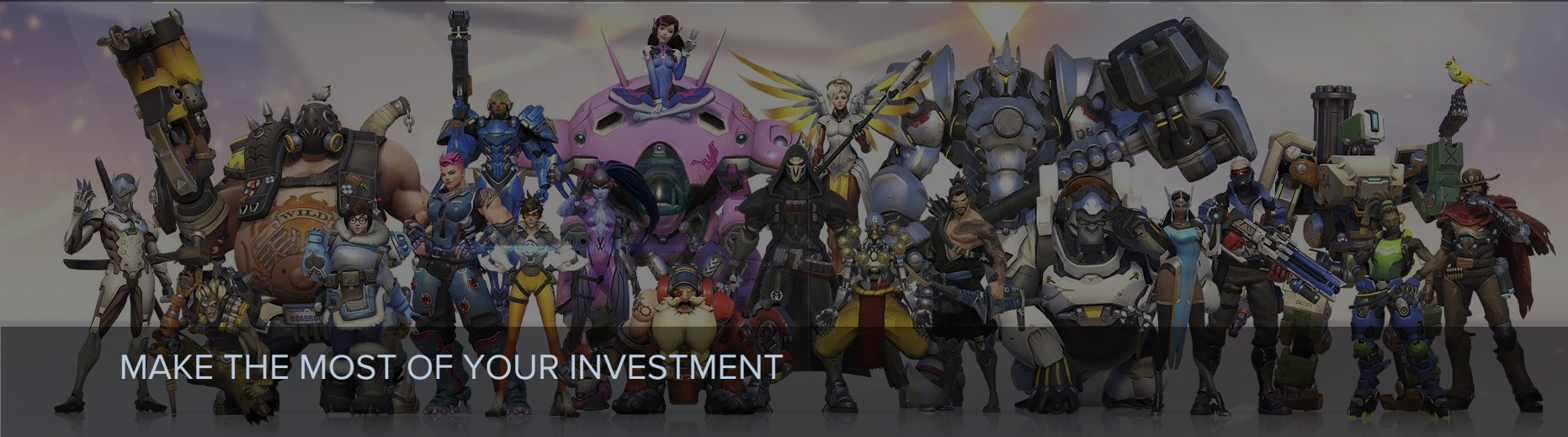
CS248 : PRODUCT DESIGN

FEB 2017

WHY WE'RE HERE

GREAT NEW PRODUCTS FROM THE NEXT GENERATION OF STANFORD STUDENTS



MAKE THE MOST OF YOUR INVESTMENT

PRODUCT SENSE IS SOMETHING TO BE EXERCISED

INTRODUCTION

STEPHEN LIM
LEAD OF R&D, RIOT GAMES

CLASS OF 2000, BS CS

FOCUS

FIND AND COMMIT TO YOUR NORTH STAR

SERVE ONLY THE HIGHEST QUALITY PRODUCT
PREPARE IT IN A CLEAN AND SPARKLING ENVIRONMENT
AND SERVE IT IN A WARM AND FRIENDLY MANNER

IN-N-OUT BURGER®

CHOOSE WHAT YOU WANT TO BE REMEMBERED FOR

ADD AND INCLUDE ONLY WHAT MAKES YOUR PRODUCT BETTER

USE ONLY WHAT YOU NEED TO GET THERE

THE CONCISE PITCH

THIS IS WHAT'S AWESOME

VALUE ADD / MISSION STATEMENT

EASIER TO REMEMBER

NECESSARY FOR ALL AUDIENCES
- JUDGES, INVESTORS
- CUSTOMERS, PLAYERS
- ACADEMIC PAPERS

- PRODUCTS
- STARTUPS

2D SIDESCROLLER: MECHANIC OF USING PREVIOUS DEAD BODIES TO PROGRESS.
3D FRUIT NINJA
HORROR SURVIVAL GAME: ESCAPE MONSTER ON A PROCEDURALLY GENERATED ISLAND
FIGHTING GAME: FIGHT AND ALSO COLLECT FALLING ‘ELEMENTS’ TO GAIN NEW SKILLS
DODGEBALL: OCULUS TOUCH
3D PUZZLE GAME: MOVE ALONG FACES OF CUBES
INFINITE TEMPLE RUN: DESTROY OBSTACLES WITH BALLS - RESOURCE: HP.
MOBILE GAME: DRAW DRACKS TO GUIDE OBJECTS FALLING DUE TO GRAVITY TO AN END GOAL.
ESCAPE THE ROOM STEALTH CHALLENGE
TRAVEL THE WORLD: MAIN MECHANIC IS TO CHANGE BETWEEN ANIMAL FORMS.
BALL ROLL TO AVOID OBSTACLES/HIT END GOAL
MULTIPLAYER “PORTAL” WAR: DEATHMATCH WHERE YOU SHOOT PORTALS AS A PRIMARY MECHANIC.
2.5D PLATFORMER: CONTROL 2 CHARACTERS AND HAVE THE ABILITY TO MERGE WORLDS
CYLINDRICAL PLATFORMER
VR GAME: SHOOT DOWN IMPENDING OBSTACLES, AVOID COLLISION, COLLECT AMMO.
CITY BUILDING GAME: ONLY FOCUS ON FREEWAY INTERCHANGES.
LOCAL MULTIPLAYER “BOXING” GAME
FISH CATCHING GAME USING FISHING NETS
COOPERATIVE VR GAME (E.G WORK TOGETHER TO MAKE PIZZA).
SKYSCRAPER TYCOON/MANAGEMENT GAME
VR SHOOTING GAME
STEALTH GAME WITH PLAYER REWIND ABILITY
RPG: COMBAT IS CONDUCTED VIA ORIGAMI FOLDS
MOBILE CARTOON SHOOTER
UNDERWATER VR GAME: SOLVE PUZZLES AND FIND TREASURE.
TAXI GAME: PICK UP PEOPLE AND BRING TO DESTINATION BUT ALL CARS TRYING TO RAM YOU OFF THE ROAD.
DEFINED TEMPLE BY ROTATING WALLS TO BLOCK INTRUDERS (INVERSE TEMPLE RUN)
MOBILE GAME: TAP BALLOONS BEFORE THEY REACH TOP OF SCREEN.
INTERACTIVE AR PICTURE BOOK
3D SIDE SCROLLER THAT USES MSPAINT TOOLS TO MANIPULATE THE WORLD TO SOLVE PUZZLES
MULTIPLAYER GAMES WHERE PLAYERS SHAPE THE TERRAIN

