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TRACING THE ROOTS

Exploring the Skill System Design in Shooting Games

Bruce Wu
Senior Game Designer, LIGHTSPEED STUDIOS

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SPEAKER BIO:

Bruce Wu is a Senior Game Designer in LIGHTSPEED STUDIOS, leading the World of Wonder module in PUBG MOBILE (co-developed by KRAFTON, Inc.)

LIGHTSPEED STUDIOS

A LEADING GLOBAL GAME DEVELOPER

LightSpeed Studios is one of the world's most **innovative** and **successful** game developers, with teams across China, United States, Singapore, Canada, United Kingdom, France, Japan, South Korea, New Zealand and United Arab Emirates.

Founded in 2008, LightSpeed Studios has created over **50 games** across multiple platforms and genres for more than **4 billion registered users**. It is the co-developer of the worldwide hit **PUBG MOBILE** (co-developed with KRAFTON, Inc.).

LightSpeed Studios is made up of passionate players who advance the art & science of game development through **great stories, great gameplay, and advanced technology**. We are focused on bringing next generation experiences to gamers who want to enjoy them anywhere, anytime, across multiple genres and devices.

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PROCESS

PART.01 How to Define Game Skill Systems

PART.02 Analysis - Composition of Shooting and Skill Systems

PART.03 Designing - Building Shooting and Skill Systems

PART.04 Practice - Shooting & Skill System Implementation

PART.05 Validation - Shooting & Skill System Verification

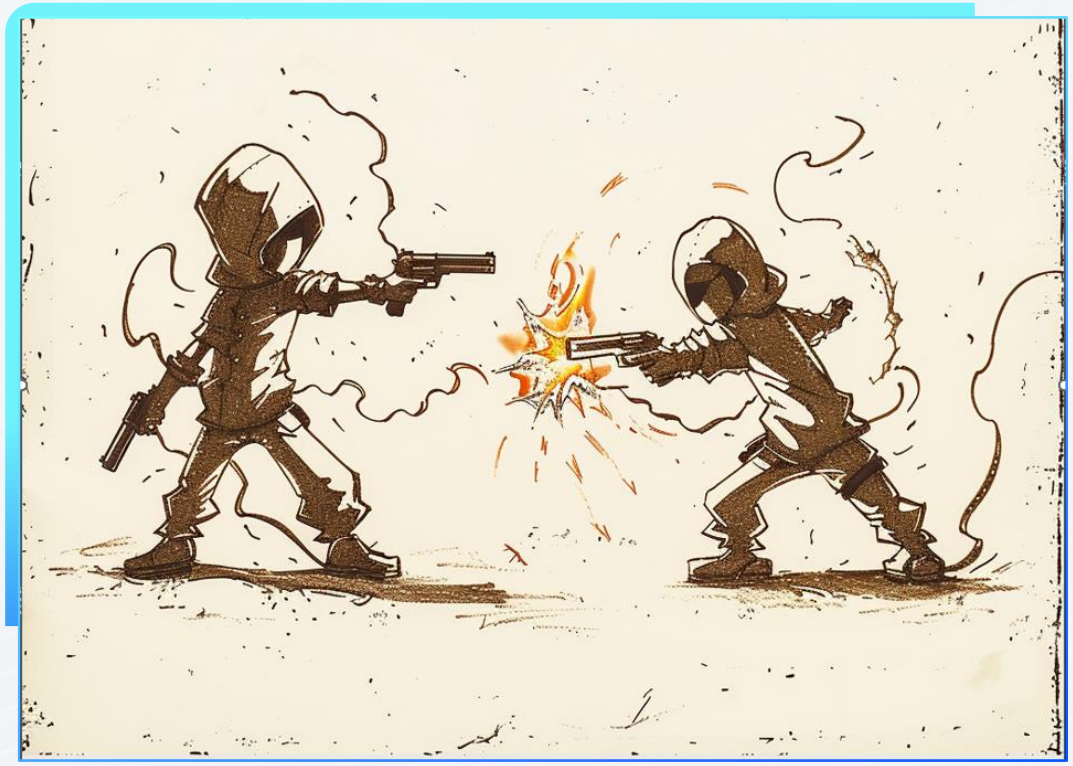
WHAT IS A GAME SKILL?

