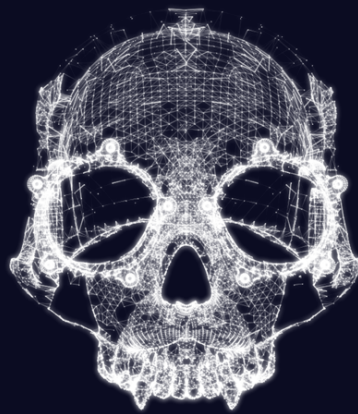


# The War Paper v1.1

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<https://warriders.com>

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## 1. Abstract

War Riders™ is a next generation, post-apocalyptic MMO strategy game of mining (collecting) cryptocurrency and blowing up cars. The game revolutionizes blockchain asset trading by introducing the first ever, in-game item marketplace truly owned by its users.

**War Riders is reimagining the nature of MMO gaming** by providing a platform where users rest assure their hard-earned loot crates and virtual gold/coins are safe. At the heart of this is Benzene (BZN) – the only form of payment left to trade in the Wasteland. Players discover BZN waypoints in the Wasteland and fill up their tanks with the valuable resource. In order to redeem BZN, the players have to bring what they've collected back to their garages without being shamelessly robbed on the way home. Benzene will be used to buy better guns, additional garage spaces, armor, nitro-boost, and it can also be exchanged for other virtual currencies.

**The purpose of the game is to become the most powerful army** in the Wasteland. Strong armies are able to provide protection to newbies for payment; this creates a steady revenue stream for the owner of the army. The more vehicles and garages you own, the stronger your position is in the game. The game starts when players assemble their very own post-apocalyptic vehicles and prepare for war. Every vehicle represents a unique, immutable piece of record on the public blockchain. Vehicles, guns and other assets may be traded between players using our native War Riders marketplace or any other marketplaces.

**The War Riders Marketplace** allows users to trade in-game items freely without transferring the item to the third party marketplace contract. It allows its users to swap all sorts of in-game items to make the experience even more fun!

**The game was developed by Cartified™** – a US software company founded in 2015 and headquartered in Washington DC. The purpose of this whitepaper is to provide a general overview of War Riders. This material is provided solely for educational purposes and may not be considered as an investment offer. Although War Riders will issue its own fungible token on the Ethereum blockchain, no ICO will be conducted and the tokens will be released during the in-game “human mining” process, thus ensuring a fair distribution.

**The early version of this paper is intentionally high level** and non-technical to prevent similar games from appearing before the official release of War Riders. The smart contract code will be open-sourced and publicly available for audit as we progress.



## 2. Introduction

Blockchain technology is a distributed ledger that may be used to record almost anything – including in-game items, skins, and other assets we have to offer. Blockchain is tamper-proof, immutable technology making it impossible for anyone to cheat the system. The newly introduced, non-fungible token standard on the Ethereum blockchain (ERC-721) allows the unique asset ownership to be recorded and safely transferred between individuals. ERC-721 is a token similar to Bitcoin and Ether with one major exception – it stores metadata. The NFT (non-fungible token) can neither be divided nor duplicated; this characteristic makes it an interesting instrument for various sorts of asset ownership.

For years, big-game publishers have been able to “print money” in virtual MMO gaming economies, and all in-game items and currency reside on their servers. Players spend hours earning precious in-game gold, only to come back a few weeks later discovering how much the gold depreciated since the last time they logged in. Due to inflation, the player now has to earn 10 times more gold to keep up.

Games that are free to play generate great amounts of revenue. According to SuperData, mobile games were the biggest revenue generator within the 2017 gaming market accounting for 55% of total market share, while PC games accounted for 30%. Both PC and mobile sectors were driven by “free-to-play” games, ultimately generating \$82 billion in revenue, demanding 89% of the market, and attracted 2.5 billion players.

For decades, it has been impossible to trade in-game items and currency outside of the game's native trading platform. These platforms usually demand a hefty commission and are regulated by central authority (the game publisher). For instance, Steam marketplace (owned by Valve corporation) charges a hefty 15% commission on all sales through its marketplace.

In addition, fraud is a very common event in the virtual goods market. This leads solely to profit-driven, segregated, and centralized trading platforms. Because of this, there is always a risk of complete platform shutdown, causing your hard-earned goods to immediately be worth nothing.

These unfortunate faults have disappointed players for years, but things are about to change. For the first time in history, we are creating a truly decentralized economy around the War Riders Marketplace - players will soon feel secure for their virtual worlds and all assets within. This blockchain technology presents a unique opportunity to exchange items between games and trade them freely within the decentralized marketplaces - ultimately avoiding the dreaded game publisher. Because of this, gamers worldwide are showing great interest and excitement in this new technology and all it entails. Big gaming companies have serious competition emerging; if they are unable to adapt, their market share will surely decline. This technology is what War Riders is being built on, and we couldn't be more excited.

