8Hours Foundation

Connecting People Through Meaningful Social Interactions

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Executive summary

THE 8HOURS FOUNDATION ENVISIONS a world where technology is used to create stronger social bonds by bringing people together through play. Just eight hours a week of purposeful social interaction improves society's health and happiness. We seek to create technology that will help create everlasting memories and forge social bonds that will last a lifetime. By blending digital and physical games, there is an opportunity for an entirely new kind of human-computer interaction that enhances our relationships with the people in our lives. This will result in a stronger society and a better world.

THE 8HOURS FOUNDATION'S MISSION is to create ways for people to come together and play, strengthening their social fabric. We seek to create a culture where "game nights" amongst friends and families are facilitated by cutting-edge technology. By creating a new environment that blends physical board games and digital possibilities, we propel social play into the 21st century.

8Hours' journey begins with its founding partner, PlayTable.

PLAYTABLE is an innovative board-game console that is the pioneer for Toy Reality - the interaction of physical objects in digital games. Toy Reality uses RFID-tagged objects to bridge the gap between physical and digital play, breathing new life into board games, video games, apps, and educational programs. Physical objects are imbued with digital context, granting them all the benefits of digital assets, such as increased flexibility of game mechanics, ownership tracking, and user customization.

PlayTable revitalizes the timeless medium of table-top games, which have been played across many cultures for thousands of years and are one of the most powerful social motivators. PlayTable's digital transformation of these games enhances the player experience while also solving the previous inconveniences intrinsic to their physical counterparts. Physical board games require set up, clean up, closet space, and rulebooks. Digital board games can be downloaded and played instantly at any time, require no storage space, and no set-up and clean-up time, providing a frictionless experience for its players. The essence of board games' social face-to-face play is preserved, providing the best of both worlds to a new market that is accessible on a global scale.

PlayTable provides a platform for social games that gives families and friends an easy way to connect. Other game consoles focus on experiences for individuals and contribute to isolation amongst their player bases. PlayTable is different because its games must be played with others, which makes every interaction on it inherently social.

THE 8HOURS PLATFORM is a blockchain-enabled ecosystem that encompasses and provides access to utilities and services that further 8Hours' mission. **Eight Hours Token** (EHrT) is our utility token that offers a mechanism to interact with software features for tangible benefits. EHrTs can be spent, staked, and/or burned in exchange for these utilities the 8Hours Platform provides:

- **AACs**

  EHrTs can be spent to link physical objects to their digital counterparts through non-fungible tokens known as Authentic Asset Certificates (AACs). Imagine your toys gaining digital identities. They could have their own digital art, level, stats, and moves. Every game they're played in would alter their histories in different ways. Linking physical with digital allows for endless possibilities for collectibles and their compounding interaction with games. Each of PlayTable's original games will require the use of AACs.

- **IGCs**

  EHrTs can also be spent by developers to create their own branded In-Game Currencies (IGCs). These enable access to a much larger and universal ecosystem that spans across games. IGCs are more flexible than traditional currencies because they piggyback on blockchain technology, which authorizes them to be reliably tracked and securely inter-operated between different game environments. As a developer, envision being able to leverage an entirely separate game's economy within your own game, or the ability to grow a loyal player community by providing rewards to in-game objectives that are easily tracked.

- **Colored Tokens**

  Finally, EHrTs can be spent by developers to generate and deposit Colored Tokens, which are tokens that can only exist inside AACs and can only be created and deposited by their creators. These are used to measure the AAC's in-game achievements, wealth, authenticity, progress, and history.

More utilities will be added to the 8Hours Platform as time goes on.

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PlayTable's intersection of video games, mobile games, and board games culminates in an ecosystem that is highly compatible with collectibles and toys. Collectibles within the table-top gaming industry can become extremely rare and valuable, which stresses the need for true validation of ownership and trusted tracking of an object with an immutable history. Collectible trading cards, such as Pokémon and Yu-Gi-Oh cards fetch prices as high as tens of thousands of dollars in the secondary market due to rarity and collectability. There is a growing problem of realistic-looking counterfeit trading cards in the secondary market being sold for thousands of dollars. The 8Hours Platform's blockchain-enabled software is the best-suited technology to allow tracking of experiences, achievements, and digital assets in a way that is trustless and secure.

We envision that PlayTable will help to grow 8Hours' ecosystem by serving three core functions for the 8Hours Platform

1 Giving ordinary users ease of access to the benefits of blockchain technology

2 Providing immersive context and compelling gameplay to collectible tokens

3 Bringing partnerships to the ecosystem in the form of content publishers, developers, and toy manufacturers

PlayTable's unique experience is user-friendly for players of all ages and serves to make blockchain tangible for mass audiences. Immersive gameplay paves the way for users to understand the true impact of a decentralized back-end and can provide a positive first impression of the brand-new technology. A familiar experience of play, when enhanced by blockchain, benefits everyone with real consequential experiences without having to understand the underlying technology.

The 8Hours Foundation's role is to foster the token ecosystem, grow the community of players, and facilitate the adoption of the gaming platform. This will be accomplished by:

- **Creating grants for the formation of partnerships with and/or use of the open gaming platform**
- **Reviewing games submitted for regulatory and ethical compliance**
- **Establishing tools and services that expand the PlayTable ecosystem in ways that may not lead to revenue and profit generation for the PlayTable company**
- **Curating promotional events and marketing efforts for ecosystem participants**
- **Designing additional rewards and incentives for EHrT holders**
- **Developing and maintaining the developer EHrT exchange service and associated EHrT pool**

THE 8HOURS COMMUNITY will be the biggest proponent of the Eight Hours Token, consisting of all fans of social play: token holders, players, game developers, publishers, and toy manufacturers, as well as the 8Hours Foundation itself. The Foundation aims to coordinate and provide direction for the healthy growth of the community so that value is constantly being created from real-world applications and connection of ecosystem participants. Each new member who joins this community brings new benefits and the value of the ecosystem can compound with ever increasing network effects.

Every new game added to the ecosystem and every new player helps extend the adoption of 8Hours and further the cause of achieving at least eight hours of meaningful social interaction a week. Thus, the success and proliferation of projects on the 8Hours Platform is paramount. Each member of the community -- token holders, developers, and players -- can help to share meaningful projects that further the Foundation's social cause and make meaningful applications possible.

To this end, the EHrT token is a powerful way to represent the alignment of all members in the ecosystem. Just as each member in the ecosystem is united in the cause, the ecosystem's increase in value is reflected in EHrTs. The Foundation facilitates rewards with EHrTs for individuals who significantly contribute to 8Hours. Contributions can be as simple as bringing more partners to the platform, sharing the platform with other communities, or creating applications that add real-world value.

EHrT also allows token holders to support the ecosystem explicitly. For example, EHrT can be:

1. **Staked for different grants of projects joining the platform**

2. **Used to voice support for favorite projects to be on 8Hours**

3. **Given as recognition of service to fellow community members**

Implicitly, EHrT also promotes a sense of belonging and trust among the community. As the Foundation matures, utility of EHrT will expand and become more technically comprehensive.

The Foundation also serves as a way to grow the entire blockchain industry and encourage mass consumer adoption. By bringing to market consumer-oriented blockchain-empowered use cases, the Foundation helps to normalize the idea of blockchain and encourage long-term adoption. With an open gaming platform, 8Hours is specifically introducing gamers and families to blockchain in a relatable way.

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Why toys?

Toys are familiar to everyone at all ages, as almost everyone has interacted with games and toys in one way or another in their life. Toys create a unique opportunity to break through the barrier of mainstream blockchain adoption by making blockchain tangible; people can touch and feel the blockchain right in front of their eyes.

Through toys, we instantly have a connection with something that is easy to understand. Furthermore, the global toy industry is extremely large and untapped with blockchain technology, thus creating incentive for toy manufacturers, developers, publishers, retailers and customers to get involved into this emerging technology through a means that is familiar and accessible to all.

2.1 TOYS ARE EASY TO UNDERSTAND

8Hours believes that collectibles - toys in particular - in combination with games is going to be one of the first "killer applications" that will bring blockchain to mainstream adoption. While blockchain is complicated and too technical for the average consumer currently, toys are accessible -- something that everyone understands well. Beyond children, the community of collectibles, especially in toys, is sizable.

Toys also solve one of the biggest challenges in blockchain: usability and usage. Blockchain adds utility to the toys without a steep learning curve for users. The functional nature of play gives toys the built-in utility that paves the way for usability. Toys themselves do not require "consumer education" in the same way blockchain does, removing friction from mainstream usage and adoption. The collectible nature of the category also allows for certain monetary incentive structures to be designed within the ecosystem, which is the perfect playground for novel Token Economic models, designs, and experiments.

