MOBILE GAMES: BUILDING AN EMPIRE

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THE AGENDA

- Introduction
- How To Make Money
- How To Make a Game That Makes Money
- How To Keep Making Money
- Questions
INTRODUCTION

Education
Master of Science in Applied Computing, University of Toronto
Honors Bachelor of Software Engineering (Game Design), McMaster University

Work Experience
Software Engineer, Zynga
Full Stack Developer, Uken Games
Teaching Assistant, University of Toronto
Software Developer, MiHealth Global Systems
Teaching Assistant, McMaster University
Multimedia Test Tool Developer, Research In Motion
Research Assistant, Visual Interactive Design lab, University of Victoria
Uken Games
Connecting the word through games...
Community Match and Tournaments
HOW TO MAKE MONEY: REVENUE STREAMS IN GAMING

SHOW ME THE MONEY!!!!!!
Ad Revenue

- Banner ads
- Interstitial ads
- Incentive-based ads
Strategic Partnerships
Freemium: Free-to-play or Pay-to-win?

PLS TELL ME MORE ABOUT
HEARTHSTONE NOT BEING PAY TO WIN
HOW TO MAKE A GAME
(THAT MAKES MONEY)

TIME FOR SOME PLANNING!

LET'S HAVE A STRATEGY MEETING
Before you write any code...

Things to think about:
- Can in-app purchases make the game playing experience better?
- If so, what kind of virtual goods will you offer for sale?
- What virtual goods lend them to the playing environment?
- How can I incorporate advertising into the game?
Opportunities for IAPs

- Collect stars to unlock the next area
  - Unlock

- Get instant access to the next area
  - Unlock

- Ask your friends for help to unlock the next zone
  - Connect

- Tiempo hasta la siguiente vida: 28:00

- Pedir a tus amigos
- Más vidas en:
Driving Revenue Through Events

Event - limited time content/activity for a social game. Events are metagames built on top of the existing core mechanics.

Event Design Pillars:
1. Rewards
2. Progression
3. Urgency
4. Competition
HOW TO KEEP MAKING MONEY: DATA, DATA, DATA

ZETTABYTES?
THIS IS BIG DATA!!
Big Data Means HUGE Infrastructure

Zynga’s Infrastructure Needs:
- **1,000+ servers** are able to be deployed in any 24-hour period
- **100x** increase in Zynga’s server infrastructure capacity within the last two years
- **24.5 trillion** rows of data in 2011. This is 20 million times as many rows as even the largest mega-spreadsheet supported by Excel
- **1.4 petabytes** of data in our entire database. This is more than 10x the data required to store every movie offered by Netflix, in HD
- **21 billion** With Friends games played on hundreds of dedicated game servers
- **650 hands** of Zynga Poker played every second
Data Driven Design

Data Driven - Relying on cold, hard data to make decisions

Problems with Data Driven Design

- Data is systematically biased!
- Not everything is an optimization problem

Data can help you iterate towards the local maximum, but that doesn’t mean you have the data to get to the best (global) outcome

Andrew Chen
Data Informed Design

**Key Performance Indicator (KPI)** - quantifiable metrics that are important to measure success in your game

**MAU** - Monthly Active Users  
**DAU** - Daily Active Users  
**Retention Rate**  
**Churn Rate / Attrition Rate** (100% - Retention Rate)  
**ARPU** - Average Revenue Per User  
**ARPPU** - Average Revenue Per Paying User  
**ARPDAU** - Average Revenue Per Daily Active User  
**CPI** - Cost Per Install  
**LTV** - Lifetime Value
**Know Your Users**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minnows</strong></td>
<td>Spend the smallest amount possible</td>
</tr>
<tr>
<td><strong>Dolphins</strong></td>
<td>Spend a typical amount</td>
</tr>
<tr>
<td><strong>Whales</strong></td>
<td>HMUs (highly monetizing users)</td>
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<tr>
<td><strong>Freeloaders</strong></td>
<td>Non-spenders</td>
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**Chart Details:**
- **$1-5**: 66.8% purchases, 0.7% revenue
- **$6-10**: 27.4% purchases, 27.0% revenue
- **$11-20**: 22.4% purchases, 8.2% revenue
- **$20-50**: 14.0% purchases, 1.9% revenue
- **> $51**: 9.1% purchases, 0.7% revenue
Questions???

IF YOU ASK ME QUESTIONS

THAT'D BE GREAT