### 3. Market Overview

#### 3.1. Global Gaming Market

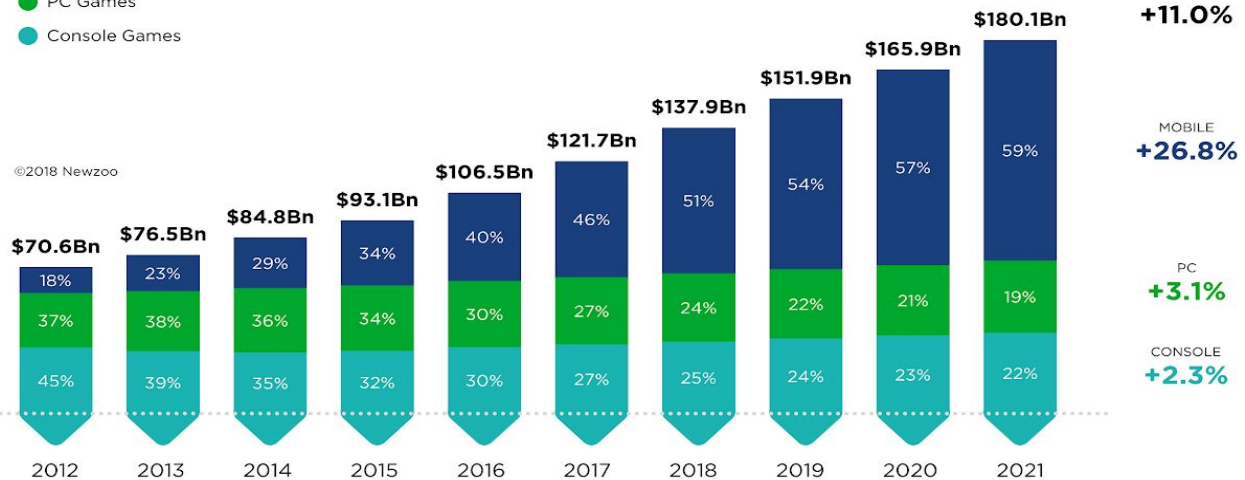
The video game industry is rapidly growing. According to Newzoo's Global Games Market Report, 2.3 billion gamers across the globe will spend \$137.9 billion on games in 2018. This represents an increase of +13.3% from the year before, or \$16.2 billion. Newzoo is forecasting mobile gaming to be a 100-Billion-Dollar Market by 2021.



## 2012-2021 GLOBAL GAMES MARKET

REVENUES PER SEGMENT 2012-2021 WITH COMPOUND ANNUAL GROWTH RATES

- Mobile Games
- PC Games
- Console Games



Source: ©Newzoo | April 2018 Quarterly Update | Global Games Market Report  
newzoo.com/globalgamesreport

newzoo

Fig.1 Global Gaming Market Report (Source: Newzoo)



In a little less than 10 years, mobile gaming will have grown from the smallest segment in 2012 to a massive 100-billion-dollar industry by 2021. By then, smartphone and tablet games combined will generate 59% of revenue in the entire gaming market. Newezoo also reports that though the rise of mobile gaming is at an all time high, it has not significantly cannibalized revenues from PC or console gaming.

In 2011, a study released by Parks Associate indicated a surge in the global gaming population which greatly contributed to the rapid growth rate of the gaming industry overall. The number of U.S. consumers who play at least one hour of video games per month increased from 56 million in 2008 to 135 million in 2011 (Online gaming and digital distribution, Parks Associate). With hardware and network infrastructure becoming ever more accessible, Parks Associate expected a continuous growth of the gamer population base, and they couldn't be more right.

### **The Number of U.S. Gamers increased 241% from 2008 to 2011**

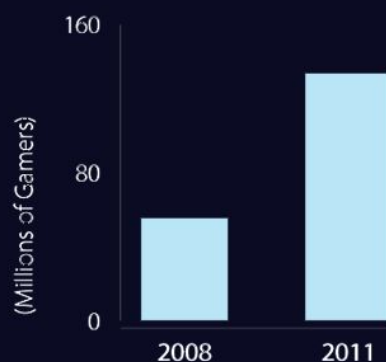


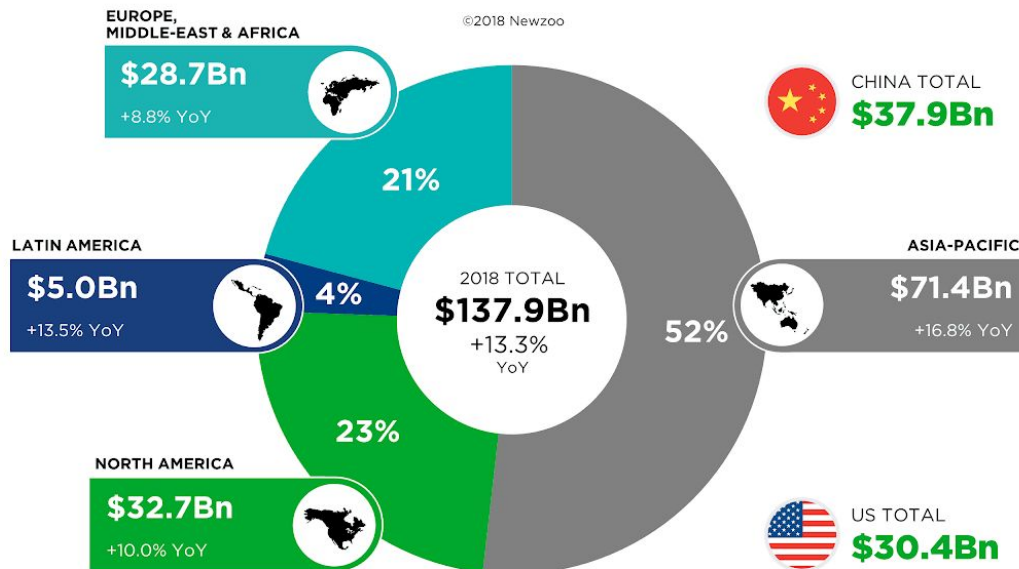
Fig.2 Parks Associates study in 2011 (Source: Parks Associates)

Globally, the Asian-Pacific market represents more than a half of the global gaming market. It is projected that the APAC territories will generate \$71.4 billion in 2018, or 52% of total game revenues. This represents a +17.0% year-on-year increase, nearly all of which is attributable to mobile.