PRODUCT DESIGN

OPPORTUNITY

EXECUTION

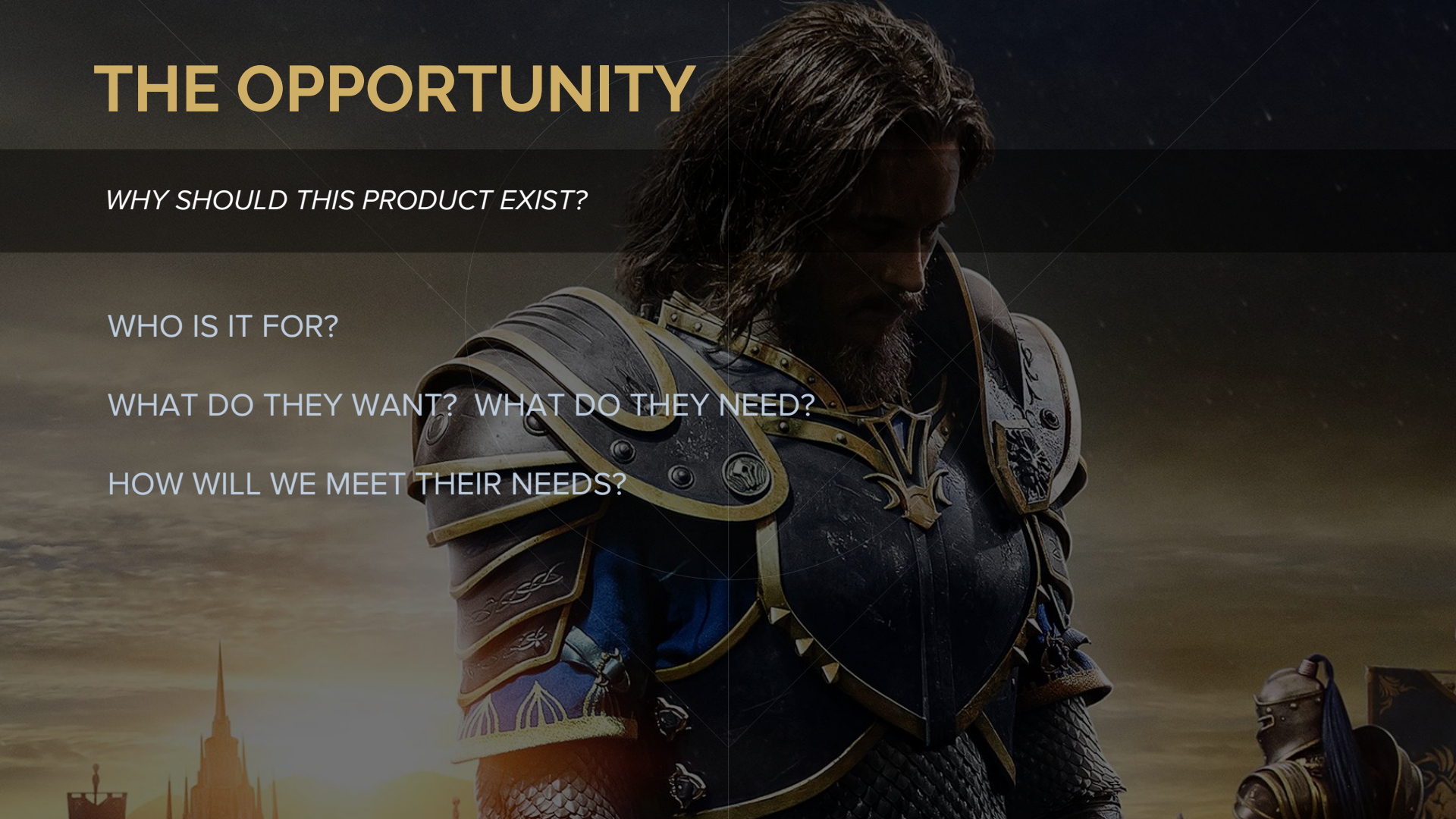
THE OPPORTUNITY

WHY SHOULD THIS PRODUCT EXIST?