The way in which game actions result in the manifestation of attack, defense, support, and other skill logic mechanisms

Abilities related to role-playing game actions are divided into skill logic and skill performance

WHAT IS A GAME SKILL SYSTEM?

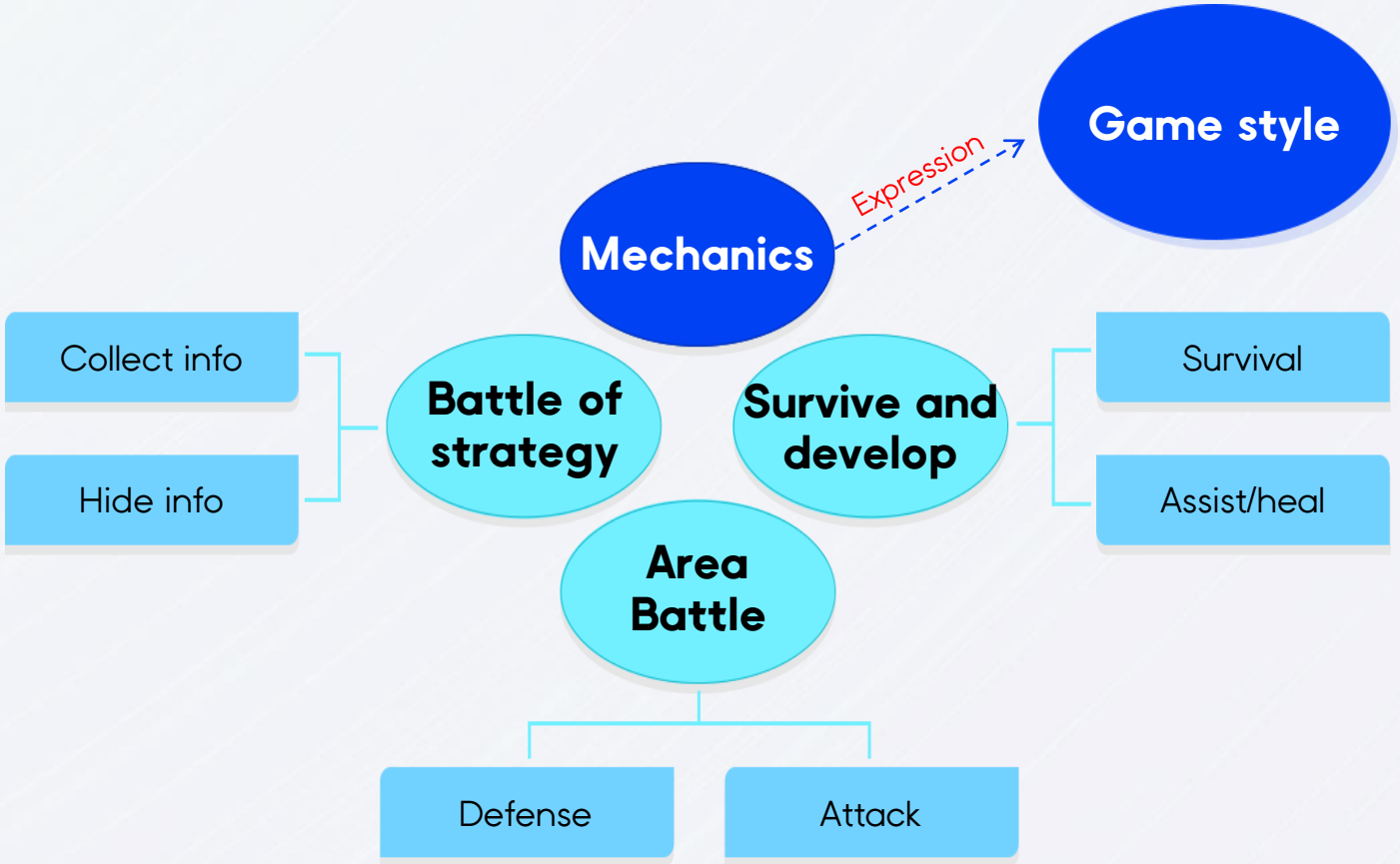
- Game Skill System: The combination of skill logic and skill presentation that aligns with specific gameplay behaviors, influenced by product features