## 2018 GLOBAL GAMES MARKET

PER REGION WITH YEAR-ON-YEAR GROWTH RATES



Source: ©Newzoo | April 2018 Quarterly Update | Global Games Market Report  
newzoo.com/globalgamesreport



In 2018, almost

# 28%

of all consumer spend on games will come from China

**newzoo**

Fig.3 Global Gaming Per Region (Source: Newzoo)

The APAC territories are a primary driver of continued growth for the gaming industry. The number of smartphone users in emerging markets such as India and

Southeast Asia grows exponentially every year, and at the same time, the willingness to spend on mobile games grows in more established markets like China and Japan.

North America is the second-largest region with estimated revenues of \$32.7 billion in 2018, a year-on-year increase of +10.0%. Most of this growth will come from smartphone and console gaming.

### **3.2. Blockchain Gaming Market**

The blockchain gaming and tokenized in-game assets industry is still in early stages, but it is important to note the rapid growth. CryptoKitties was the first to introduce the non-fungible token at the end of 2017. CryptoKitties is a game of breeding virtual cats on the Ethereum blockchain that became so popular in December 2017 that it slowed down the network. At that time, CryptoKitties accounted for over 20% of all the Ethereum transactions.

CryptoKitties generated about 45,000 ETH (25 million USD, ETH=\$550) in sales and commissions as of April 2018. According to research performed at Cartified, from December 2017 to March 2018, the top 10 blockchain games generated approximately 200,000 ETH in revenue (110 million USD at the moment, ETH=\$550). This represents a monthly growth rate of roughly 44.83%.

Our studies show that the blockchain gaming market will grow by a at least 25% CMGR for next 12 months. As of June 2018, dappradar.com indicates more than 600 games are currently live on the Ethereum blockchain (<https://dappradar.com/dapps>). This does not account the thousands of games still

in research and development. We expect blockchain gaming applications, as well as those that use tokenized assets, to continue growing its total share in the global gaming market.

### **3.3. Blockchain Gaming Problems**

It is important to note that shortly after CryptoKitties was introduced, a handful amount of “copycats” (Purr) arrived to the market offering “crypto-collectible games” consistent of trading virtual images over various platforms. Many games that are currently deployed on the Ethereum blockchain fall under the collectible category. Most of these games have limited player actions, and while considered novel, a lot of players report them as boring.

Part of the difficulty in developing an interactive game entirely on the Ethereum platform (or other blockchain for that matter) is that every decision the user makes represents a unique transaction and demands a transaction fee (which can sometimes be as high as \$5-20 USD). Because of this, a game with a higher degree of freedom becomes more expensive to play; this is the main reason why most crypto games have been considered static in playstyle.

### **3.4. Digital Goods Monetization**

In september 2017, a South Korean gaming service provider, Nexon, bought out KorBit (valuing it at just over \$120 million) in order to integrate their in-game assets

with blockchain technology. (Techcrunch) Many digital assets that exist on traditional MMORPG are traded with cash, and game developers believe they can further secure the “realness” of these virtual assets by saving it onto a blockchain and allowing it to be traded. The spread of ERC721 represents a meaningful step forward in this direction. Cartified intends to be a leader in this area by creating a truly interactive game with tradeable in-game assets represented in ERC-721 and ERC-20 tokens.



## 4. War Riders Game

### 4.1. Game Overview

The goal of the game is to become the strongest and wealthiest army in the Wasteland. Players build their very own war vehicles using custom style parts and installing powerful weapons. In addition, every vehicle comes with a garage that may be customized and later upgraded. The vehicles “mine” the game’s native cryptocurrency called Benzene by driving through the Wasteland and discovering tokens. The tokens appear in random locations and have to be brought to the player’s garage in order to be redeemed. The Benzene token is used to purchase guns and ammunition, build additional garages, or simply upgrade the ones that already exist. BZN can also be used to purchase armor or nitro-boost and exchanged for other virtual currencies.

Players can choose to boobytrap or intercept other players and perform a shameless robbery. In this case, the offender’s guns will be fired and the victim must either surrender, hide in the nearby garage, or die on the battlefield (dying will result in losing all Benzene and a temporary freeze). While building an army, experienced players may rent out their garages to newbies seeking protection.

All vehicles and guns belong to the players and are not stored on the company’s servers. The items can be freely traded between the players using our built-in War Riders marketplace. Certain vehicles and guns are rare and will only be released as limited edition assets during challenges and campaigns. The Benzene

token has a deflationary mechanism meaning 30% of tokens from each transaction is burned every time a player makes a purchase from the War Riders store.

#### **4.2. Game Access**

Unlike traditional games, in order to play War Riders, players must purchase vehicles and weapons in order to participate in the game. Vehicles and weapons will be available at the War Riders store, and each player needs at least one vehicle to participate.

#### **4.3. Car Modification and Ad Revenue**

The customization of the vehicles in War Riders will happen in beautiful 3D right in your desktop or Ethereum-compatible mobile browser (such as Cipher). In fact, we expect our players to enjoy this process as a part of their preparation for the apocalypse.

The players will be able to customize the color, body parts, wheels, guns, install additional equipment and put the personal message (logo) of the vehicle. We expect other blockchain companies and beyond to advertise on the vehicles (as some expressed interest) which can bring an additional revenue stream for the gamers. Isn't it fun to blow up advertisers? :-)

All the garages in the game will be expandable and also have a personalized messaging attached.



#### **4.4. Garage Renting**

If the vehicle is under threat of attack, the player can choose to hide the vehicle in a nearby garage; however, the player's personal garage may not be in close proximity to the vehicle's current location. In this case, the player may choose to rent the closest garage that belongs to another user, but only if the garage has an empty spot and is offered for rent. Players who offer garages for rent are in complete control of the prices. The rent price can be fixed, adjusted dynamically, or operate according to a set schedule. Once the garage is rented out for a certain period of time, a smart contract will be executed between parties which simulates a real world rental contract. When this takes place, the owner of the garage may not cancel or revoke access to the garage until the rental contract expires. Players renting these spots may choose to come and go as often as they like during this time.