WHO IS IT FOR?

WHAT DO THEY WANT? WHAT DO THEY NEED?

HOW WILL WE MEET THEIR NEEDS?



TESLA'S MISSION IS TO ACCELERATE THE WORLD'S TRANSITION TO SUSTAINABLE ENERGY.

WHY?

HUMANITY ON EARTH IS DOOMED AT OUR CURRENT RATE AND METHOD OF CONSUMPTION.

WHO IS IT FOR?

HUMANS

WHAT DO THEY WANT? WHAT DO THEY NEED?

COOL SHIT, MOAR POWER

TESLA

TESLA, INC

HOW WILL WE MEET THEIR NEEDS?

IMPROVE ENERGY PRODUCTION TO SUSTAINABLE METHODS

MEET HUMANS WHERE THEY CONSUME
- 18% COMMERCIAL, 21% HOUSEHOLDS, 28% TRANSPORTATION

HIGH QUALITY, DESIRABLE PRODUCTS
- $$$ TO $$ TO $

REDUCE COSTS
- GOVERNMENT SUBSIDIES, $ GENERATION / SOLAR CITY, GIGAFACTORY, AUTOMATED DRIVING

SPACEX
PLAN B

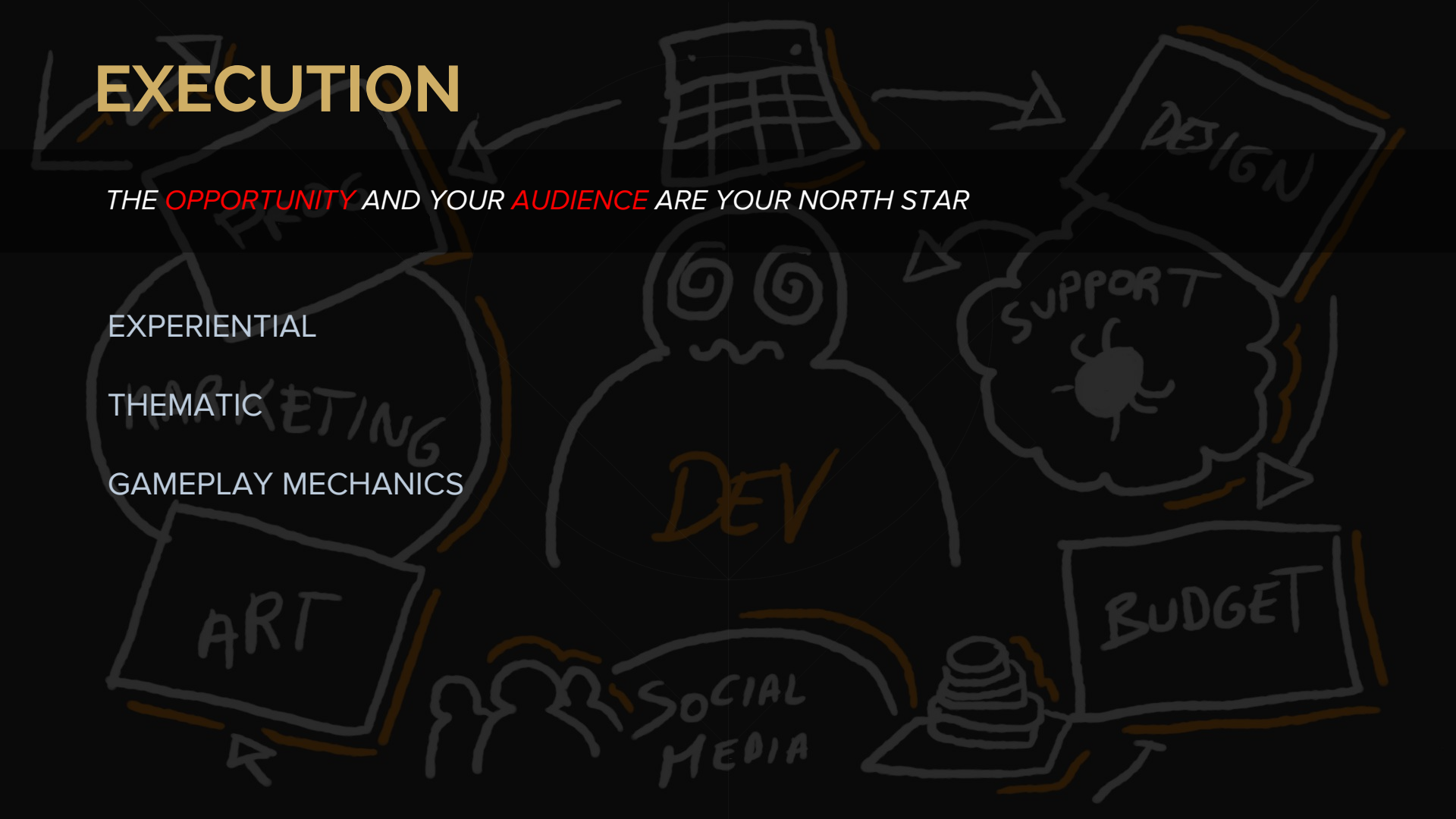
EXECUTION

THE OPPORTUNITY AND YOUR AUDIENCE ARE YOUR NORTH STAR

EXPERIENTIAL

THEMATIC

GAMEPLAY MECHANICS



EXPERIENTIAL

WHAT IS THE STORY THEY TELL?