2.2 BIG EXISTING INDUSTRY

The global toy industry is $88.1 billion[1], with the US market alone worth $20.1 billion.[2] With the average price of a toy at $10[3], there is an opportunity to bring 8.81 billion toys into the digital world every year.

With ever-advancing technology, toys are not just toys anymore. The $88 billion toy industry also has seen cross-pollination with adjacent industries, particularly in the categories of "smart toys" and digital games. The global video game industry is $134.9[4] billion, while the smart toys industry is projected to reach $9.7 billion by 2020[5]. The category itself is believed to account for 7.7% of the general video game and toy market in 2016 and projected to grow to 10% by 2018. This is in line with analyst projections of a $15.5 billion industry by 2022 driven by a combination of hardware and app sales[6].

[1] https://www.statista.com/statistics/194395/revenue-of-the-global-toy-market-since-2007/

[2] https://www.npd.com/wps/portal/npd/us/news/press-releases/2018/toy-sales-globally-and-in-the-us-both-grow-by-1-percent-in-2017-reports-the-npd-group/

[3] http://www.toyassociation.org/ta/research/data/impact/toys/research-and-data/data/economic-impact-data.aspx

[4] https://www.statista.com/statistics/292460/video-game-consumer-market-value-worldwide-platform/

[5] https://www.statista.com/statistics/320941/smart-toys-revenue/

[6] https://www.juniperresearch.com/press/press-releases/smart-toy-sales-to-grow-threefold

There are even nascent efforts in combining both categories in Interactive Gaming Toys (IGTs), also known as "Toys-to-Life," which has collected massive adoption and usage[7]. While the category did not exist five years ago, IGTs grossed over $5 billion, led by Disney, Activision, Nintendo, and LEGO.

Skylanders sold over 240 million toys since its launch in 2011 with sales surpassing $3 billion[8]. Disney quickly followed two years later with over $1 billion in revenue, while Nintendo and its Amiibo figurines have surpassed 10.5 million units[9]. NPD reports that 70% of parents in the US are aware of these toys, with 40% stating they own at least one franchise and 41% of that group owning more than one franchise. The report also points out that parents spent, on average, $131 on IGT games, characters, and accessories just within the first six months[10].

With a continued appetite for more innovation and the complacent incumbents, toys are the perfect industry for a new platform to enter and disrupt. PlayTable lies at the intersection of toys, games, and blockchain, and is uniquely qualified to be the paradigm-shifting technology of this massive industry. Existing IGTs have compatible technology to PlayTable and can drastically benefit from the underlying screen in the form of animations, sound effects, and metadata. PlayTable can capitalize on virtually every touchpoint of the ecosystem -- as a system to engage content, a mechanism for recurring content subscriptions, a source for ongoing digital purchases, a point of sales for toys, a curator of affiliate programs, an affiliate for toys, a provider of analytics, and a provider of developer services.

2.3 TOYS HAVE MULTIPLE UTILITIES

TOYS AS VIDEO GAMES

"Toys-to-life" creates a unique value to all players as it brings a dual nature to both the game and its pieces – it's simultaneously a video game and a toy. These toys are now inherently more unique and valuable than a traditional toy purchased at the same price. In fact, toys-to-life figures, on average, retail for 30% more than a traditional toy.

TOYS AS COLLECTIBLES

Further, toys-to-life figurines have also created a cross-sectional appeal beyond children via collectability. Disney Interactive executive John Vignocchi agrees, stating that "52% of our audience is ages 1 to 17, and then the remaining 48% is 18 and up."[11]

Similarly, Nintendo wants to take their Amiibo franchise to a younger audience[12], as adults are treating the figurines as collectibles and have created an entirely different ecosystem to appreciate the IP (Intellectual Property). With rising interest in the collectability aspect of toys, the need to provide validation of ownership becomes apparent. As scarcity, rarity, and uniqueness are all fundamental drivers behind collectability, the ability to verify specific traits and absolute number of copies in existence (as provided by 8Hours) is necessary to attach an economic value to the toy.

Furthermore, IP holders would be able to tap into additional revenue streams by monetizing toys with added digital uniqueness. The linkage to digital assets is a new dimension for rarity to exist, which is a fundamental driver behind collectability. The playing field between ultra-large and small IP holders becomes more level as smaller brands have more venues to express their creativity and it becomes easier to enter the market on innovative merit.

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[7] A toys-to-life toy is a toy with an attached RFID tag that can be identified with a "reader" attached to a gaming console
[8] http://www.latimes.com/entertainment/herocomplex/la-et-hc-the-player-e3-toys-to-life-20150613-story.html
[9] http://www.nintendo.co.jp/csr/en/report2015/smile/index.html
[10] https://www.npd.com/wps/portal/npd/us/news/press-releases/2015/interactive-gaming-toys-viewed-as-positive-investments-keep-families-and-players-engaged-in-play/
[11] http://www.latimes.com/entertainment/herocomplex/la-et-hc-the-player-e3-toys-to-life-20150613-story.html
[12] http://www.mcvuk.com/news/read/will-anyone-win-the-toys-to-life-war/0148453

3

Why Blockchain?

Blockchain technology has four major advantages over conventional types of digital storage:
true ownership, portability, security, and scalability.

3.1 TRUE OWNERSHIP

When combining physical toys and digital characters, 8Hours believes that the only logical way to handle digital information is to grant full, irrevocable ownership to the toy's owner. There cannot be a situation where the toy's owner has physical ownership, but its digital half is being held hostage by software companies.

When someone buys a physical toy, that toy may be resold second-hand for any price. Even if the toy is broken, modified, repainted, or rebranded, it can be sold again. The manufacturer or IP holder cannot come and physically revoke the owner's possession of the toy. Yet that is what happens to digital assets. All digital game characters come with an agreement that if you break, modify, repaint, rebrand, or resell your character, the developers will remove the character from your possession and ban your account from owning more.

Vechain's VIP-181 standard interface for non-fungible tokens provides an irrevocable way for users to validate or transfer ownership of their digital items. Again, this is especially important for high-value collectible toys.

3.2 PORTABILITY

3.2.1 Unlimited Potential

When physical toys and digital characters are combined, they should be playable across all games. A physical toy can be played in games it was not created for at its owner's behest. For example, any toy can become a Monopoly piece, a queen in Chess, or a guest in Barbie's Dreamhouse. This ability to move from game to game is called **portability.** Physical toys are only limited by their owners' imaginations. Digital characters, on the other hand, are 'siloed' in their respective universes. Your character in World of Warcraft cannot be used as a Rook in your chess game.

Because blockchains are public ledgers, any information associated with a digital character is accessible to everyone. Characters can gain experience, skills, items, or modifications in a limitless number of games or applications.

8Hours believes that the future of toys should be like physical toys; digital characters should be limited only by their owners' imaginations.

3.2.2 Trustless protocol layer for multiple industries and parties

8Hours is a potential solution for expensive "toys-to-life" infrastructure, behaving as an intermediary platform that can provide a value layer and network for a seamless interaction between multiple industries and parties.

Developing toys with "video game utilities" requires cross-functional competencies that are cost-prohibitive for most individual actors (IP holder, manufacturer, or game studio). Reported figures have stated that Disney spent $100M+ on developing the Infinity franchise under a wholly vertical model[13]. Beyond initial development costs, there are considerable ongoing manufacturing costs and inventory challenges associated with developing a "toys-to-life" experience.

The dominant model at the intersection between these industries has been licensing. If there is a lucrative IP and a desire to create physical or digital experiences, it has been easier for an IP holder to license it away to a toy company or a video game company and collect a royalty than to take on production risk themselves.

Utilizing the 8Hours Platform will allow both small and large stakeholders to participate in an ecosystem owned by no singular actor while giving all participants innovative physical and digital experiences to build for customers with powerful monetization options.

3.3 SECURITY

Piggybacking off the inherent reliability of the blockchain, 8Hours unlocks the full benefit of its security. Blockchains are inherently tamper-proof, unhackable, and immutable. Because of true ownership of collectible digital assets, a breach in security or sudden loss of data would be catastrophic to our community. Blockchain is the easiest and safest option to ensure the absolute security for digital assets.

3.4 SCALABILITY BEYOND TOYS

Since Blockchain is a protocol layer technology, there is an opportunity to provide any physical object with a digital context beyond toys. There is an equally compelling case to create unalterable and traceable digital identities for physical consumer goods, physical certificates of ownership, or digital licenses/goods, etc. This would create additional dimensions of usage, interaction, and context in ways that have yet to be discovered.

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[13] https://gamerant.com/disney-infinity-development-costs-100-million/

4

Why VeChainThor Platform?

