

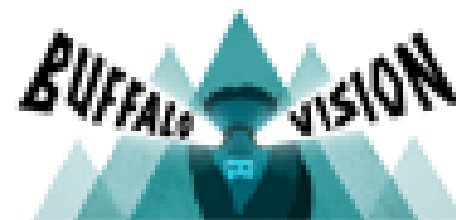
Surviving Cross Platform Development with *SKULLS OF THE SHOGUN*



Borut Pfeifer
Lead Programmer, design
17-BIT/Plush Apocalypse Productions



PLUSH APOCALYPSE[™]
PRODUCTIONS



RADICAL[®]
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ENTERTAINMENT




Criterion

SKULLS OF THE SHOGUN



Gameplay Overview

Development Cycle

Design Challenges

Technical Challenges

Business/Marketing Challenges

Pause



ROUND 1



Why Cross Platform?

Myth of multi-screen gameplay

Building audience/awareness

Mitigate platform lifecycle risks

Use platform deals to help build

Background



Cross-platform roots

- Started as iPhone concept (2009)
- Turn based + sped up gameplay/HD art
- Launched on Xbox 360/WinPhone/Win8
- Then Win7 PCs (Steam), iOS, Mac/Linux/Android

Development

- 4 years (10 months part time)
- 2 programmers, 1 artist
- Support people (sound, QA, porting)
- Remote development (3 locations)

Development Cycle

Concept – prototyping, mission statement

Pre-production – vertical slice

Production – build remaining art, functionality

Post-production – QA, beta, porting

Concept & Preproduction (1st year)

- PC + Xbox 360 focused (XNA)
- Prototype 2 levels (small to big), avg level size



Production (~2 years)

- Focus on remaining work: story, AI, networking, tutorial
- Start mobile/Windows phone development



Post-Production (~1 year)

Microsoft Platforms

- Windows 8 port w/MonoGame
- ARM tablet optimizations
- Added asynchronous cross platform play

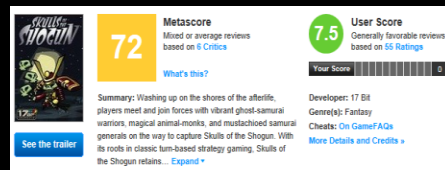
Steam/iOS/Android

- 4 level expansion added
- New backend for realtime & async networking

Launch & Reception



iPad/iPhone



PC



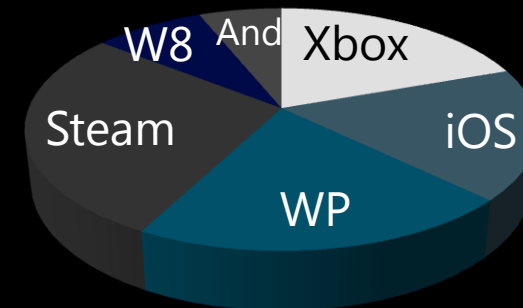
Xbox 360

- 1/2013 – Microsoft launch
- 5/2013 – Steam Early Access
- 11/2013 – iOS
- 5/2014 – Humble PC + Android Bundle
- 8/2014 – Google Play
- 10/2014 – OUYA
- ??? – PS4 (Vita?)

Critical reception

- +20 awards & nominations
- ~4.4 user rating on app stores

Pre-discount units sold



Challenges!

Design

Technology

Business & Marketing

Design Challenges

Satisfying multiple audiences

Best-in-class Interface

Design Challenge - Accessible Strategy

Introduce strategy gameplay to casual players:

- Larger potential audience, fit on console
- Fix common flaws in genre
- Streamline interface, keep depth
- Approachable style – East meets West influences



Design Challenge - Accessible Strategy

Arcade Strategy – direct control, realtime multiplayer

Gridless combat – more strategy, less puzzle

- Rely on intuitive complexity
- Needed crisp visual/audio design



Design Challenge - Accessible Strategy

Heavily playtested (10 festivals/shows)

3 major tutorial revisions

Success in controls, strategy, visual design



Problems:

- Single player difficulty spikes – different playstyles
- Appealing to different players (marketing)
- Briefly attempted metrics (time vs. traditional playtesting)

Interface challenges

Strategy game on console!