COMPETITIVE?

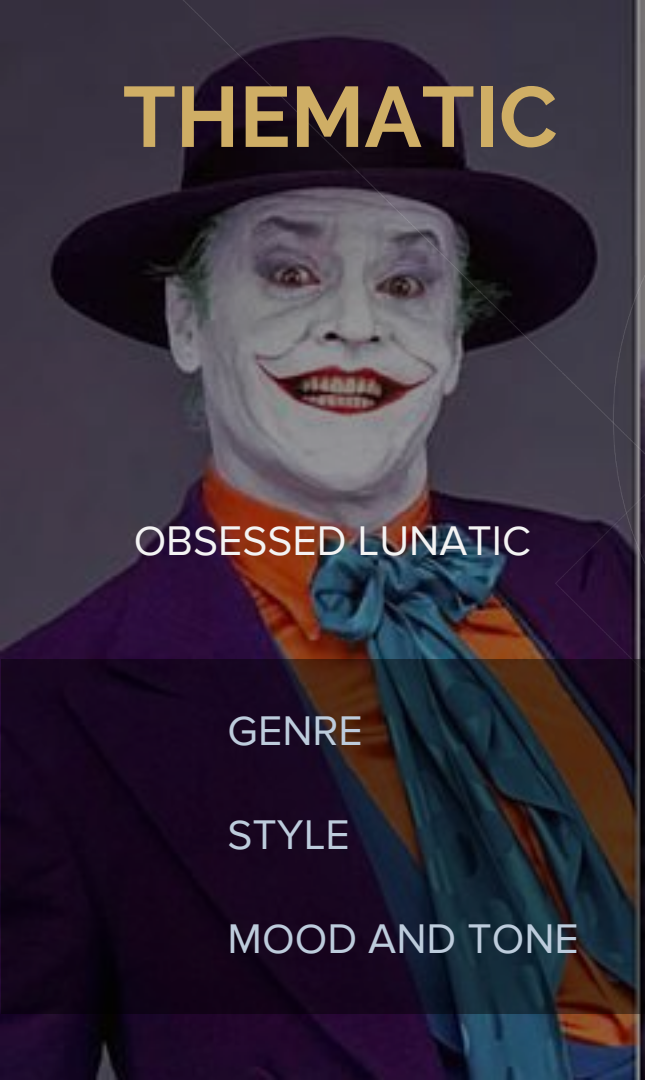
ACHIEVEMENT?

RANK?

HORROR / SURVIVAL / STRESS?

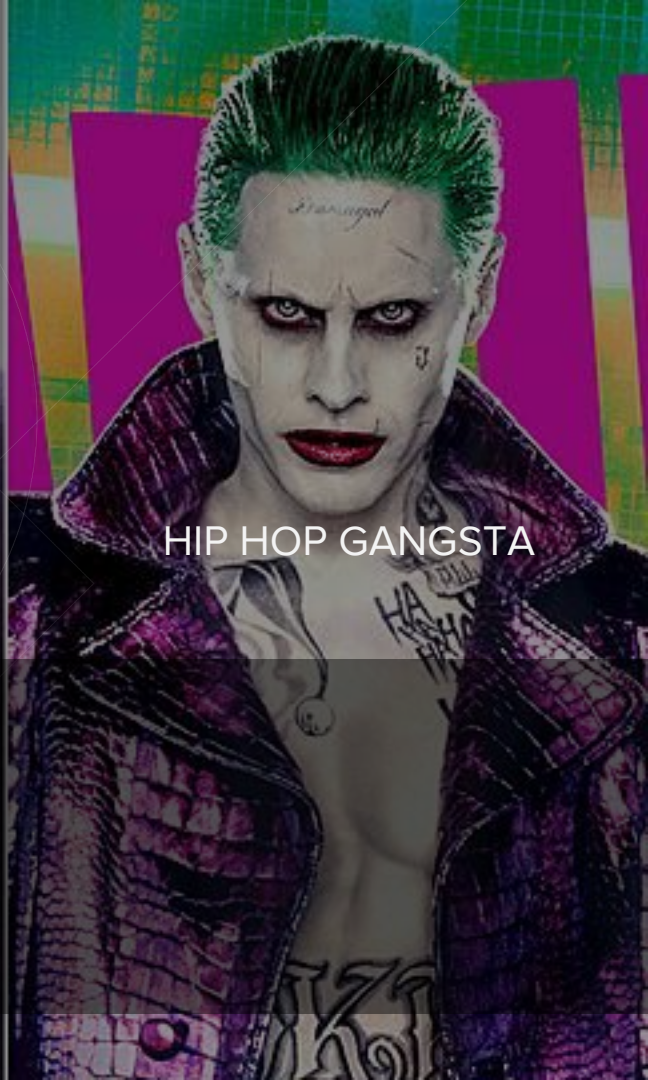
RELATIONSHIPS?