#### **4.5. Attack Mechanism**

In order for a vehicle to execute a successful attack on another, the attacker must be within its weapon's firing range. In addition, the gun must have the necessary power to take down the victim's vehicle, as the victim may be armored with a bulletproof body. The vehicle that is being attacked will have a chance to surrender, purchase a one-time shield or nitro-boost, fight and defend, or hide in a nearby garage. If the attack is successful, the offender takes all Benzene carried by its victim.



#### **4.6. Guns, Power, and Ranges**

The guns and armor in War Riders are always improving. General characteristics of the guns include:

- *Range or how far the gun may shoot.*
- *Power or the level of damage the weapon will cause.*
- *Type of ammunition: bullets, rockets, grenades, flamethrowers, etc.*
- *Possibility of critical damage to the opponent*

Certain guns will only be available for purchase using Benzene and will be released in a limited amount. For example, War Riders may introduce a “gun of the week” which will be released in a limited quantity (1,000 guns) and will be sold for Benzene in the War Riders store for a period of one week only. After that period of time, this gun can only be purchased from other players in our marketplace for ETH.

#### **4.7. Merchandise Transfer to Other Users**

Each player can freely trade any vehicle/gun/garage asset with other players in the game using our built-in War Riders marketplace. Similar to games like CS GO, our game’s central authority is replaced with a decentralized public blockchain. When the player knows the item is unique and immutable, the virtual asset may be transferred in and out of games without any restrictions. The distributed ledger also makes it possible for gamers to use their characters and items throughout multiple

games with interlinked environments. This raises the functional value of those in-game items and provides us with a unique opportunity to create an entire ecosystem of different games without having to share a server or connect to a third party API provider.

#### 4.8. Hybrid Chain

In December 2017, CryptoKitties slowed down the Ethereum network because people were breeding virtual cats on the main Ethereum blockchain. The transactions were slow and expensive, and though it sounds silly, it upset many users. This occurrence pointed out very significant scalability issues within the Ethereum network. The Ethereum foundation is reportedly working on a potential scalability solution (such as considering shifting to the proof of stake).

A game that requires thousands of transaction per second is simply impossible and economically unviable to build using the current implementation. Because of this, we have invested significant resources into testing the hybrid chain solution with a **dedicated game side chain**.



Fig.4 Hybrid chain

Players will be able to enjoy War Riders at significantly faster transactional speeds compared to the current implementation of the Ethereum network. All in-game items are enforced by the Ethereum mainnet for maximum security. Players «deposit» their in-game items and currency in the state channel in order to play the game. The items can be “withdrawn” to the mainnet at any point in time.

## 5. The Marketplace Owned by its Users

We are proud to introduce an innovative marketplace technology that allows our players to trade all the in-game assets in a trustless manner, without having to transfer the items to a third party marketplace. The War Riders marketplace was introduced by the CEO Vlad Kartashov at the Booz Allen Hamilton innovation center at the end of May 2018. You can watch the video here:



### 5.1. Background

Most of the marketplaces today are very centralized in their nature. Emerging crypto-asset marketplaces that utilize smart contract technology are forcing users to transfer crypto-assets (NFTs) to their marketplace contract in order to buy the in-game items for sale. This means assets are actually leaving the user's wallet. While the item is listed for sale, the player cannot use it in the game, show it off to his/her friends, or offer it for sale concurrently someplace else. This limits the gamer's freedom

to use their in-game items simultaneously across different resources. In addition, there is currently no trustless way of swapping non-fungible tokens with users (like swapping a kitty for a car or vice versa). Such structure creates a single point of failure, like if the owner of the marketplace gets hacked, all items can potentially be stolen from the contract. According to the Coindesk's Q4 2017 State of Blockchain report, the crypto community is very confident in decentralized exchanges:

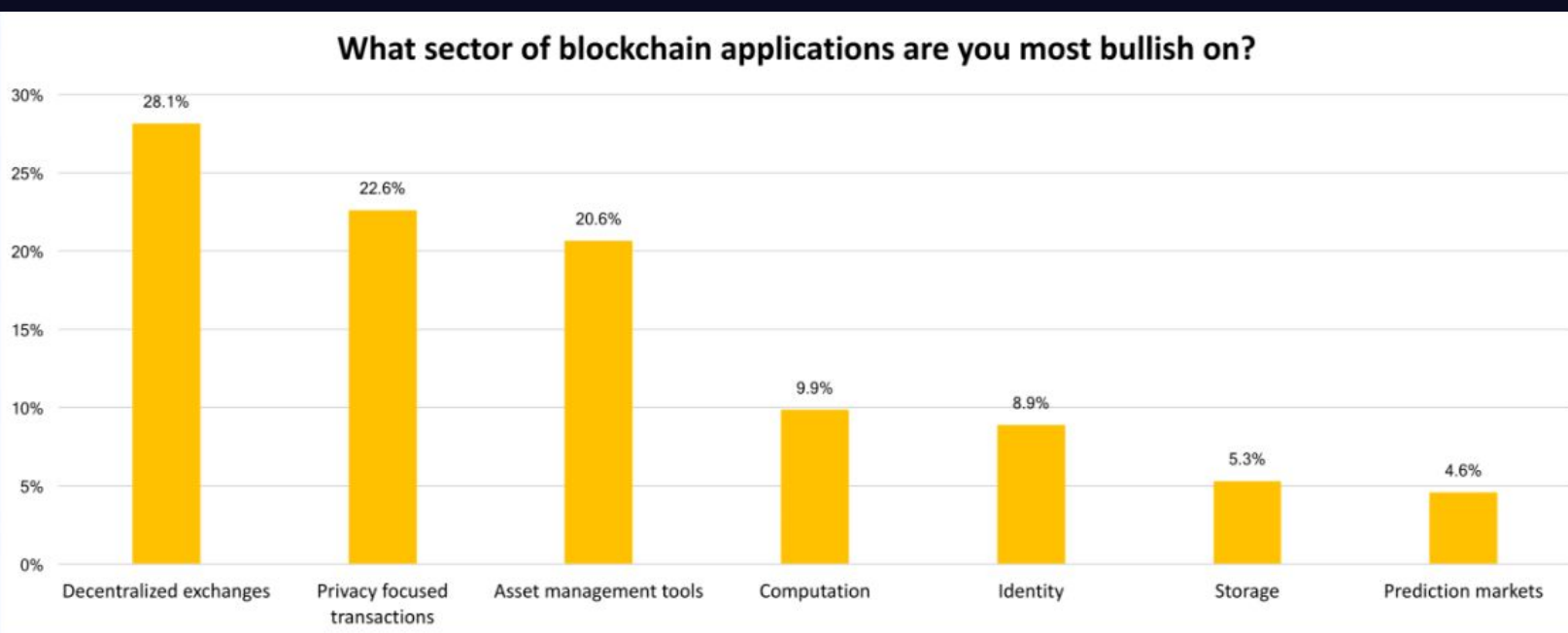


Fig.5 CoinDesk State of Blockchain report

We believe this trend is going to continue into the virtual asset trading space as consumers will ultimately be choosing decentralized exchanges over centralized. Our marketing research concluded 85% of traders prefer a more decentralized way of

trading non-fungible crypto assets. 91% of responders stated they would try a service that allows an ERC-721 swapping.

## 5.2. War Riders Marketplace

The War Riders Marketplace introduces a revolutionary smart contract technology that allows users to deploy a “mini-eBay” on the blockchain while offering all crypto-assets for trade in one place. The beauty of this technology is that your precious items never actually leave your wallet. In fact, you can still use your items while offering the items for sale. You only need to list the item once, and your very own “mini-eBay” will continue selling the item for as long as you want.

Our marketplace will also introduce **NFT swaps**. It allows users who own crypto-collectibles (ones they can't sell or trade) to trade it for a different in-game item **without paying Ether for it**. Players who are tired of playing a particular game can use the service to swap their items for another game's items. This will allow them to explore a new game **without exchanging Ether** (except for a network's transaction fee).

Marketplace users will receive offers from others which they may choose to accept or reject. All offers are happening off-chain; therefore, no gas is wasted for the “preliminary talks”. All trades are peer-to-peer or wallet-to-wallet, so buy, sell, or swap as much as you like – we won't judge.

### 5.3. Access to the Marketplace and Premium Features

The War Riders marketplace is natively integrated into the War Riders game. All non-fungible tokens (ERC-721) are automatically supported by the smart contract. Anyone can register for free and list all items for trade at our marketplace.

To unlock the premium features, you **will need to own at least one War Riders premium vehicle**. We believe that this will incentivise our early adopters and help the premium vehicles appreciate in value overtime.

## 6. Vehicle Categories and Types

### 6.1. Supply Overview

The game introduces a single ERC-721 smart contract for every vehicle sold. The total amount of vehicles caps at 1,180,000 – no more vehicles will **ever** be released in the game. Once all vehicles are sold, the only way to be acquired is by purchase from other users in the marketplace. There are 3 categories of vehicles:

1. Premium (30,000)
2. Mid-Grade (150,000)
3. Regular (1,000,000)

The sale of premium and special vehicles will start in the summer of 2018. Mid-grade vehicles are planned to be released during fall of 2018, while regular-grade vehicle sales will begin in 2019.

The release of vehicles is controlled by the Vehicle Factory smart contract. The Factory contract initiates the sale of each vehicle type with the lowest possible starting price - this price increases with every vehicle sold. This mechanism rewards early adapters and incentivises them to participate in pre-order campaigns as soon as possible.





## 6.2. Vehicle Specs

All vehicles come from the factory with specifications written in the digital “title” of the vehicle. At the time of purchase, each smart contract randomly picks a vehicle form whichever grade is selected; this creates an element of luck when the ride is purchased. For example: when buying the War Riders Lambo, one may receive a small BZN tank with loads of armor and the biggest engine possible, or you can get a lambo with a weaker engine, no armor, and a larger tank for storing BZN. Buying more vehicles will maximize chances of receiving top of-the-line vehicles. Every vehicles comes with the following set of specs:

- *Engine size*
- *Armor*
- *BZN tank*
- *Main gun slots*
- *Additional gun slots*
- *Additional equipment slots*
- *NOS equipment*

## 6.3. Calculated Performance Parameters

The vehicle derives speed and acceleration from the size of the engine and the amount of armor it’s carrying. The more armor it has, the slower the speed will be. Similarly, the stronger the engine, the faster the vehicle.

- a) The speed of movement indicates how quickly the vehicle will travel a specified path for a period of time (*in mph*):

$$\text{Travel speed} = (\text{Engine power} - \text{Armor})/1.6$$

- b) The car does not reach its maximum speed immediately. The car will accelerate until it reaches “Travel” speed. Acceleration to maximum speed is calculated by the formula (*in miles/h<sup>2</sup>*):

$$\text{Acceleration} = (\text{Travel speed}/10) / (\text{Acceleration Ratio} + 1)$$

- c) The acceleration ratio is calculated using the following formula:

$$\text{Acceleration Ratio} = \text{Armor} / \text{Engine Power}$$

## 6.4. Premium Vehicles

There are 30,000 Premium Grade vehicles – this category includes **special vehicles**. Special vehicles are *extremely* rare premium vehicles equating 1000 total to ever be released. Not only do these vehicles have outstanding speed, armor, and BZN specs, the special vehicles have unique abilities unlike any other vehicle in the game.