FORMATION OF A SHOOTING GAME SKILL SYSTEM

- Analyzing the Skill Systems in Representative Shooting Games, Identifying the Constituent Elements of Skill Logic Mechanisms and Skill Expression Methods

Analysis of Representative Shooting Games



CLASSIFICATION AND COMPOSITION OF PRODUCT GAME FEATURE MODULES

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Game Skill System Matrix

	Skill Logic		Skill Performance	
Game Features	3C Operations (Camera, Control, Character)	In-Game Actions	Game Fundamentals	Game Metrics
	Distinctive Mechanisms	3C Operations (Camera, Control, Character)	Victory Rules	Combat Rhythm
		Level Scenes	World Background	Skill Effects

EXAMPLE:

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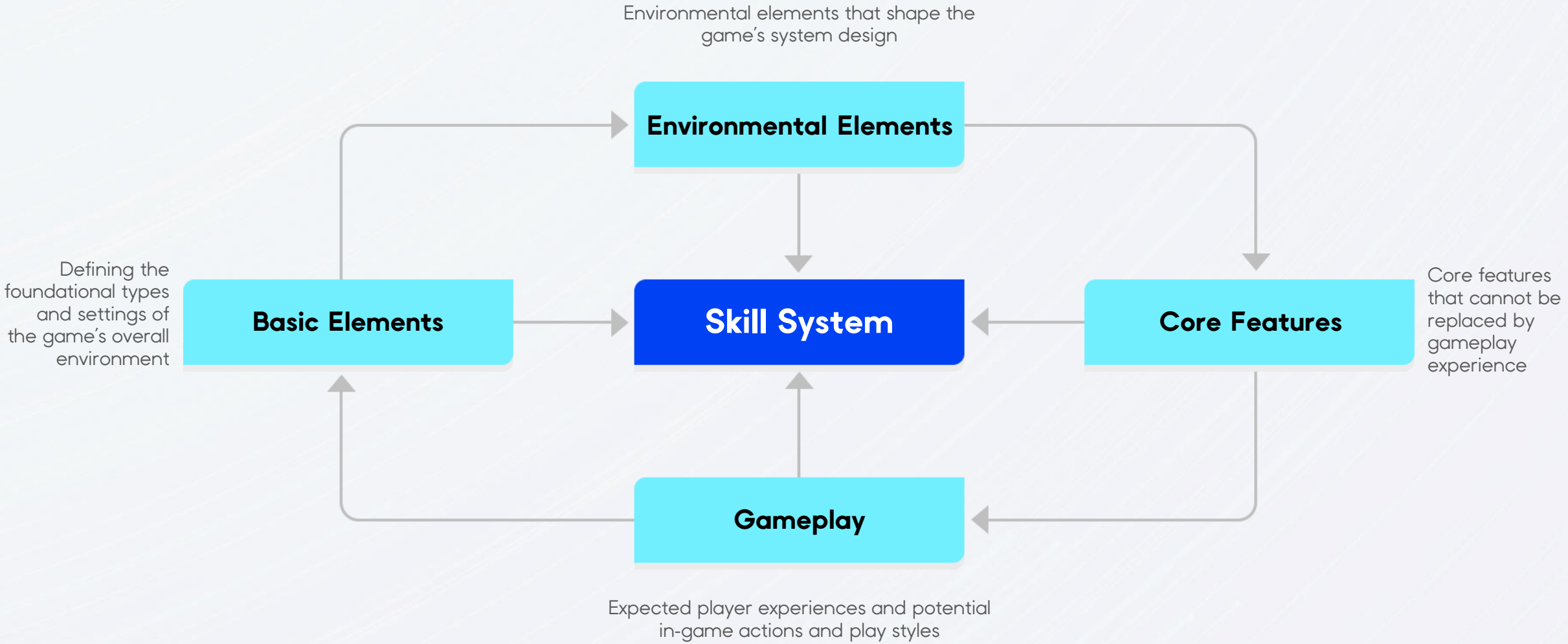
How can realistic BR be implemented using skills?