THEMATIC



OBSESSED LUNATIC

MENACING



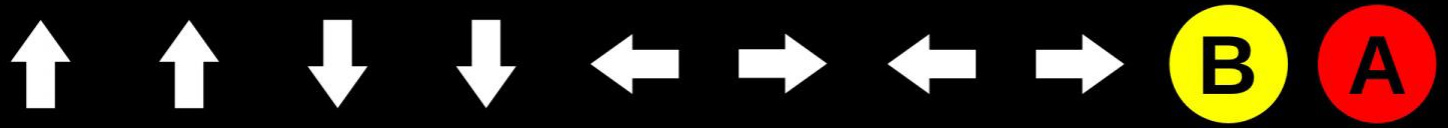
HIP HOP GANGSTA

GENRE

STYLE

MOOD AND TONE

GAMEPLAY MECHANICS



RUN, ROLL >> JUMP

MELEE / RANGED HIT

PHYSICS (ROLLING, FALLING, COLLISION)

LINE OF SIGHT (SHOOTING, BLOCKING, STEALTH)

BUILD / PLACEMENT / ORIENTATION

NUMBERS

FEEDBACK

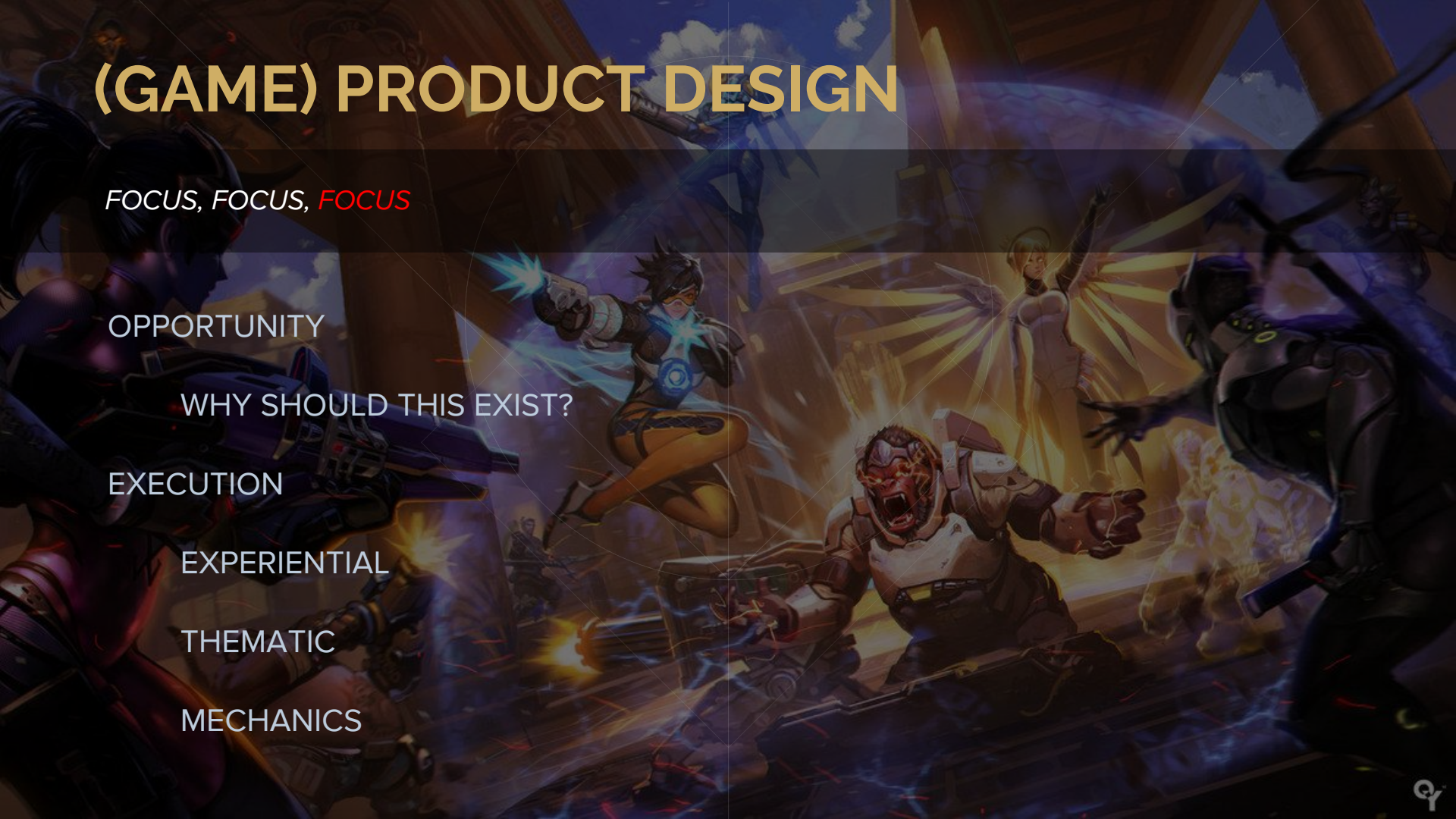
UI

AUDIO / VISUAL EFEFCTS

DEVICE / HAPTIC

(GAME) PRODUCT DESIGN

FOCUS, FOCUS, FOCUS



OPPORTUNITY

- WHY SHOULD THIS EXIST?

EXECUTION

- EXPERIENTIAL
- THEMATIC
- MECHANICS

PORTAL (2007, 2011)

3D PUZZLE GAME WITH PERSONALITY

THE OPPORTUNITY
EXTREMELY NOVEL PORTAL MECHANIC

THEMATIC
DYSTOPIAN, WITTY HUMOR

GAMEPLAY MECHANIC
PORTALS, JUMPING

~25 DEVS, ~9 MILLION COPIES @ $10, ~8.5 MILLION COPIES @ $10-20

INSIDE (2016) .

