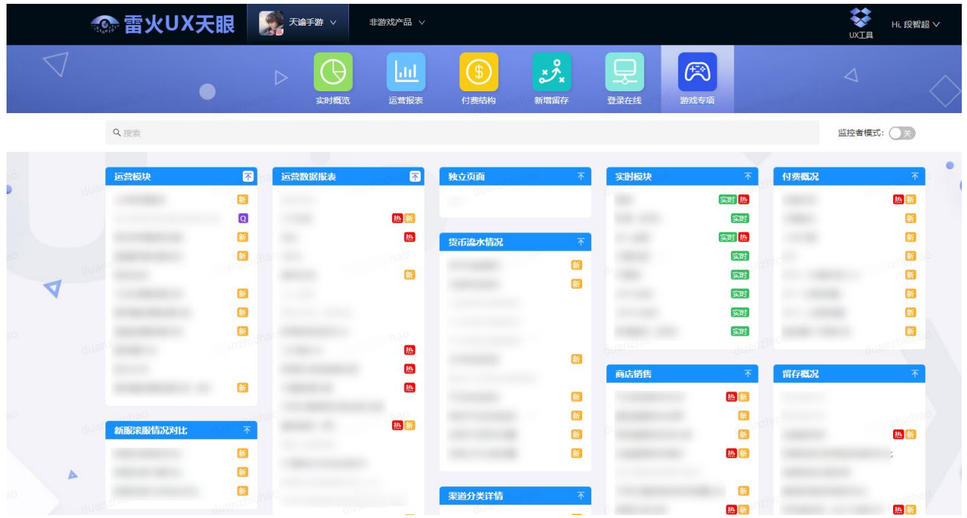
Data Platforms

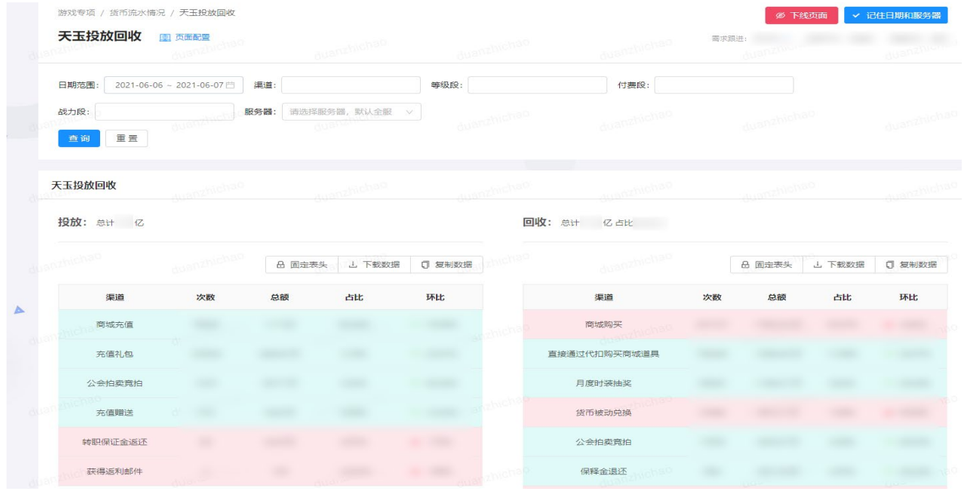
- Real-time in-game data platform
  - Online
  - Revenue
  - Retention
  - LTV
  - ARPU/ARPPU
  - …



Data Platforms

- Offline in-game data platform
  - History retention / DAU / Revenue
  - Customized in game indicators
    - Win rate
    - Participation rate
    - Equipment acquisition rate
    - …
  - Resource Monitor
  - …





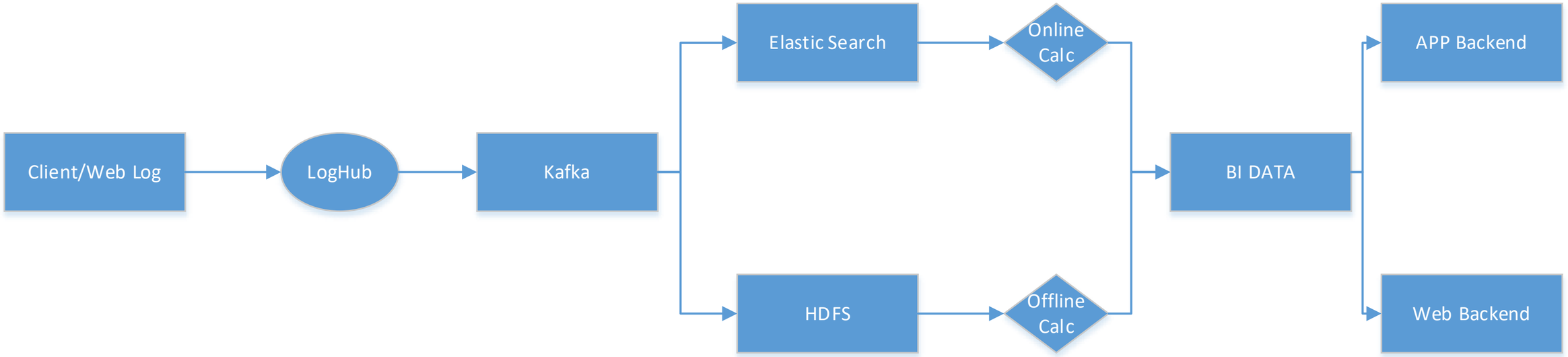
Data Platforms

- Offline in-game data platform
  - Huge amount of data
  - Complexity of calculation
  - different granularity
  - Data consistency
  - Task dependency
  - …

Data Platforms

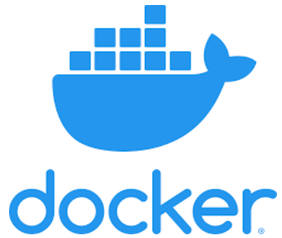
- Repeatable Programing
- System Maintenance
- Log Change
- …

Tech Stacks



- LogHub
- Message Queue
- Data Storage
- Data Calculation (online / offline)
- BI platform Backend

Tech Stacks



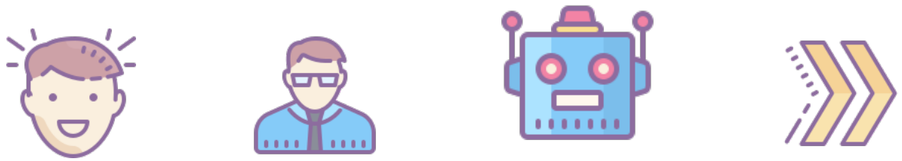
Part.3 Data as Service

Data as Service

Data

Data Analysis/Mining

Service



Data Service

Early Periods

Data-based Design Advise

- The UI design promotion in Conqueror’s Blade
- Character design and Skin design in Revelation

Card Group Analysis

- Helping card group analysis at the early design stage for game MARVEL Duel

After Release

Regular BI Indicators Analysis

- Contrasts between similar products
- Basic evaluation of game performance

In-game Resource Monitoring

Expansion Pack Performance Analysis

In-game Recommender System

THANKS!