VeChainThor's technology is currently the most advanced among blockchain platforms and provides the best features for business-oriented scenarios. VeChain's research efforts into RFID infrastructure also highly complements the RFID tagging of toys that PlayTable offers, making VeChainThor the best blockchain for 8Hours to be built upon.

VeChainThor's Multi-Party Payments (MPP) and Multi-Task Transactions (MTT) bring accessibility to end-users for business context that's not built on any other blockchain.
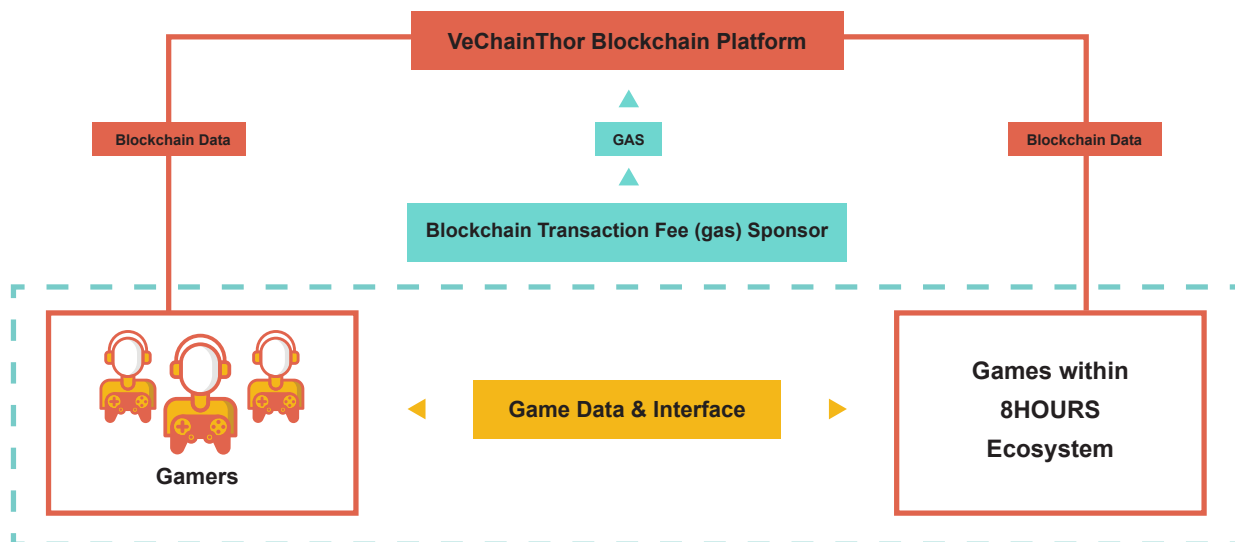
MPP removing the obstacle to blockchain technology adoption

MPP is incredibly important for a smooth user experience, which is key for mass user adoption of blockchain. MPP allows for the Eight Hour Foundation to sponsor users' transactions, making it more user-friendly for an audience that may not be blockchain-savvy enough to calculate the amount of gas they need in their wallet.

For example, without MPP, a user would have to ensure that their wallet has enough gas to complete a transaction. If someone is not familiar with blockchain nuances, they may give up in frustration before they figure out that they need to have enough gas just to make a transaction work. Currently, VeChainThor is the only blockchain with native fee delegation, which allows for a low barrier to entry where 8Hours can offset fees for users or sponsor the transaction entirely on behalf of the user, if the user doesn't have sufficient funds in their wallet. This allows our intended casual audience of families and gamers to not have to master blockchain before using EHrT.

VeChainThor's mechanism for atomic transactions, Multi-Task Transactions, also benefits the wide array of business-oriented use cases that we see for PlayTable and 8Hours Foundation. Multi-Task Transactions allows batching of interdependent transactions so that they can form an all-or-nothing batch of bundled transactions. This brings price predictability into the hands of 8Hours users. For example, if 8Hours were to send two interdependent transactions, and one transaction fails, the gas cost for the success is still consumed. This isn't a feasible approach when dealing with complex real-world applications since the true cost for transactions needs to be known and considered.

With MTT, 8Hours Platform can batch dependent tasks together for certainty of gas cost. This allows for more flexibility and reliability in the context of game mechanics adding metadata and multiple simultaneous transactions to a single collectible. Other blockchains either have clunky workaround solutions for this fundamental flaw, or developers tolerate wasted gas in the case of partial transaction failure.

VeChain is also very appealing for the non-technical aspects. As a company with the stated purpose of identifying real-world applications of blockchain, it makes sense for 8Hours Foundation to align on VeChainThor with the real-world application of PlayTable. Community is an integral part of VeChain's ecosystem. The synergy between existing and new projects continues to grow as projects offer solutions to each other to aid in their respective projects, while simultaneously growing the ecosystem. PlayTable, with its exclusive content and hardware partnerships, brings in more value to the ecosystem, while also having the opportunity to tap into already proven projects build upon VeChain Thor's Blockchain – all sharing the underlying goal of creating valuable transactions.

8Hours Platform

The 8Hours Platform is a software ecosystem for providing meaningful social content to bring people together. It uses the Eight Hours Token (EHrT) as a utility token for the validation of physical collectibles (such as on the PlayTable) and minting in-game currencies for developers.

The protocol is built on top of the VeChainThor blockchain to provide a trustless and decentralized platform for any toy maker, game developer, or consumer to engage with without going through a gatekeeper.

5.1 HOW IT WORKS

First, Eight Hours Tokens (EHrTs) are burned to create a VIP181 non-fungible token (AAC). Through the use of low-cost RFID tags, the AAC stores the globally unique identifier of the RFID tag onto the blockchain. Whenever the collectible needs to be validated, the non-fungible token (AAC) is referenced by scanning the RFID and using the ID as the index. Hardware encryption on the RFID tag provides security at the physical communication layer. Now the digital context can be added to the AAC in the form of transactions or metadata.

Toy makers can use EHrT during the manufacturing process to generate the digital record from the inception of the toy. Collectors can add RFID tags to existing collectibles that don't have tags pre-embedded if they wish to begin the digital record for their collection. Makers who enjoy 3D printing can create small-scale batches of toys in a similar process. Thus, both end-users and toy manufacturers can use EHrT's mechanism for AAC creation.

Since 8Hours is built on top of VeChainThor, Multi-Party Payment protocol is used to sponsor transactions for end-users. This supports a cleaner user experience because the end-user is not required to have sufficient gas in their wallet to conduct a transaction. The business can sponsor the transaction knowing that the overall outcome is still net profitable. This gives Toy Reality much more accessibility in that users don't have to overcome educational hurdles in nuances of cryptocurrency before they join the platform.

RFID and NFC readers are present in modern smartphones, POS systems, and other compatible devices, and are also able to use 8Hours to read and validate data. In the future, it is possible to extend the storage, access, and exchange capabilities of 8Hours to other tracking technologies such as barcodes, QR codes, or other visual object recognition technologies.

Second, data and proof of ownership is stored on the blockchain. The 8Hours Platform registers and tracks ownership and metadata of physical objects through certificates created on the blockchain. It leverages the VeChainThor blockchain to provide immutable, tamper-proof, and transparent record keeping.

For toys, this data can be everything from character levels to loot upgrades and achievements hard won in-game. Beyond properties in toys, metadata can also include categories like warranties and IP ownership. This level of open access gives physical objects unlimited data and trackability which provides unique features hard to implement previously like royalties and marketplace analytics.

Third, owners control storage, access, and exchange of data via private key.
Storage: The 8Hours Platform assigns unique identifiers to the object and pairs it with the public address of the owner and the public identifier of an RFID tag to create an AAC on the blockchain. Additional object properties are assigned depending on application use case — including descriptions, timestamps, and encrypted data. The AAC itself is a Non-Fungible Token able to be sold on exchanges.

Access: 8Hours provides a developer API to read the data associated with a physical object. This software can be incorporated into anything equipped with an RFID reader, including all Android-based phones and newer iOS phones.

Exchange: 8Hours inherently creates proof of ownership with a user's private key and will also facilitate the exchange of ownership. Using an 8Hours-enabled exchange, buyers and sellers can trade their physical toys and AACs, along with their digital identities. This provides immediate value to the time and energy spent playing with physical toys, as gamers can earn upgrades or obtain rewards based on incentive economics.

5.2 CORE FEATURES

5.2.1 Value Creation
First and foremost, the 8Hours Platform is a value layer. It defines a new dimension of value in physical objects by giving them unlimited digital attributes (dates, owners, points, etc.) in physical objects. You can effectively network physical objects together in at a singular protocol level. This is a generalized layer that can be applied beyond toys and collectibles.