Touch interface that felt as responsive as a console game



Keep PC interface precision



Console Interface

Modes became mandatory:

- Select
- Move
- Targeting



Thumbstick diagonals are horrible



Info placed front & center where eye is

The Secret of Good Touch Interfaces

Touch DOWN

Touch up - disambiguation (drag, pinch, double tap)

Disambiguate contextually, less aggressively

- Tap unit always selects, except for pinch
- low impact false positives - drag always moves camera



Touch-anchored (relocating) virtual dpad

Relocate anchor drawing paths on tablets



PC Interface

Remove double click

- First click changes state
- Second advances again
- Bonus: less effort!

Remove hover as a necessity

- Find other states to display info
- Modal and contextual – e.g. near targets by dist

Keep any speed shortcuts for expert players

Design Challenges – Lessons Learned

Find & streamline universal aspects of gameplay.

Importance of visual design in making mechanics read across platforms

Manage long-term playtesting as well as short term.
Too much single player content?

Don't sacrifice the strengths of any platform

Technical Challenges

2D Art

User Interface/Menus

Connectivity

C# - productivity win

- XNA->MonoGame for Win8/iOS/Mac+Linux/Android
- High code sharing, Fast tool dev
- Memory management (always avoid garbage)



2D Art Pipeline

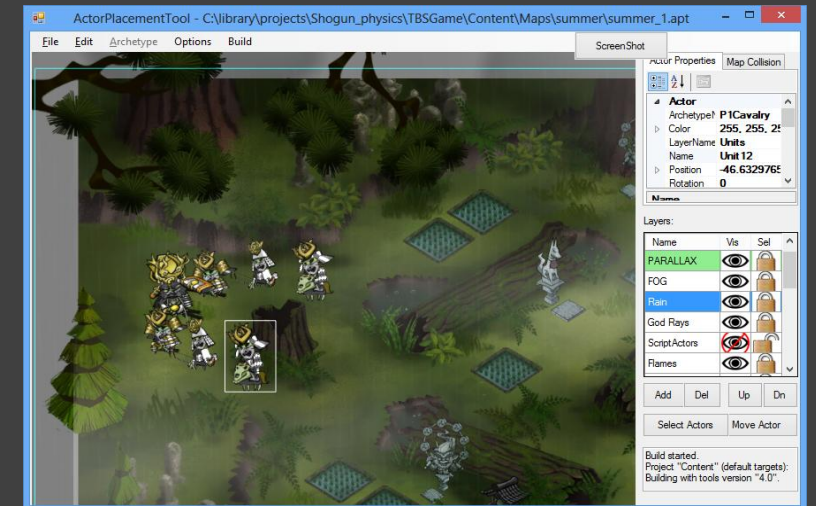
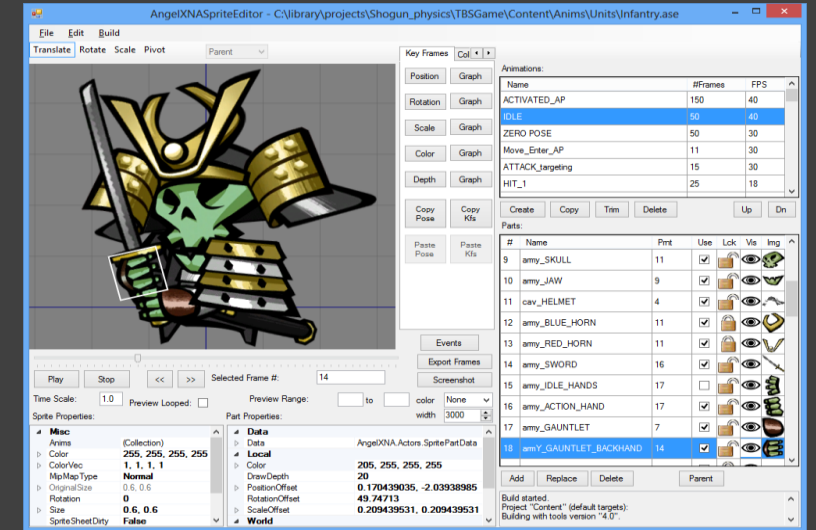
Custom animation, level tools
XNA content pipeline

Lessons:

- Avoid double compression!
- No pre-mult alpha compression!
- Android texture format hell – ETC1

Optimizations:

- Find all opportunities to reduce fill rate
- 16 bit shader precision (battery life)
- Simpler blending, lower detail skeletons