SYSTEM CONSTRUCTION: KNOWING WHAT TO DO IS MORE IMPORTANT THAN HOW TO DO IT



BR – CORE MECHANICS

- Entry: Random routes and the selection of landing spots
- Equipment: Start empty-handed and pick up equipment items
- Shrink the Circle: Migration to the safe zone is required
- Escape: Failure leads to elimination
- Drop: Elimination results in dropped items

SKILL FRAMEWORK: EXPECTED GAMEPLAY BEHAVIOR

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APPLICATION OF 3C CONTROLS & LEVEL SCENE STRUCTURE:

- Using ropes to reach the top of buildings
- Checking for enemies inside buildings
- Frontal protective shield

EXPECTED GAMEPLAY BEHAVIOR:

- Occupying advantageous terrain in buildings
- Encounters expected within groups of buildings
- Encounters in open areas and wilderness

PRODUCT FEATURE MECHANICS AND GAMEPLAY BEHAVIOR CONSTITUTE THE SKILL LOGIC FRAMEWORK

Identifying the key experiential aspects of the game

INFORMATION STRATEGY

Open-world map + rules for navigating territories + anticipated confrontations within buildings

- Scouting for intelligence
- Disrupting opponent's intelligence

SUSTAINED COMBAT

Outdoor survival challenges + mechanisms for moving to safe zones + consequences for failing to escape.

- Ensuring ongoing survival
- Implementing mobility strategies and ensuring protection

TERRITORIAL CONTROL

Coping with outdoor survival challenges + securing items within specific territories + strategies for safe zone relocation

- Establishing defensive positions within territories.
- Initiating offensive strategies to take control of territories.

Deriving the framework for skill mechanics

Exploration	Disruption	Fortification
Assault	Maneuverability	Protection
Rescue	Search	Survival
Stealth	? Features	

SKILL EXPRESSION METHODS: CLARIFYING THE FUNDAMENTAL ELEMENTS OF THE GAME

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GAME MODE & VICTORY RULES:

- Control game progression by shrinking the survival area.
- End the game when only one unit remains.
- Skill performance must stay within the boundaries of the rules.
- Players cannot exceed the shrinking circle or the only surviving application method.

TONE AND SET-UP OF THE WORLD:

- Realistic military setting.
- Skill expression tends to portray 'human physical limits' or realistic equipment

SKILL EXPRESSION METHODS: ORGANIZING GAME ENVIRONMENTAL ELEMENTS

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"TIME-TO-KILL" (TTK)

- Short TTK means quick, impulsive battles
- Environment for skill usage
- Tendency towards strategic deployment outside combat
- processes

PROPORTION OF SKILL EFFECTS

- Percentage of shooting
- Effectiveness of skill impact
- Whether it affects damage

SYSTEM CONSTRUCTION: THE COMPOSITION OF THE SYSTEM IS DETERMINED BY THE GAME FEATURES

Presentation medium

Expressed in a realistic military manner

Fundamental principle

Cannot interfere with the winning rules and game progress

Skill application environment

Open area & local building offense and defense

Effect of the skills

Supportive effect & not directly involved in damage

Skill application method

Strategic deployment outside of combat

Skill growth potential

Numerical expansion of survivability

Skill expression method

The visual aspect of skills in the game

Skill mechanism

User behavior in the game

FOCUSING ON THE DESIGN METHOD OF 'POSITIONING'

- **Q1 :** How to design the "Scouting" information mechanism as the core experience?
- **Q2 :** How to place designated locations for the "Scouting" of area information as the core experience?