Networking effect: RFID and blockchain adds a digital layer to physical objects. Utility comes from doing this at a protocol layer; a network is created, and utility is derived from a singular language to categorize objects at multiple dimensions beyond physical. The objects and data also benefit from typical network effects experienced by protocols where a bigger network, or more usage makes the network more valuable.

Flexibility / accessibility: A key feature of blockchain is the added context and digital data within physical objects. This unified value layer has never existed before for the physical object. An early version of this is perhaps serial numbers, or UPC codes, as they add different dimensions of understanding and context for various incentivized parties. However, as singular platform on blockchain, 8Hours creates a unique value proposition beyond the digital context, accessible and manipulatable by multiple parties.

New and unseen properties: Beyond just being physical, RFID has the capabilities of adding digital properties. With a blockchain layer, properties like immutability, security, and networking become properties of the object itself. Various combinations of the properties can pave the way for new usage and applications that has never existed.

5.2.2 UTILITY

Secondly, EHrT functions as a utility token. This is the "application layer" where users, both enterprise and consumer, can manipulate and interact with the digital layer to authenticate licenses, customize attributes, transfer ownership, in addition to deriving value from play and collectability.

Licensing authentication: When a product manufacturer releases a product, they want to be in control of the respective toy genre or market they are entering. For most collectors, hobbyists, and parents, having authenticated safe-to-play toys is crucial. 8Hours Platform's colored token system is the perfect technology to create an authentication mechanism and system that has the following features:

- **Identifies which toys are made by the real manufacturer**
- **Recognizes features of the toy even when the toy's packaging is missing or removed**
- **Detects the immutable record keeping on production batches, which enables access to quality control measures if a product is recalled**
- **Enables hobbyists and collectors to verify the authenticity of their collections and can bring a new dimension of features, such as tracking toys with a specific unique tag (ID) as the first and final toys in a collection**
- **Distinguishes counterfeit toys as non-authentic, which will ultimately eliminate certain play mechanisms further adding value to the non-fungible toy, while simultaneously deterring counterfeit manufactures.**

At a higher level, licensing is an exercise of ownership/property rights within multiple parties. Since 8Hours can store digital data on objects, ownership assignments and interactions are possible in ways that have not existed before.

In the case of toys, rights of IP holders can be abstracted from the manufactured toys, and the data can be manipulated in various ways.

Take for instance a rare Darth Vader figurine produced and registered by Disney with a data attribute indicating that this was the 10th figurine of its kind ever created.

- **Users can find out exactly how many figurines exist and the activity of each figurine via the blockchain** (which game it has been used in, how many experience points, etc.)
- **Disney can set a royalty to allow other game developers to use the figurine that would be automatically paid out via a smart contract**
- **The consumer can now use all Darth Vader figurines in games or experiences that will accept a Darth Vader, regardless of manufacturer**
- **Disney can also take advantage of digital royalties; set their own royalties every time a character is exchanged from owners, to games, or to devices**
- **Analytics around marketplace movement and character customizations can be easily collected by Disney or other network participants**

The benefit of having this data public on the blockchain is that it can be trustless and incentivize an open sharing of data to improve the network via better games or data-driven marketplace dynamics. One does not have to trust the data given by one company anymore when they say something is "rare and valuable."

Character customization: In the case of games, the data added to physical objects need not be simply ownership and licensing. Value can be gleaned from giving end users a complete control over how a particular object or toy is customized. Customization, in a way, is how end users can build unique, non-fungible value in the objects and toys they own.

For instance, an end user can create 100 limited edition toys using 8Hours with various attributes, stats, abilities, and powers. Inside a game, the toy can earn experience points, exchange data with other characters, or even earn money. Outside the game, he can add location data, usage data, etc. Or he can add additional non-fungible properties relating to the physical world (e.g. on this day, this toy was painted red because…).

Transfer ownership: Tracking ownership transfer of physical objects has proven challenging in the past, especially for low-value items like toys. The 8Hours ecosystem bypasses this by incentivizing attribution into the objects themselves, prompting actors to register on their own accord. While value is increased every time digital context is added to a particular physical object, to liquidate or realize the value, users have to register and become part of the ecosystem.

In tracking ownership, 8Hours does not actually track the physical objects themselves. This effectively tackles security issues around counterfeiting or double-spending. The system is oriented around the end user and their individual wallets and/or identities. This system works similar to "two-factor authentication" where no two users can own the same piece of data. The data inside objects are, in a way, sub-wallets linked to an owner.

Collectible + play value: The utility derived by the end user is beyond data. Physicality adds a different contextual meaning that gives EHrT-enabled objects and toys "real-world value" — which in the case of toys are collectability and play value. This dual configuration allows for unique designs in incentive mechanisms through blockchain. In a way, EHrT-enabled objects and toys leverage the best of both worlds: digital games (blockchain games) and collectible (like Cryptokitties), and physical play (toys) and physical collectibles (trading cards, toys, etc.).

5.2.3   STORE OF VALUE

Third, colored EHrT itself acts as a financial store of value inside of objects, fractional or whole. EHrT can add (or subtract) direct, verifiable financial value to rare or collectible objects beyond abstract (rarity, looks), IP, and utility value. Similarly, value of commoditized objects and items can be wholly or fractionally represented in EHrT.

Physical objects and collectibles are defined by various characteristics that make up their total value.

1 **Collectible value:** These are standard variables not just in the collectible industries, but ones that also drive traditional supply-demand economics in any industry. This includes abstract qualities like rarity, looks, condition.

2 **License value:** The toy industry is a great example of value created by licensing. Toys themselves are commoditized value, and the primary way the industry captures profits is through the value created by intellectual property (e.g. Transformers toy) added on top of the manufactured plastic.

3 **Material value:** The actual value of the material that makes up the object
(e.g. aircraft grade aluminum or gold).

4 **Utility value:** The value derived from the end user being able to use or not use the product
(e.g. a limited-edition RED-branded iPhone case has utility value, as well as collectible value).

EHrT as a financial store of value can be a characteristic within the object itself. Imagine a limited-edition piggyback with $100 inside or a collectible $100 bill. In some cases, EHrT can also represent the value of the object that embodies the collectible, license, material, and utility values. This is particularly important for a new class of objects where there are fungible "mass-manufactured" objects linked with non-fungible digital data. If the collectible, license, and material value of the object is low, EHrT can mostly, if not wholly, represent the value of the object.

5.3 SELECT APPLICATIONS

5.3.1 Verified Experience and Toy History
As toys interact on PlayTable, games can create a transaction of metadata to form an "experience" for the toy. With 8Hours, the transaction is automatically timestamped to the activity and evidence is permanently saved on the VechainThor Blockchain. From this point on, hackers cannot tamper with the toy's history to create false experiences or activities.

For instance, with a toy and game that emphasizes an experience points mechanism, whereby matches played with the toy will result in level ups, the blockchain will be able to store the history of the experience gains, level ups, and matches played in a way that is fully transparent, allowing for these verified experiences to form part of a game's economic stability or competitive integrity. At the platform-layer, 8Hours provides the secure trust layer so that users can have confidence in the infrastructure developers are using to create their collectibles ecosystem.

Another example is of the value a toy can accrue just by building a history. The toy forms an identity through its journey as it encounters rare events, builds experiences, and changes owners. Ordinary toys can also one day become valuable if they are used by a professional player or undergo extensive customization.

While users can rest assured in the trustless nature of their collectible environments, they should be aware that game developers still have ultimate freedom for the designs of their systems. Freedom to create within a nonrestrictive environment opens up possibilities for design flaws that may still be exploited. It is the developer's responsibility to create interesting game mechanics while heeding potential manipulation of the system.

5.3.2 Validated Toy value
With 8Hours and blockchain technology, validated valuations of collectible assets can be extended to enable all toys to be easily verified without the need to repeatedly audit authenticity after an initial inspection. Collectible card games make the best case study for how collectibles can have validated valuations.

There are entire companies and organizations dedicated to verifying the authenticity of cards, checking for their quality, and storing them in secure containers to lengthen their shelf life. There can also be a lot of value created just by the fact that a professional audit took place. The signing of an audit on the ledger could improve the economic value of a collectible if a previous inspection had never taken place. This means that almost any toy can increase its value permanently by recording the audits on blockchain. The transparency of the blockchain also allows for collectors to check on the total supply; they now know exactly how many products were created or published and can thus determine with certainty if what they are holding is genuinely a rare item.

5.3.3 Frictionless cross-platform usage (and monetization) of toys
Despite modern technical advances, toy manufacturers have yet to take advantage of a post-sale market. Once toys are sold in a store, the toy manufacturer's involvement with the customer ceases, and there are no additional monetization opportunities. This is an unfortunate loss of business opportunity that could be a paradigm-shifting disruption to their traditional business model. But the truth is that toy manufacturers are currently not motivated to sustain their relationship with their toys past the initial sale to the user.