SECRET TO CROSS PLATFORM UI

SECRET TO CROSS PLATFORM UI

**NO ONE CARES
HOW GOOD
YOUR MENUS LOOK**

SECRET TO CROSS PLATFORM UI

Simple

Functional

Not horrible looking

Cross Platform UI

Hardware Fragmentation

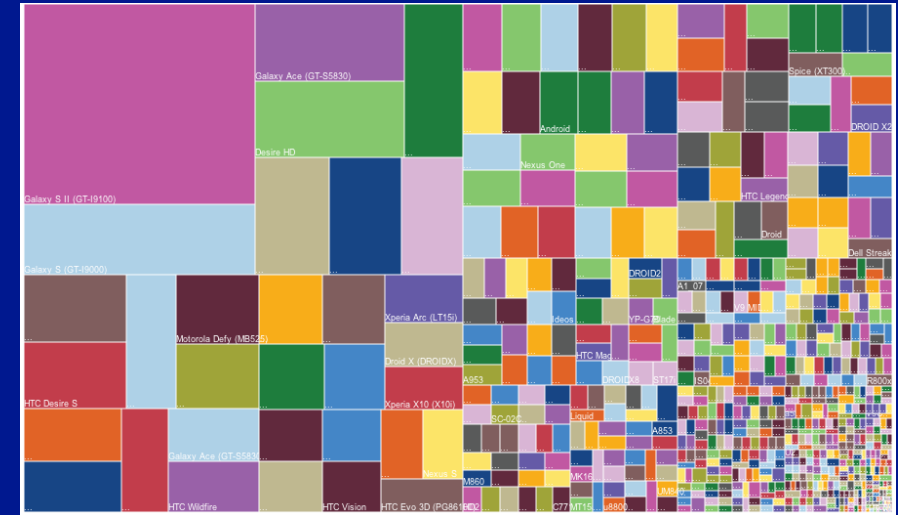
Inconsistent APIs for DPI/size

KISS:

- Use 3:2 as base
- Touchable/readable fonts on 800x600, 4"

Spend effort on basic tech:

- Anchoring, resolution scaling
- Auto scaling text & font resolutions
- Auto-adjust widgets per platform (eg. button prompts)
- Any testing/visualization tools help a lot



Android devices July 2013

Cross-platform functionality

Cloud saves

- Merge progress
- Differentiate cloud vs local saves

Async multiplayer

- Repurpose tech – realtime net packets, scripting
- 4 player matchmaking time sink
- Don't rely on push notifications
- Parse backend

Achievements/Leaderboards

- Platform specific for featuring – not worth it?

Tech Challenges – Lessons Learned

Pick right tools w/focus on productivity – for us C#

Minor features in some areas can cause exponential work across platforms.

Cover weaknesses in cross platform tech in design.

Pick spots to amortize dev costs across platforms.

Business Challenges

Marketing to different audiences

Dealing with changing markets

Pricing/Sales

Other Promotions

Business Challenge – Reaching Multiple Audiences

Casual players: still put off by genre-specificity

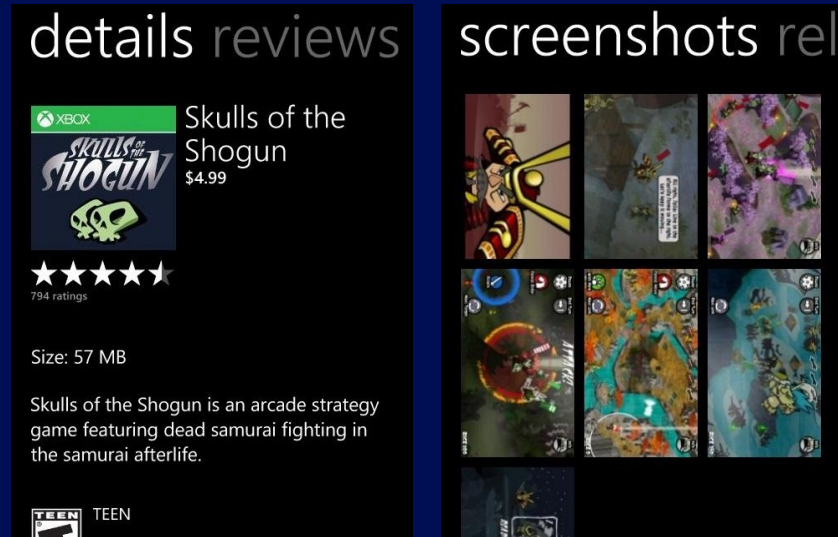
Hardcore players: art style too casual?