SCOUTING

Obtaining information about a specific area/character through a certain method within a limited time frame

DETAILING EACH LAYER OF THE CORE MECHANICS

Core Experience: "Scouting" Information Mechanism

- Scouting Subject: Drone/Rover/Device/Creature/Self/?
- Mobility: Fixed/Mobile
- Control: Autonomous/Manual/Fixed Route
- Information Marking: Target Information Labeling
- Area Range: Direction/Self Coverage
- Penetration: Ignore Obstacles/Obstructed
- Duration: One-time/Interval/Duration
- Destruction: Destructible/Indestructible
- Priority: Scouting Priority (Interference Influence - e.g., smoke interference)

DETAILS OF SKILLS ARE DERIVED FROM CHARACTER FEATURES

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Reverse-engineering the core mechanics through character construction elements, refining core features through a layer-by-layer 'positioning' approach

BIOLOGICAL FEATURES	INNER FEATURES	EXPERIENCES	SOCIAL CONNECTIONS	TAGS
Shape: skinny, agile	**Characteristic**: sensitive, insecure	**Growing path**: orphan, not accepted by others, immersed in the internet	**Relatives**: half brother	**Items**: drone
Name: 凌一	**Habits**: computer, gaming	**Key events**: Hacked the World Bank in 1min36s	**Organization**: Top hacker organization	**Creatures**: lizard
Nickname: ghost	**Talents**: Superior IQ		**Relationships**: Real brother is beefed in internet	
Professions: hacker				
Ability: coding				

Key elements: Insecure personality、top hacker、drone
Core feature: Aerial surveillance for self-range detection

- Scouting Subject: Drone/Rover/Device/Creature/Self/?
- Mobility: Fixed/Mobile
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FINALIZING THE DESIGN BY INTEGRATING FEATURES AND GAMEPLAY

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'Positioning' potential gameplay scenes, predict following derived skill functions, finalize skill system

- **Searching resources in buildings**
- **Securing the translocation**
- **Taking advantage in local combat**
- **Limitation in using drone?**
- **Any expansion of drone?**
- **Other supportive function of searching**

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- **Expansion: Share info with team**
- **Buff defects: more function of drone**
- **Competition: disturb searching from enemies**

- The aim of skill system is for more fun
- The design is not making a logic list of skill
- A complete design of skill system requires a comprehensive accordance of gameplay during each play stage for distinct scenes

VERIFICATION OF GAMEPLAY EXPERIENCE

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Application Perception

How to use skills effectively:

- How to effectively convey the player's perception?
- Understanding how to use it?
- When is the best time to use it?

Role in Gameplay Mechanics & Flow Experience

More about skills:

- What role do skills play?
- Are the skills uniquely designed, and can their core features be replaced?
- Are the skills the only solution, and are they replaceable in terms of positioning?

Core Player Enjoyment

Enhancing the depth of gameplay through skills:

- Shooting type skills are designed with a clear function, providing intuitive feedback to users.
- After experiencing the game, is there continuous improvement in operational skill dimensions?
- After experiencing the game, is there continuous enhancement in the combination of gameplay content?

SUMMARY

01

ANALYSIS
THE COMPOSITION OF SKILL SYSTEM

Extracting the Constituent Elements of Skill Logic Mechanisms and Skill Expression Methods derived from game features

02

DESIGNING
CONSTRUCTION OF SKILL SYSTEM

Building key components from game mode and skill-derived modules, eventually shaped by game mode features

03

PRACTICE
IMPLEMENTATION OF SKILL SYSTEM

Polishing the constructed skill system through positioning guidance, employing a layer-by-layer method to anchor the complete skill system

04

VALIDATION
VERIFICATION OF EXPERIENCE

Enhancing the game through the flow system, gaming feedback, and improvements in game depth

TEAM

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THANKS FOR YOUR ATTENTION