However, if they were economically incentivized through recurring digital profits, the story may be different; if toys could upgrade themselves or have interactions added at a later stage and with an associated price, they would be more than willing to make such an investment. Case in point with the toys-to-life market as previously mentioned. Toys that have been equipped to interact with other systems can be continually upgraded to do more things instead of a second release of a product, with the manufacturer saving on material and logistics costs.

Both game assets and toys can be integrated smoothly across different games and bring cross-realm play (e.g. mining ore in a mining game, moving the proceeds into a world where there is a need to use ore to craft weapons, and finally the weapons to be sold into multiple different game realms) - creating a robust and magical economy powered by millions of players of different games.

If the physical goods and toys could have a digital identity beyond just those environments, their digital and physical values would be inseparable. As an example: a toy used to play in one game could transfer as a character piece to another. The toy could also then be scanned by a smartphone to read its stats and stored information. The value of a physical object would come not from just its physical appearance, but its digital attributes and characteristics as well. This opens the gateway to a second reality where people can be part of a second economy outside of their working lives, where they are involved in the creation of goods in an enjoyable environment.

5.3.4 Applications in games & toys

Toymakers: Whether one is an indie toymaker using a 3D printer or an established toy manufacturer, anyone can plug into 8Hours and immediately create digital identities for their toys. Every toy that gets registered is immediately usable in EHrT-enabled games and to sell to an increasing amount of consumers familiar with the platform.

The registration process involves attaching an RFID tag to a physical object and then linking a digital identity with it on 8Hours with a smart contract transaction. The toy creator will need to pay for this using EHrT, which can either be bought on the open market, received as a grant, or obtained through some other reward mechanism. Registration can be done with a decentralized application created by the 8Hours Foundation, someone else, or by interacting directly with the smart contract.

Since EHrT is publicly accessible, toy makers don't need to ask anyone for permission and can independently read the documentation, register their toys, and market and sell their toys on the open market.

Game Developers: Studios, small and large, are always looking for a substantial audience and are usually constricted to the size of the platform they use for development. For game developers, EHrTs have two main utilities:

1) The creation of AACs for Toy Reality and true verification of collectibility.

Since larger, more established companies dominate the toys, video games, and IGT space, interactions and innovations within each respective industry are limited. There is a massive opportunity in these industries for an open ecosystem of cross-platform games that interact with platform-agnostic toys.

Games built on the 8Hours can use its API to read and write data stored on the blockchain regarding ownership and metadata of toys that consumers already have. Rather than trying to kickstart a new ecosystem for every new game, developers can just focus on delivering a compelling gaming experience using the existing ecosystem of toys.

The 8Hours ecosystem will also make participation as easy as possible with a development fund for game studios to interact with 8Hours smart contracts for free to write new data to existing digital identities.

This means a game studio can create a fantasy game using existing dragon toys registered on the 8Hours and give them new abilities once activated on their game. These new abilities can be data written on the blockchain paid for with EHrT from the development fund. Once the network reaches critical mass or the development fund runs out, EHrT has to be acquired on the open market which has a limited supply, encouraging early adoption.

As a public good, game studios can continue to build games and benefit from all the activity on EHrT as the ecosystem of compatible toys, hardware consoles, and end consumers grow and want more ways they can use their existing toys.

2) The minting of branded in-game currencies (IGCs).

Microtransactions have become a staple monetization model for games, with each developer needing to create their own in-game currency just for handling purchases. These traditional digital currencies are often limited to the scope of a single game and the restriction can be a poor user experience. Also, there is an opportunity in opening up currencies to a larger ecosystem.

In a universal ecosystem, players can participate in several different games to collect one single brand of IGC. This cross-pollination has an effect of balancing play patterns between game industry behemoths and smaller developers. Curious players who are used to playing one type of game may wander into a game they never would have tried before because of the type of IGC offered.

This branded IGC becomes a tool of the developer to foster brand loyalty and a sense of unity within the player base. Many interesting game mechanics are possible from this sort of cross-pollination, and it can be a better user experience because it allows a player to actually play what they want to without the pressure of spending every last cent of their currency for a particular game. Additionally, it can help reduce development time creating an in-game currency system from scratch.

These tokens can also be leveraged to buy auctioned NFT items from other games that may use a different IGC. When you create a token market (linked to EHrTs as a base and USD as an extension of EHrTs open market) you can encourage other developers to accept an IGC from another brand as it has established value within the wider marketplace.

For example, if two small indie game studios, with mutually exclusive communities, want to run a promotional campaign to help grow each other's player base they can have a shared IGC that is unique to their two games. Now two distinct player bases can engage with each other in meaningful ways and even help to bring in completely brand-new players. IGCs can be used as a reward from developers for completing certain special events, reaching milestones, or in exclusive giveaways. Each game now has a larger network of impressions that can help it expand by word-of-mouth.

Consumers: Even with no knowledge of blockchain, consumers can benefit from participating in the 8Hours with an ever-increasing number of toys and games they can play with in addition to full ownership of the digital data associated with each toy.

With their private key, consumers can prove ownership of their toy via the blockchain. This means any achievements or upgrades earned on a toy is theirs, and they can sell it to someone else if they choose. This means the value of a toy actually grows in value in the after-market where it normally only decreases in value.

Games can be configured to only accept toys that prove ownership, so stealing toys won't be profitable since the digital ownership is still based on the original owner's private key.

The marketplace dynamics from having toys that increase in value as they are played would encourage more consumers to participate in the ecosystem fueling more toys and games to be made in a virtuous cycle.

5.3.5 Applications beyond

While 8Hours is initially focused on specific industries targeting gaming and toys, our goal has always been to enable a world where physical and digital universes intersect seamlessly. In the future, we see the 8Hours Token transitioning to a "Product Network Token" with many future applications for this technology to play a part in both consumer and enterprise.

Consumer goods receipts: In a truly digital world, physical receipts as proof-of-purchase may be phased out in favor of digital records maintained on a blockchain. Upon purchase of an item, a non-fungible AAC token could be created and assigned to a specific user as a form of receipt. The certificate may store information about that purchased product's warranty and service-related information. In this scenario, tokens would function as proof that the purchaser properly took title to the asset and has related ownership rights (e.g. right to transfer).

Products are then identifiable by token without the need to associate ownership with identity. In the case of a product recall, the manufacturer would be able to identify owners of a given product and either send a message to those owners regarding a recall or even make a refund.

Since everything is controlled by software, the digital transfer of assets can happen underneath a vendor's web layer for a seamless user experience. In the consumer good purchase example, a vendor can automatically register a product's warranty upon purchase with the owner, without any user action.

Digital product licensing: EHrT can also be used to track ownership of digital assets — anything from in-game items to media protected by Digital Rights Management (DRM). EHrT simplifies the licensing process so that the blockchain serves as the registry for rightful purchases of software.

The tracking of an object's transaction history and owner validation can also be extended to check for proof of ownership of other digital assets as well. This makes sublicensing easy and secure to implement. For example, if an IP licensor wanted to control their distribution and access to their licenses, the licensee could be required to carry the IP's brand of IGC. Then, access to the IP licensor's assets and services would only be allowed when enough IGC is held. Physical licenses for toys and art, and digital licenses of any kind for music, applications, video games, etc. can be registered by their respective organization and use EHrT to mint their own IGC.

Blockchain would serve as the backend data validation service, with decentralized applications built on top to handle the actual processing and issuing of assets and royalties. Thus, even existing DRM solutions can migrate to a decentralized system paving the way for a more open sourced approach to digital licensing.

Open tracking of physical goods: When a physical object gets registered with a digital identity, that object now gets an auditable historical log of every transaction that happens to it.

Previously this data was locked away by a company, and one would have to trust what they said was true. With a public blockchain, anyone can now know this data is the true source of record.

5.4 TOKEN MECHANICS

5.4.1 Token Overview

The primary use-case of EHrT is to render services for developers on the platform. Participants such as toy makers and game developers will have to buy EHrT on the open market in order to register toys, update their toy data, or access to otherwise restricted functions. "Colored" tokens can be created by IP owners as a branded in-game currency to be redeemed for specific in-game products and services.

Secondarily, EHrT can be used as a currency for platform-level services. 8Hours services will require payment in the form of EHrT, burnt EHrT, or locked EHrT.

Authentic Asset Certificate (AAC)
None-Fungible Token linking physical collectibles & proof of ownership.

In-Game Currencies (IGC)
Sub-tokens. Developers' own branded in-game currency.