REVEALING, ARTFUL STORYTELLING

THE OPPORTUNITY
THOUGHT PROVOKING, ATMOSPHERIC STORYTELLING

THEMATIC
DYSTOPIAN, GRIM

GAMEPLAY MECHANIC
JUMPING, PULL / PUSH

~30 DEVS, 91 METACRITIC, NUMEROUS GAME AWARDS

AGAR.IO (2015)

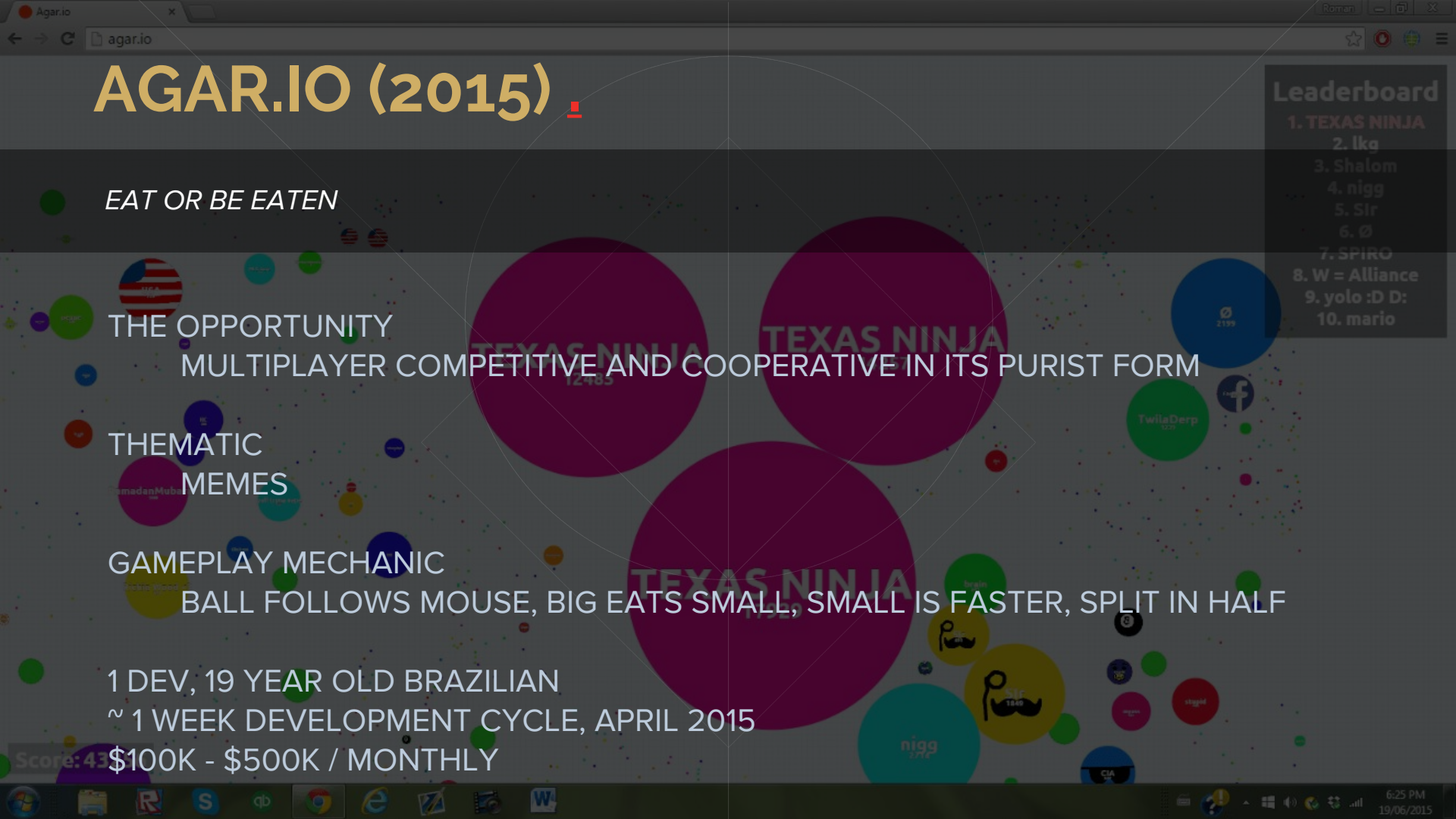
EAT OR BE EATEN

THE OPPORTUNITY
MULTIPLAYER COMPETITIVE AND COOPERATIVE IN ITS PURIST FORM

THEMATIC
MEMES

GAMEPLAY MECHANIC
BALL FOLLOWS MOUSE, BIG EATS SMALL, SMALL IS FASTER, SPLIT IN HALF

1 DEV, 19 YEAR OLD BRAZILIAN
~ 1 WEEK DEVELOPMENT CYCLE, APRIL 2015
$100K - $500K / MONTHLY



STARDEW VALLEY (2016)