## SPECIAL VEHICLES

## LAMBO



The Lambo is a speedy beast on customized sand-adapted suspension. There are only **100 Lambos** to ever be released.

### Body parameters:

**Speed:** 125 – 219 *mph*

**Acceleration:** *instant*

**Engine Power:** 900 – 1000 *HP*

**Armor:** 650 – 700 *units*

**BZN tank:** 200 – 250 *units*

**Main weapon slots:** 1 *pc.*

**Slots of additional weapons:** 2 *pcs.*

**Slots of additional equipment:** 5 *pcs.*

**Bonus parameter:** *instantly gains speed*

**Slot of wheels**

**NOS equipment**

## CAR TANK



The Car Tank is a stylish special vehicle with incredible armor and off roading tracks. Tanks are slow and have relatively small BZN tanks, but they don't receive critical damage and have a lot of weaponry. There are only **300 Tanks** that will ever be released.

### Body parameters:

**Speed:** 12 – 62 mph

**Slots of additional weapons:** 5 pcs.

**Acceleration:** 0.63 – 3.21 miles/h<sup>2</sup>

**Slots of additional equipment:** 5 pcs.

**Engine Power:** 1900 – 2000 H P

**Bonus parameter:** *does not receive critical damage*

**Armor:** 1700 – 1800 units

**Slot of wheels**

**BZN Tank:** 150 – 200 units

**NOS equipment**

**Main weapon slots:** 3 pcs.



## HOVERCRAFT



The Hovercraft is a fast, maneuverable vehicle capable of instantaneous turns without loss of speed. There are only **600 Hovercrafts** that will ever be released.

### Body parameters:

**Speed:** 62 – 187 *mph*

**Acceleration:** 3.27 – 10.71 *miles/h<sup>2</sup>*

**Engine Power:** 1100 – 1200 *H P*

**Armor:** 900 – 1000 *units*

**BZN Tank:** 250 – 300 *units*

**Main weapon slots:** 2 *pcs.*

**Slots of additional weapons:** 3 *pcs.*

**Slots of additional equipment:** 2 *pcs.*

**Bonus parameter:** *perfect maneuverability*

**Slot of wheels**

**NOS equipment**

## PREMIUM VEHICLES

## SUV



The SUV has a good balance of speed, armor, and tank space. The SUVs can be fast and deadly, depending on the type of weapons used. There are only **20,000 SUVs** that will ever be released.

### Body parameters:

**Speed:** 62 – 156 *mph*

**Main weapon slots:** 2 *pcs.*

**Acceleration:** 3.57 – 10.42 *miles/h<sup>2</sup>*

**Slots of additional weapons:** 1 *pcs.*

**Engine Power:** 400 – 500 *H P*

**Slots of additional equipment:** 2 *pcs.*

**Armor:** 250 – 300 *units*

**Slot of wheels**

**BZN Tank:** 150 – 200 *units*

**NOS equipment**



## WAR TRUCK



The War Truck is a moving battle fortress with a huge BZN tank, but it is extremely slow. War Trucks can be used to carry large amounts of Benzene across the Wasteland, especially when paired with lighter “guarding” vehicles. There are only **9,000 War Trucks** that will ever be released.

### Body parameters:

**Speed:** 31 – 93 *mph*

**Main weapon slots:** 2 *pcs.*

**Acceleration:** 1.61 – 5.11 *miles/h<sup>2</sup>*

**Slots of additional weapons:** 2 *pcs.*

**Engine Power:** 850 – 900 *H P*

**Slots of additional equipment:** 3 *pcs.*

**Armor:** 750 – 800 *units*

**Slot of wheels**

**BZN Tank:** 1200 – 1500 *units*

**NOS equipment**

## MID-GRADE VEHICLES

## 6.5. Mid-Grade Vehicles



Mid-Grade Vehicles are designed for experienced players looking for a good balance of price and power. These vehicles are going to be offered for sale during fall of 2018. There are **150,000 Mid-Grade Vehicles** that will ever be released.

### Body parameters:

**Speed:** 37 – 144 *mph*

**Acceleration:** 2.3 – 9.6 *miles/h<sup>2</sup>*

**Engine Power:** 160 – 450 *H P*

**Armor:** 80 – 280 *units*

**BZN Tank:** 50 – 120 *units*

**Main weapon slots:** 1 *pcs.*

**Slots of additional weapons:** 1 – 2 *pcs.*

**Slots of additional equipment:** 0 – 1 *pcs.*

**Slot of wheels**

**NOS equipment**

## REGULAR-GRADE VEHICLES



## 6.6. Regular-grade vehicles



Regular-Grade Vehicles are the entry-level war machines for all kinds of players. They can be used for general purposes, Benzene mining, Wasteland patrol, and vehicular combat. The regular-grade vehicles are going to be offered for sale in 2019. There are only **1,000,000 Regular-Grade Vehicles** that will ever be released.

### Body parameters:

**Speed:** 19 – 112 *mph*

**Acceleration:** 1.00 – 7.37 *miles/h<sup>2</sup>*

**Engine Power:** 100 – 380 *H P*

**Armor:** 40 – 240 *units*

**BZN Tank:** 20 – 90 *units*

**Main weapon slots:** 1 *pcs.*

**Slots of additional weapons:** 1 – 2 *pcs.*

**Slots of additional equipment:** 0 – 1 *pcs.*

**Slot of wheels**

**NOS equipment**

## 7. Vehicle Customization and Preparation for the Apocalypse

Once the pre-order campaign for premium vehicles is completed, players will begin building and customizing their war vehicles from scratch. This is a spectacular 3D process that takes place on the browser window. Features that are customizable:

- *Body of vehicle*
- *Color*
- *Guns*
- *Wheels*
- *Installations: spikes, bull bars, saw blades, etc*
- *Additional equipment*
- *Custom logo or message*

We call this process a “preparation for the apocalypse” which will be happening until the beta release of the game in the fall of 2018. During this time, users will be able to freely trade vehicles with others using the native marketplace (or any other marketplace of their choice). The decentralized nature of Ethereum allows players to take War Rider items outside the game and do whatever they want with them.