= EHrT Token

5.4.2 Token Functions

VIP180 Compliance: EHrT is an VIP180 standard token that will be used in several ways by network participants. Building on top of the VeChainThor blockchain provides us with a Byzantine fault tolerant blockchain and a Turing-complete virtual machine. This designation means we can already start storing data on a trustless and decentralized blockchain with a continually improving smart contract ecosystem for network participants to utilize.

Transferring tokens between wallets: The VIP180 standard interface requires compliant token contracts to have a specific method of transferring tokens between VeChain wallets. Being VIP180-compliant means that EHrT will be able to be listed on third-party token exchanges and used by third-party VeChainThor wallet dApps. This increases the liquidity of the token, allowing it to be more easily purchased by users.

Burning tokens in exchange for services: Instead of transferring tokens to a service provider, the service provider may accept burnt tokens. Burning tokens removes them from circulation forever, which is beneficial to the health of the network.

Locking tokens/ sending locked tokens in exchange for services: EHrT can be locked for several years, effectively burning the token for the locked duration, after which they may be unlocked by the token owner. Tokens can be locked to increase the token owner's stake in the network or transferred to a service provider as payment before becoming locked. All payments for services from developers (digital asset creation, licensing rights, etc.) will require a percentage of the payments to be given as tokens locked for two years. This enables 8Hours to utilize a time-gapped deficit model.

Verification of stake in network: Locked tokens have another utility as they are proof of a token owner's stake in the network (since locked tokens by definition cannot be transferred or sold). Certain functionality will be only accessible to token holders with a predetermined stake in the network.

Creating Colored EHrT: Sub-tokens called "colored tokens" can be registered by spending EHrT. Colored tokens are defined as an in-AAC currency that is branded by a developer for their particular use-case. They are not VIP180 tokens and cannot be listed on an exchange. These tokens can only exist inside AACs and are deposited by spending an equal number of EHrT. Only the colored token creator can deposit their created colored tokens but can be spent by any authorized operator of the AACs.

There are many use-cases for colored tokens. Here are 3 potential use-cases:

- **In-game Credits -** Spending colored tokens can be accepted as payment for products and services within the colored token creator's economy. In general, only game developers and toy manufacturers will want to invest in generating colored token economies. For example, game developer A might make a colored IGC named "AToken" and allow "AToken" to be spent for products or services in A's games (skins, upgrades, etc.). Developer A might even make "AToken2" that can only be redeemed in A's second game.

- **Proof of License -** Toy manufacturers can pre-load a number of colored tokens on each of their toys as proof that they were indeed created by the toy manufacturer. For example, manufacturer B verifies their toy authenticity by scanning them. If the toy contains their colored IGC "Btoken," they allow the toy owner to play in Btoy only games. Manufacturers can offer a service whereby they deposit this colored IGC into an unlicensed toy for proof of payment of a licensing fee.

- **Proof of Rarity -** Toy manufacturers can pre-load a number of special limited-edition colored tokens on a batch of toys. On top of proof of license, these toys will now have inherent value from limited nature of their special tokens inside.

Storing value inside digital assets: In addition to colored tokens, VeThor, along with any VIP-180 tokens, may be deposited into AACs. This can be a way for toy manufacturers to add value to their products, or for game developers to encourage players to play their games.

Manufacturer A's toys might not be selling well, so A loads them all with $5 of VeThor. Now, the toys can function as gift cards with more redeemable value than their retail cost, creating the proper incentives to sell and increase inventory turnover. Another example would be a game developer that offers $20 of their own VIP-180 tokens to the first 1,000 players that beat the tutorial of their new game.

Initial Developer EHrT Exchange Service pool: In order to ensure availability of tokens for utility purpose within games, the EHrT Exchange Service pool is a portion of tokens allocated specifically for developers. The exchange includes an easy checkout experience for developers to turn fiat into EHrT serviced by the 8Hours Foundation. This keeps companies and developers from having to interact with exchanges, maintain bookkeeping and auditing for businesses and new clients who are onboarded.

The pool allows the Foundation to have stronger control over EHrT market factors, limiting the risk of early developers only having access to EHrT at extraordinarily volatile market rates. When the initial developer pool runs out, the 8Hours Foundation will have to add more tokens to the pool from the open market or from offsetting revenue. The Exchange Service is also highly convenient as a one-stop-shop solution for developers and ecosystem participants looking to use the platform without the need to source services, guides, and general information from Medium, GitHub, etc.

5.4.3 Tokenomics
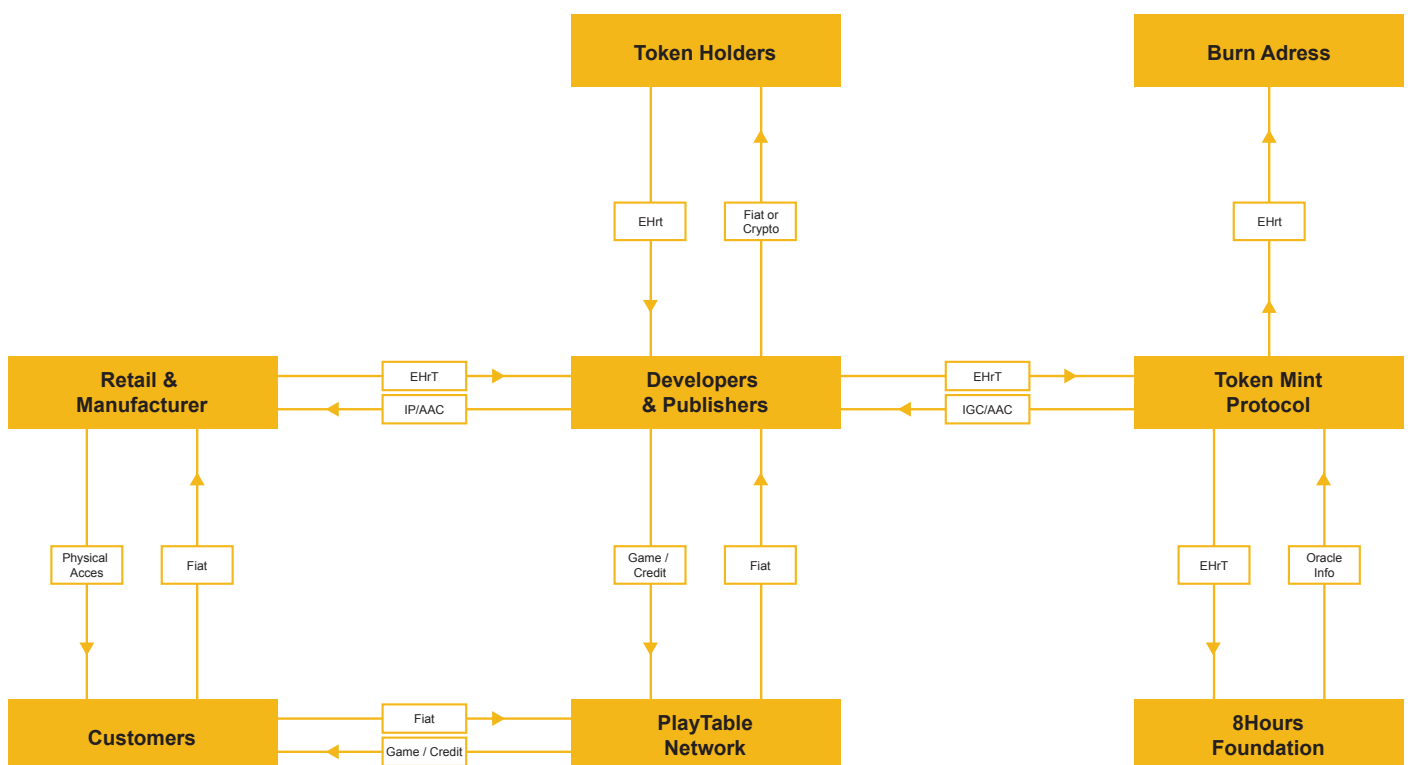
5.5 8HOURS ECOSYSTEM

The 8Hours Foundation Ecosystem consists of the Foundation, Token Mint Protocol, token holders, game developers, toy manufacturers, and players. Every group within the community is vitally important to each other and the success of one group implies the success of others.

At the platform level, EHrTs are circulated between participants as a platform-wide currency to use for various platform-level services. **One of the utilities of EHrTs currently is to be burned via the Token Mint Protocol for the creation of AACs and IGCs, thus diminishing supply.**

The AACs and IGCs minted from the Token Mint Protocol will continue to provide value in the ecosystem via true ownership of collectibles and purchasing power of in-game objects within the Platform.