Marketing = signaling who should pay attention

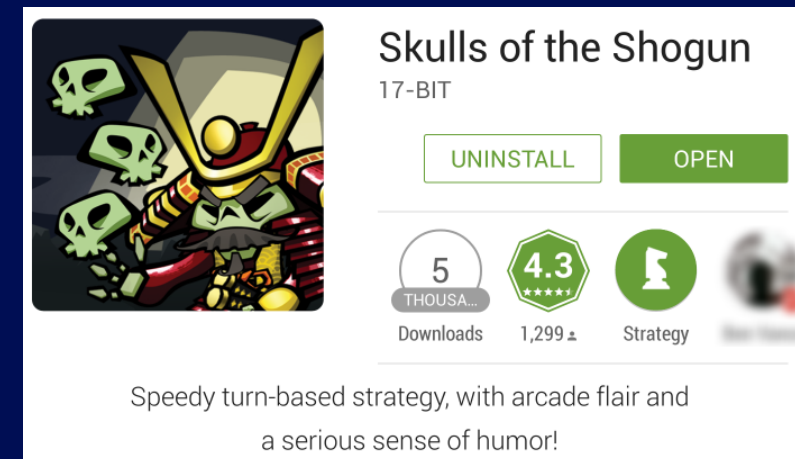
- How does user perceive app through art/videos/marketing?
- Why do they perceive it is for them?
- Don't be afraid to target different audiences with marketing
- Hard on single storefronts

Business Challenge – Reaching Multiple Audiences

Windows Phone Storefront



iOS Icon



Google Play

Business Challenge - Changing Markets

Xbox 360

– 2010: 200k vs 2013: 20-30k

Windows Phone

– underserved, growing

Windows 8

– brand new marketplace

Steam

– starting to get crowded, EA

iOS

– 40% of similar features prior year

Android

– <50% of iOS sales?

Understand where in the lifecycle the platform is:

- Early days – risky, pre-launch PR
- Golden age – featuring has biggest impact
- Crowded & old – post-launch, pay for eyeballs

Pricing

Different platforms, different prices?

- Launch - XBLA \$15, Win8 \$10, Phone \$7
- 2 months MS price drop \$10/\$7/\$5 – no effect
- iOS \$5, Gplay launch \$2

Players now used to price differences per market

Negative perception mobile -> PC/console

Don't be afraid of "premium" mobile prices

Sales

Steam & Steam sales:

- 50% - 75% off
- 2-3 months apart
- Front page promotion



Promotion, not discounts

iOS sales - in between (use w/other promotions)

Bundles can backfire

Whatever you do, DON'T PANIC

Marketing strategies - Steam

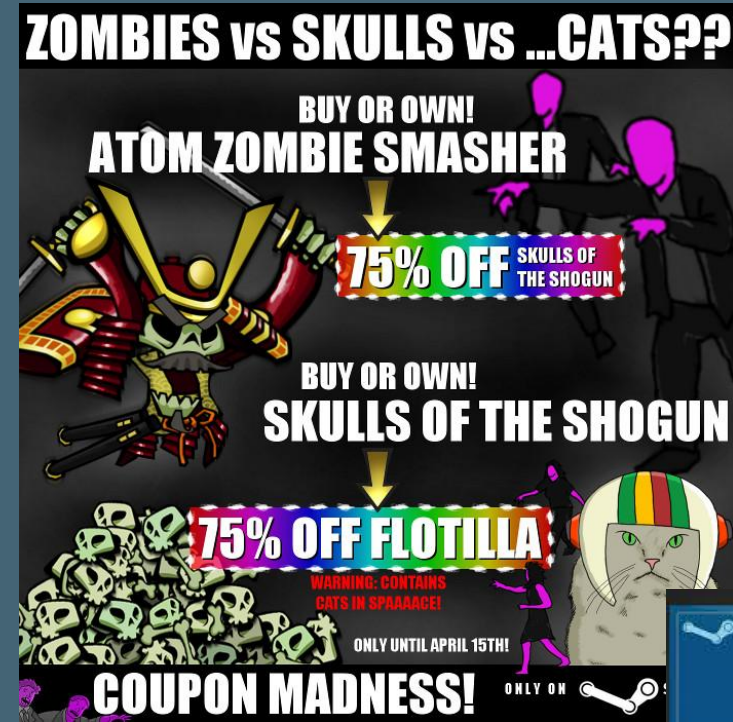
Featured sales

Coupon based cross-promotion

- Based on similar games
- Knock on sales effect

Recommendations & Curators:

- Most traffic from store page (direct recommendations)
- Curator lists: not effective?
- Tagging



Marketing strategies - iTunes

IOS - Hard for premium games

Keyword selection strategy

- Highly searched terms
- Lowest # of results



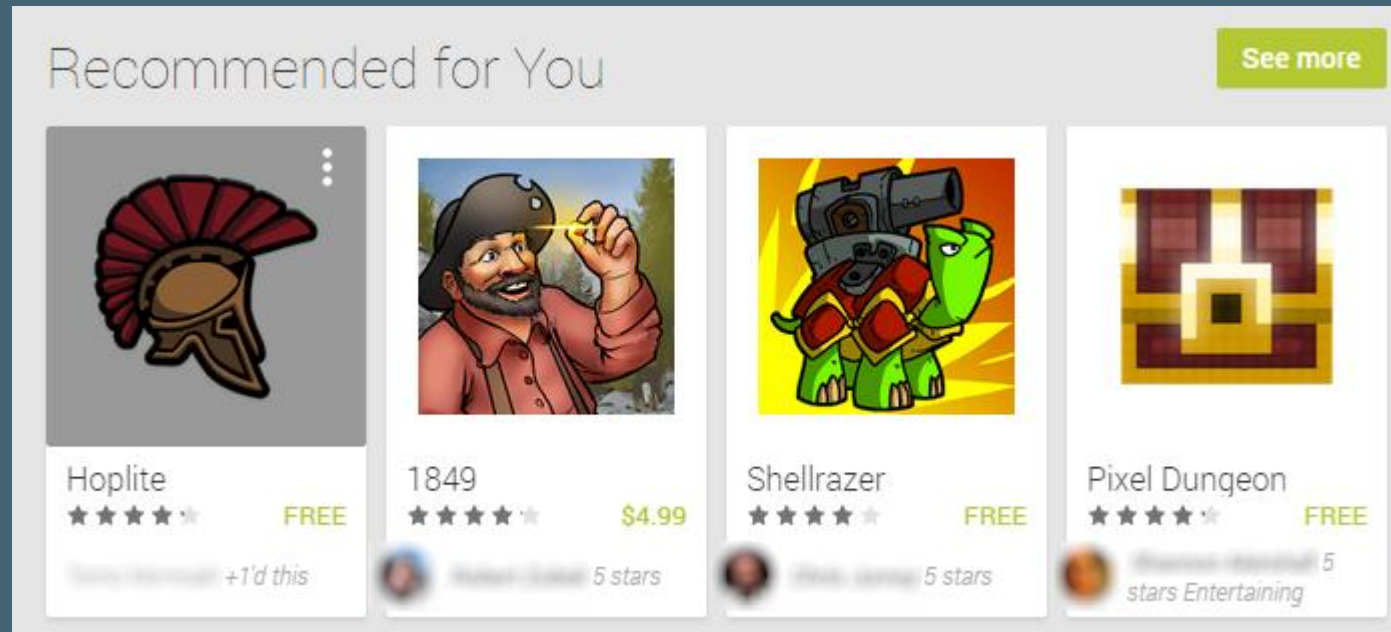
Free Promotions - only with IAP or other titles

Marketing strategies – Google Play

Google Play: G+ sharing/recommendations

How to encourage users to +1/review?

Direct marketing?



Business/Marketing - Lessons learned

Multiple audiences – avoid only the overlap

When targeting multiple audiences, be sure to signal to each of them individually

Patience in sales, focus on promotion opportunity

Surviving Cross Platform Development!

Marathon not a sprint

Build on each launch – & post launch!

Commit time, use all the tools:

- Festivals & shows
- Sales & promotions
- Announcements/updates
- Cross promotion
- Direct marketing
- Advertising

SKULLS OF THE SHOGUN

<http://skullsoftheshogun.com>

***XBLA, Win Phone, Win 8, Steam (PC/Mac/Linux),
iPhone/iPad, Android, OUYA, & soon PlayStation 4!***

Questions: borut@plushapocalypse.com

Game/Business/Press related: pr@17-BIT.com

http://www.gamasutra.com/view/feature/185853/accessible_strategy_is_not_an_.php

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