## 8. Benzene Token Economics

War Riders seeks to be fully transparent about the token economics and the issue of in-game currency. No ICO will be conducted, and all tokens are released during the gaming process. Benzene (BZN) is an ERC-20 token deployed on the Ethereum network. War Riders will issue a total of 100,000,000 Benzene tokens which will be distributed in the order below.

### 8.1. Token Quantity to be Released and the Economics

- 75,000,000 tokens will be released for free and are to be retrieved by the in game “mining” process
- 20,000,000 tokens are reserved for the company with a 1 year lockdown period
- 5,000,000 tokens are reserved for advisors and partners.

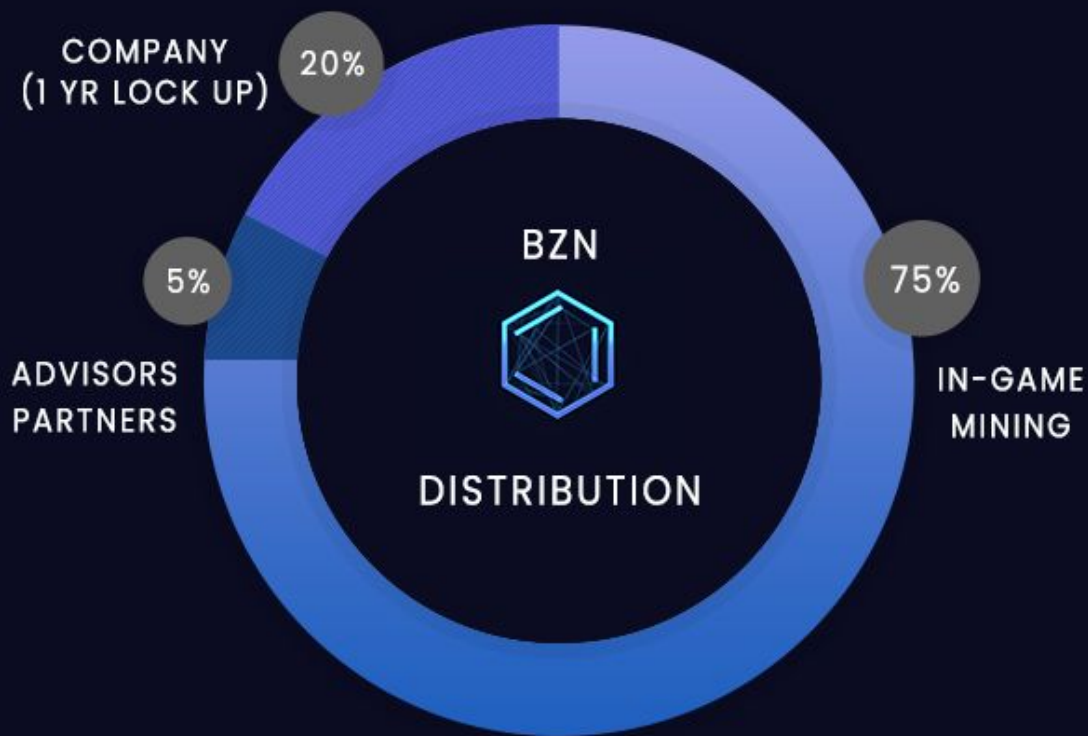


Fig.6 BZN token distribution

## 8.2. Game Pool and In-Game Mining

The initial 75,000,000 tokens are placed in the game pool and will be distributed via a smart contract during the game. Players drive through the Wasteland discovering Benzene waypoints where they fill up their tanks with BZN tokens. We call this process “human mining”, even though in its nature, it’s simply discovering the coins in the game. Benzene will never fully run out – when players purchase nitro-boosts, shields, guns, garage upgrades, etc., Benzene is being transferred back into the game pool (with 30% of Benzene burned), thus causing Benzene to become more scarce overtime



### 8.3. Deflationary Mechanism

Every time a garage, weapon, or any asset is bought with Benzene, the tokens go back to the game pool, and 30% of it is “burned”. This mechanism will decrease the total amount of token supply over time and will ensure the scarcity of the valuable resource.