5.6 TOKEN CIRCULATION

A successful blockchain community must have a perfect economic cycle. Tokens need to have practical utility functions in order to really generate long-term value. If tokens have weak utility functions or there are no practical applications, the tokens will not circulate.

The most critical factor in this mechanism is that the games on the platform are designed well enough to attract many users. This ensures continual growth and value creation within the ecosystem. To this effort, IP holders and game developers are serving to bring in more players and retain user stickiness of games on the platform.

The 8Hours Platform functions essentially as a two-sided marketplace with network effect. Therefore, the number of players participating in the ecosystem also helps to attract partnerships and additional game developers. To this effort, players and token holders serve to bring in the content side of the platform in the form of games or game developers.

The Foundation's role, as always, is to promote the growth of the ecosystem as a whole. EHrT grants controlled by the Foundation will be allocated to growing specific areas of the ecosystem. These grants can be used to reward community members for accomplishing Foundation key objectives.

For example, development objectives may take the form of bug bounties; growth objectives may take the form of marketing initiatives or new partnership deals secured; and for other objectives that further the Foundation's mission, additional incentives may be created.

$$F_{grant} = MP_{EHrT} - T_{Burn} \qquad T_{Burn} = 0.5\ (MP_{EHrT})$$

F_{grant} = Total EHrT returned to Foundation Grant Allocation

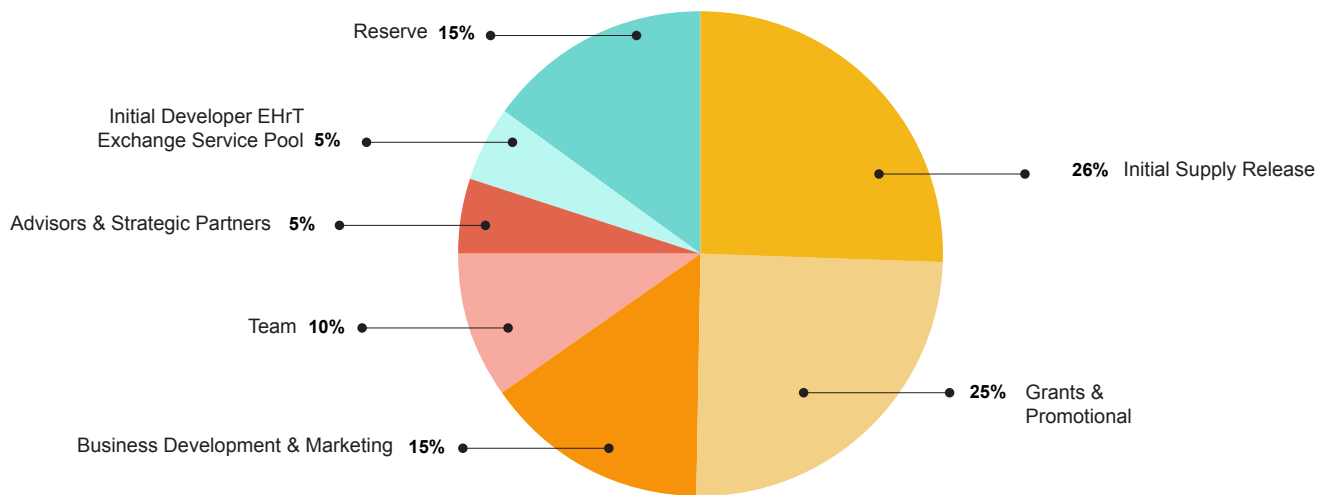MP_{EHrT} = Total EHrT processed by Token Mint Protocol

T_{Burn} = Token burn of 50% of Total EHrT processed by Token Mint Protocol

In order to encourage ongoing token circulation, when the Token Mint Protocol is called, 50% of the EHrTs will be burned, and 50% of the EHrTs will be sent back to the Foundation's grant allocations. This is to ensure long-term capacity of the Foundation to continually push for growth and eventually reach a tipping point for widespread adoption. It also allows for the community members with more notable contributions to benefit asymmetrically, as they will have constant circulation of EHrTs for participant rewards.

6

Token Distribution & New Token Issuance

EHrT is a VIP180 token with a fixed supply of 10 billion (10,000,000,000). The large number of tokens will ensure meaningful transactions can happen on 8Hours. After issuance, no additional tokens will be created, with the burn mechanism, the number of max tokens can only decrease.

Token distribution

- Reserve **15%**
- Initial Developer EHrT Exchange Service Pool **5%**
- Advisors & Strategic Partners **5%**
- Team **10%**
- Business Development & Marketing **15%**
- **26%** Initial Supply Release
- **25%** Grants & Promotional

EHrTs will be used by the 8Hours Foundation for furthering ecosystem growth.
The distribution of tokens is as follows:

- **~26%- 30% of tokens in initial circulation released after NTI, of which ~20% will be private sale, and ~10% will be community and public sale**

- **25% for grants and promotional use**

- **15% business development and marketing for publisher and IP owner onboarding**

- **10% team** (locked up and on a two-year vesting schedule)

- **5% advisors and strategic partners**

- **5% initial developer EHrT Exchange Service pool** (Game Developers)

- **~10%~15% reserve**

The grants given by the 8Hours Foundation include purposes for infrastructure development, third-party content development and other development campaigns.

Business development or onboarding costs may include license fees, service fees, or IP development.

The 8Hours team allocated tokens are locked for 2-years with a 1-year cliff. 1 year after initial supply release, half of the team's tokens will unlock. Then, every 3 months an additional 12.5% unlocks, so that 2 years after the initial supply release date 100% of tokens have been issued to the team.

Private Sale allocated tokens will follow a **lock-up distribution** schedule of:

1. **First Distribution Date:** 25% of the purchase amount to be delivered by the company after the completion of the entire process of the token offering and after the minting of the EHrTs on VeChainThor Blockchain.
2. **Second Distribution Date:** 25% of the purchase amount to be delivered at First Distribution Date + six Months.
3. **Third Distribution Date:** 25% of the purchase amount to be delivered at Second Distribution Date + six Months.
4. **Fourth Distribution Date:** 25% of the purchase amount to be delivered at Third Distribution Date + six Months.

Advisors and strategic partners are given allocation to help guide the foundation in meaningful ways. Advisors may consult on areas of expertise including, but not limited to, token economics, marketing, IP strategy, community management, and technical architecture. There are various lockup-distribution schedule for various advisors and partners set in place.

The EHrT Exchange Service pool serves as an allocation exclusively for the use of utilities within games. These tokens may only be issued to game developers with games on the 8Hours Platform for EHrTs intended functionality.

Team

The 8Hours team is composed of UC Berkeley and Stanford graduates who have a proven track record with experience working at Amazon, Apple, high-growth SaaS companies, successful mobile game companies, and entrepreneurial endeavors (building then selling startups).

They have patents pending covering critical aspects of human-machine interactions based on a digital/physical, virtual/tangible platform, object sensing, recognition, and manipulation, etc. Everyone on the team is an avid gamer with deep and compelling connections within the industry and has garnered much praise and respect across the industry for their pioneering work.

7.1 CORE TEAM

John Dempsey, Founding Director

John is an Eagle Scout whose DNA resides in social play. A lifelong gamer with a technical background and passion for bringing people together, he created dozens of hardware electronics kits teaching kids how to code. Eventually, he dropped out of college to pursue his dream—to unite people with the power of play. Since then, he has gone on to create PlayTable, a revolutionary gaming project that is pioneering new space for social gaming.

Shane Zhu, General Manager

Shane has a wealth of experience in startups, manufacturing, and business development. Previously, Shane was the co-founder of Titanium Falcon, a Silicon Valley-based smart hardware company. He sold his company to one of the largest IoT companies in China. Before Titanium Falcon, he helped design and build the mechanical systems for the NASA Mars Rover. Shane has a BS in Robotics Engineering from Arizona State University.

Joe Brogno, Creative Director

Joe has over 10 years of experience in art direction and design at Nickelodeon Animation Studios as an Art Director and Supervisor. He has a degree in Animation and CGI from Full Sail University. He is now an expert game designer, with over 60 games designed and several published.

Sherman Meredith, Blockchain Lead Engineer

Sherman was one of the earliest blockchain adopters and investor in the Ethereum ICO. With his eight years of software and game development experience, he was in the perfect position to pioneer blockchain and gaming fusion. He got started developing for blockchain within games (as opposed to traditional web3.js route) and created the first ETH wallet to natively exist inside the Unity Game Engine.

Ye Deng, Software Director

Ye has over 12 years of experience in software engineering. After working at Huawei, he was the founder of a game studio that developed a proprietary lagless physics engine on arbitrary curved surfaces with custom mathematical spatial queries and collider interactions (a very hard problem to solve). Ye has a MS in Computer Science from the University of Kentucky and a BS in Computer Science and Technology from Jilin University.