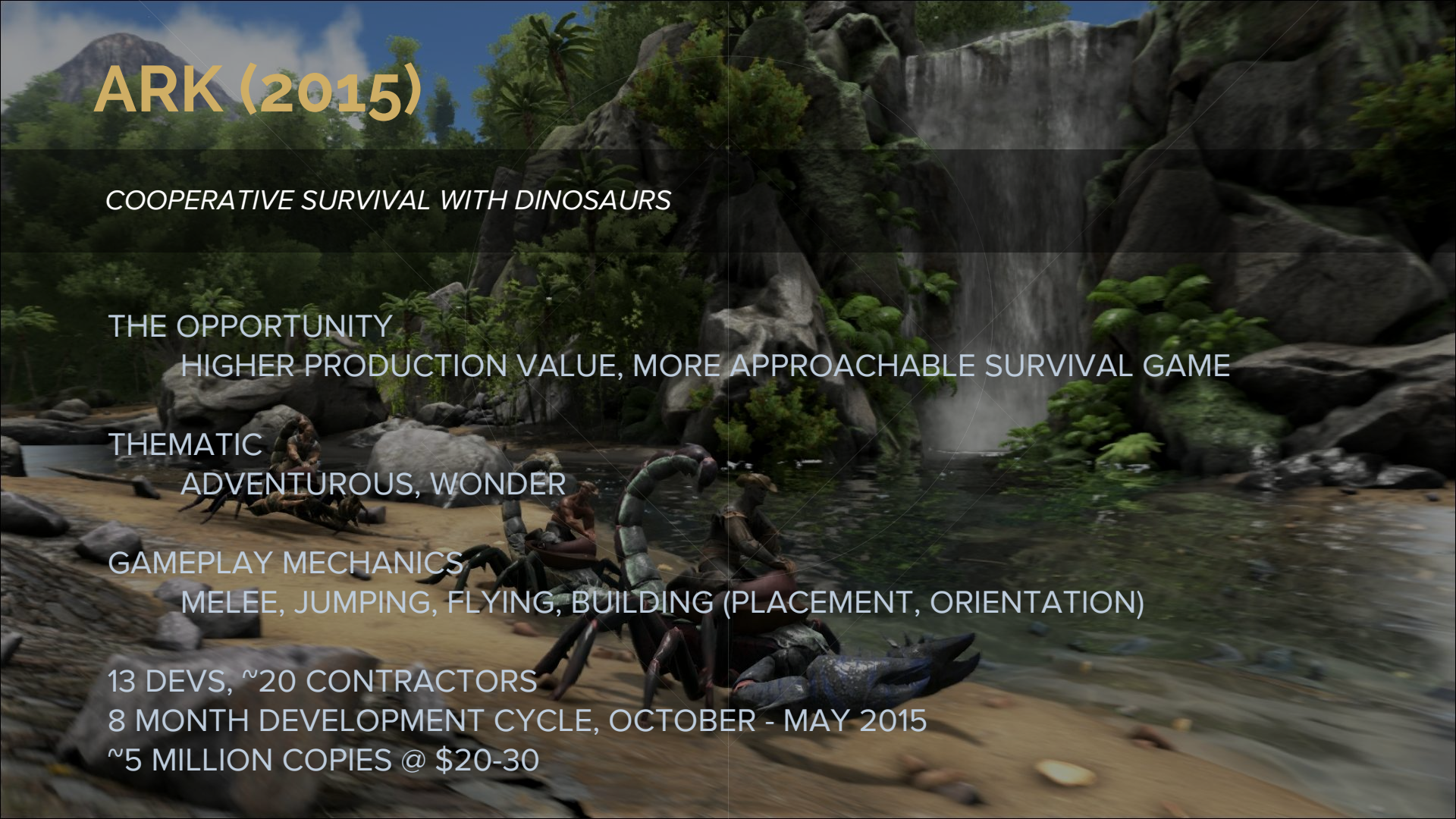
GROW, HARVEST, BUILD

THE OPPORTUNITY
FRIENDLY CRAFT AND COLLECT (HARVEST MOON) ON PC

THEMATIC
CUTE PIXEL NOSTALGIA

GAMEPLAY MECHANIC
MOVE, EQUIP, SWING

1 DEV, FRESH GRAD, 4 YEARS
2.5 MILLION COPIES @ $15



ARK (2015)

COOPERATIVE SURVIVAL WITH DINOSAURS

THE OPPORTUNITY
- HIGHER PRODUCTION VALUE, MORE APPROACHABLE SURVIVAL GAME

THEMATIC
- ADVENTUROUS, WONDER

GAMEPLAY MECHANICS
- MELEE, JUMPING, FLYING, BUILDING (PLACEMENT, ORIENTATION)

13 DEVS, ~20 CONTRACTORS
8 MONTH DEVELOPMENT CYCLE, OCTOBER - MAY 2015
~5 MILLION COPIES @ $20-30

CHIVALRY (2012)