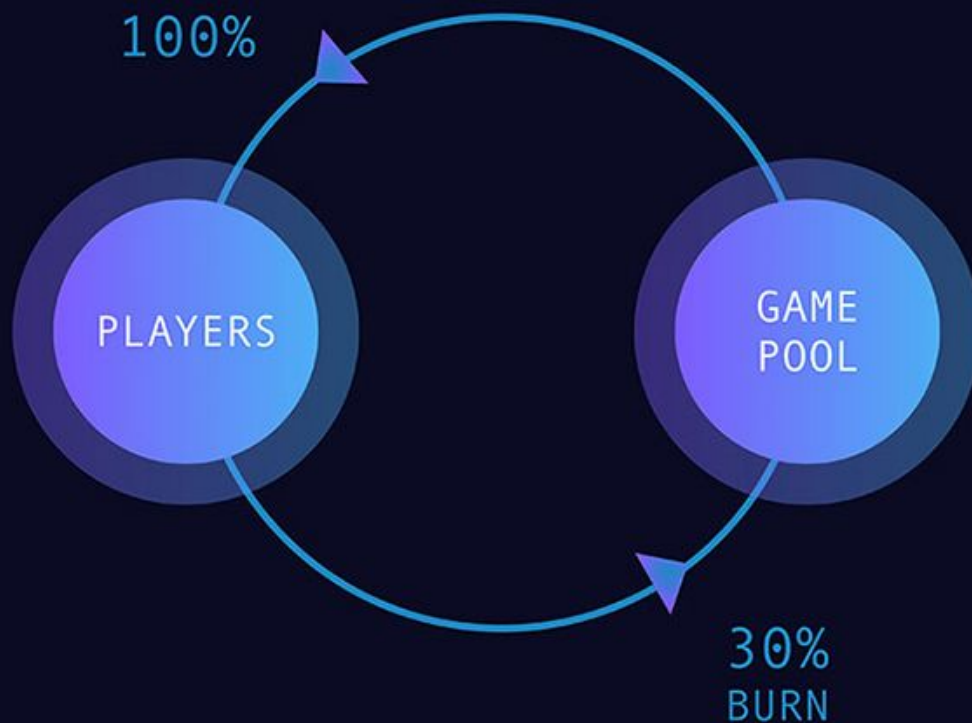


Fig.7 BZN burn mechanism

## 9. Early Vehicle Pre-order Details

War Riders will initiate the early vehicle pre-orders in June 2018. The process will start with a private pre-order sign up and the private distribution of the War Paper. People who have signed up for private pre-orders will have a chance to purchase vehicles before the sale is available to the general public. Premium vehicles (including special vehicles) will be offered for sale first, and total supply is capped at 30,000 vehicles.

The vehicle sale is handled by a pre-order smart contract on the Ethereum mainnet along with a Car Factory contract that “produces” the war machines. Just as any good dealership would offer, our vehicles will come with a full tank of Benzene to get players started in the game.

If you wish to participate in pre-orders, you must download a MetaMask extension for your web browser or use a Cipher browser on mobile. This will allow you to create an Ethereum wallet capable of receiving ERC-721 and ERC-20 tokens. You can buy Ether from an exchange of your choice (some countries including the U.S may use Coinbase). If these platforms are not available to you, research how to buy Ether specifically in your country.

### 9.1. Pre-Order Mechanics

During the pre-order process, all vehicles have a starting price which will increase by a certain percentage with every vehicle sold; therefore, the earlier you

buy, the less you pay. Tactical and well-equipped players will purchase multiple vehicles early on to increase their chances of dominating the Wasteland. It is also recommended to pre-order multiple types of vehicles and combine them in the battle.

Please note that Ethereum charges a transaction fee which varies depending on the current network load. The transaction fee is not received by our company and is not something we control. Please set a sufficient amount of gas (use <https://ethgasstation.info> as a reference) in order for your transaction to successfully go through. Shortly after confirmation, the smart contract will disperse a new, shiny war vehicle to your wallet.

Early game supporters (those who participate in early pre-orders) will be the only beta-testers allowed during the testing period which will be announced as we move closer to release. In addition, early game supporters will have a head start at the official launch which will allow them to mine a huge chunk of Benzene before everyone else has the chance.

## **9.2. Earn ETH by becoming a Virtual Vehicle Dealer**

We are pleased to announce the start of our referral campaign. Anyone will be able to generate a unique referral URL using our website which can be used to earn Ether. You will automatically receive a status of a “War Riders Virtual Vehicle Dealer” and be able to earn 5% commission on every vehicle sold using your referral link. Post it to your social media outlets, send it to your friends, or just use it yourself to get 5%

cashback (clever, right?). The top 3 car dealers will receive a signature War Riders Lambo!

### **9.3. Who can participate?**

Absolutely anyone! We believe in true disantalization and globalization, and we welcome players from all over the world. There is no limit imposed whatsoever on the amount of digital vehicles you purchase. In fact, you should buy as many as you can to have a head start at total domination of the Wasteland.

### **9.4. Languages**

As of now, we are actively working on translating our website to Japanese, Korean, and Russian languages. The game trailer will be available in Korean and Russian, as well as an additional version with Japanese subtitles. We also have plans of adding support for Chinese languages in the near future.

### **9.5. Refunds**

The irreversible nature of blockchain does not allow us to issue refunds to customers who pre-order our in-game items. No refunds will be given and all sales are final. If you have any questions or concerns, please contact us via email at [info@warriders.com](mailto:info@warriders.com), and we will try to solve any problems that arise. If you no longer

wish to own an in-game item, you may sell it using our native marketplace or any marketplace of your choice.

## 10. About Us

War Riders is developed by [Cartified, Inc](#) – a VC backed blockchain software company based out of North America. Cartified was founded in 2015 by the American and Georgetown University graduates of Washington D.C.

Cartified is backed by two VC funds – the AU Venture Fund and ERA Venture Fund. In 2016, Cartified successfully completed the acceleration process with [Entrepreneurs Roundtable Accelerator](#) in New York City which is one of the top 5 accelerators in the U.S.

Watch the pre-launch video:



## 10.1. Key team members



Vlad

Head Dreamer & Blockchain Nerd



Ryan

Frontend Pro & Football Champ



Eddie

Master of Ethereum



Caroline

Community Hero & Candy Crusher



Nick

Marketing Freak & Main Miner



Dmitriy

Data Wizard & Half Life Hero



Jay

Marketing Guru & WoW Adept



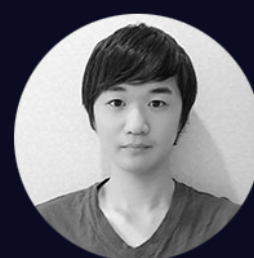
Ignat

Grumpy Game Dev & Inventor of UNI



Britanny

Strategy Aide & Pokemon Master



Sane

Global Expansion & Blockchain Gmr

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