VISCERAL, FIRST PERSON MELEE FIGHTING

THE OPPORTUNITY
- FIRST PERSON MELEE SKILL

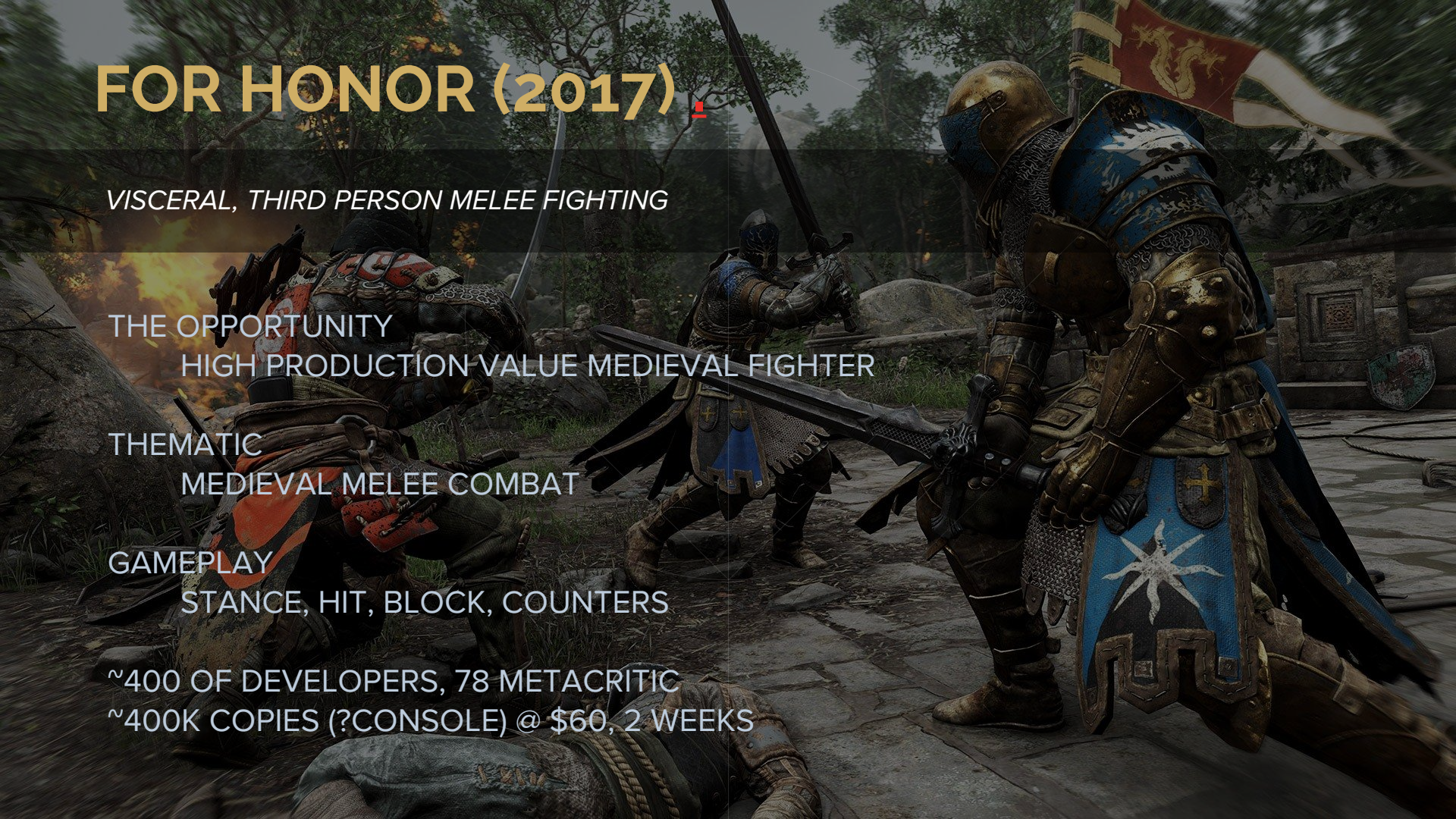
THEMATIC
- EUROPEAN MEDIEVAL

GAMEPLAY
- SWING SWORD, FACING, PARRY

~14 DEVELOPERS
~4 MILLION COPIES @ $15-25

FOR HONOR (2017)

VISCERAL, THIRD PERSON MELEE FIGHTING



THE OPPORTUNITY
- HIGH PRODUCTION VALUE MEDIEVAL FIGHTER

THEMATIC
- MEDIEVAL MELEE COMBAT

GAMEPLAY
- STANCE, HIT, BLOCK, COUNTERS

~400 OF DEVELOPERS, 78 METACRITIC
~400K COPIES (?CONSOLE) @ $60, 2 WEEKS

SIMCITY (2013)

COOPERATIVE BUILDER AND MAYHEM

THE OPPORTUNITY
MULTIPLAYER CITY BUILDER

THEMATIC
MODERN, CITY SIMULATION

GAMEPLAY
PLACEMENT, ORIENTATION, DISASTERS

~80 DEVS, 64 METACRITIC
~2 MILLION COPIES @ $40-60

CITIES SKYLINES (2015)

BUILD FOR THE SIMULATION

THE OPPORTUNITY
CITY BUILDER ON SIMCITY'S FAILURES

THEMATIC
BRIGHT, MODERN

GAMEPLAY MECHANIC
PLACEMENT, ORIENTATION

~13 DEVS, 85 METACRITIC
~3 MILLION COPIES @ $20-30

SMOOTH GAMEPLAY

ULTRA SETTINGS

CHERRY MX

MULTI-MONITOR

MODS

MOUSE ACCURACY

HIGH RES TEXTURES

DISCORD

144 HZ

4K

300+ F

slim@riotgames.com

RIOT GAMES