Jiaqi Wang, SDK Architect

Jiaqi was the co-founder of MBAville, an educational games studio that published Project Quant -- a game that teaches accounting, economics, and analytics. Jiaqi has an MS in Computer Graphics from Purdue University and a BS in Software Engineering from Beihang University.

Jason Ge, Hardware Partner

Jason has 20+ years of experience as a VP of R&D at Huawei, where he was responsible for shipping millions of units over the course of his career. He eventually left Huawei to start his own manufacturing operation with a factory in Shenzhen. He has a degree in Electrical Engineering from the University of Electronic Science and Technology.

Sam Lee, VP Hardware

Sam is a highly sought-after RF Engineer in Silicon Valley. After working for Apple, Nokia, and Amazon for the past 10 years, he's become an expert in wireless technologies and hardware development. His notable achievements include helping design the Amazon Echo. He has a degree in Electrical Engineering from UC Berkeley and studied Communications at Stanford.

7.2 ADVISORS

8Hours Foundation's advisory board is composed of industry leaders spanning blockchain, gaming, and hardware backgrounds.

Glen Schofield

Glen is a AAA Video Game Director, prolific artist, and influential figure. He is best known as the creator of Dead Space and co-founder of Sledgehammer Games, which developed Call of Duty: WWII, Call of Duty: Advanced Warfare, and Call of Duty: Modern Warfare 3.

Sean Barger

Sean has produced over 55 entertainment software titles including the legendary "Tetris" game, Capcom's "NFL Football", "Bo Jackson's Baseball & Football", and "The Hanna-Barbera" Series. He is the original founder of Equilibrium Technologies, Inc and led the product development, global distribution, and strategic partnerships for the award-winning DeBabelizer and MediaRich Dynamic Media Processing Platform before selling his company in 2000.

Jateen Parekh

Jateen was Jeff Bezos' first hire for Lab126, where he built out Amazon's Kindle product, team, and platform. After he founded Jelli, a programmatic radio advertising platform, which is undergoing acquisition by iHeartMedia.

Kris Alexander

Kris has brought businesses from $0 in revenue to $10s of millions to $100s of millions. An entrepreneur at heart, Kris is an advisor to multiple startups and has served as the Chief Strategist at Akamai.

7.3 STRATEGIC PARTNERS

CREAM

The CREAMethod incubator process is helping to create a 3D model of 8Hours Foundation + PlayTable + Community, so that the 8Hours Movement and PlayTable can grow with the help of a proactive community base. Using strategy, , Tokenomics, and Community has become the proven method of CREAM to unleash the potential of enterprises and startups around the globe.

VeChain Foundation

VeChain is the world's leading public blockchain platform providing services to enterprises. VeChain aims to connect blockchain technology to the real world by providing a comprehensive governance structure, a robust economic model, advanced IoT (Internet of Things) integration, and pioneers in real-world applications.

UC Berkeley Blockchain Xcelerator

One of the top accelerators in blockchain industry, Berkeley's accelerator program for blockchain startups provides leading mentorship opportunities, as well as access to UC Berkeley's top-tier talent and network.

7.3 GAME PUBLISHER PARTNERS

Catan GmbH

Catan GmbH's primary product is the successful board game Catan™ (former "Settler of Catan"™), which comes with an array of expansions, extensions, editions, and spin-offs. Catan creator Klaus Teuber gained valuable experience as an independent game designer and founded the Catan GmbH in 2002. For over two decades, Klaus has built an impressive portfolio of board and electronic games. Catan™ is available in over 39 languages and has sold over 27 million units worldwide since 1995. According to estimates by licensing partners, approximately 20 million people are spending time in the Catan gaming universe on a regular basis.

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Asmodee Group

Asmodee is a French publisher of board games, card games, and table-top games. Founded in 1995 with in-house developed games, they have since acquired numerous other game publishers and as of 2018 have become the second largest publisher of board games in the world. Aside from in-house games such as Jungle Speed, Splendor and Diplomacy, Asmodee also develops digital video game versions of their highly popular games.

Days of Wonder

Days of Wonder is a games publisher and developer owned by the Asmodee Group. From its insistence on releasing only a very limited number of new games to its uncompromising board game production values and unique in-house digital development team, Days of Wonder consistently raises the bar with an unmatched string of hits that includes Ticket to Ride®, the world's best-selling train game; Small World®, the legendary fantasy game of epic conquests; and Memoir '44®, the World War II saga with 20 expansions to its credit.

AdMagic

AdMagic is a personalized playing card printing company as well as a promotional advertising and design firm specializing in the creation of custom playing cards, custom card games, custom board games, and personalized playing cards. Best known for their worldwide best-seller viral phenomenon card game, Cards Against Humanity, AdMagic creates playing card decks and games that are now being sold throughout the world.

Czech Games Edition

Founded in 2007, Czech Games Edition (CGE) released their first titles in Galaxy Trucker by Vlaada Chvátil and League of Six by Vladimír Suchý. Since then, CGE has published over 40 games and expansions, including Codenames, Alchemists, Dungeon Lords, and many others. In 2014, CGE expanded into the realm of digital board games. CGE's games can be found in over 30 countries around the world, thanks to their impressive list of partners and publishers.

Fingerprint

With over 800 unique apps to enhance children's education and entertainment experiences, Fingerprint curates a digital network aimed at pre- and early elementary school students. Fingerprint's applications combining education and entertainment have gained recognition from notable child and family organizations including the National Parenting Publications Awards and the TechWithKids.com Best Picks.

Breaking Games

Founded by Shari Spiro of AdMagic, Breaking Games is a promotion and publishing company that prides itself on being unique and different than other board game publishers. Providing a full-support and advisory service to game designers, Breaking Games actively involve themselves in the publishing and development of their clients' games. Two of their most popular tabletop games are the Mensa Select award winning Letter Tycoon and the Mensa Select and Indie Cade awarded Circular Reasoning.
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Alderac Entertainment Group (AEG)

Founded by Jolly Blackburn in 1993, AEG is a publisher of role-playing game, board game, and collectible card game products, based in California and has a virtual workforce distributed all over the world. AEG was originally formed to publish the award-winning Shadis magazine. Since then, AEG has created huge hits like Smash Up and Love Letter, and recent innovative games like Mystic Vale, Valley of the Kings, Automobiles, Istanbul, Thunderstone, and Dice City.

Days of Wonder

Days of Wonder is a games publisher and developer owned by the Asmodee Group. From its insistence on releasing only a very limited number of new games to its uncompromising board game production values and unique in-house digital development team, Days of Wonder consistently raises the bar with an unmatched string of hits that includes Ticket to Ride®, the world's best-selling train game; Small World®, the legendary fantasy game of epic conquests; and Memoir '44®, the World War II saga with 20 expansions to its credit.

CSE Games

CSE Games is a distributor, developer, and publisher of award-winning sports and entertainment products. Boasting award-winning games fully licensed based on the NHL®, the games lineup includes board games, card games, sports, and collectible products. CSE games present players with an entertaining challenge and promote family fun, cognitive skill development, and strategic thinking.

Catalyst Game Labs

Catalyst Game Labs is a table-top gaming, role-playing games, and casual games publisher founded in May 2007 by InMediaRes Productions LLC. Established for the purpose of publishing sourcebooks for the Shadowrun and Classic Battletech series, it has now expanded its scope by entering the card games business as well as actively producing games based on its exclusive licenses for game franchises such as the MechWarrior series.

Skymarch Entertainment

Skymarch Entertainment is a game development company based out of Calgary, AB, Canada made up of highly respected AAA company background experiences. Skymarch Entertainment focuses on creating unique, well designed, immersive entertainment experiences.

Level 99 Games

Level 99 Games is a board and card game publisher with a focus on games that adapt and grow, as well as building games with nearly endless replayability and customization. Their series lines are continually coming out with new releases and are supported by organized play, such as their Battlecon, Pixel Tactics series.

Brotherwise Games

Brotherwise Games is an independent game publisher focusing on a mixture of board games, table-top games, and card games Founded by Chris and Johnny O'Neal. Brotherwise's first game, Boss Monster, was a Kickstarter hit in 2012, and the game has gone on to become one of the best-selling card games in the U.S. Brotherwise Games is based in Southern California. Boss Monster is now available digitally for mobile, PC, and VR.

Grey Fox Games

Founded in 2016, Grey Fox Games is a publishing, marketing, and fulfillment company that creates accessible and thematic table-top board games. Grey Fox Games carefully selects and develops games to make sure they meet the brands high standards of playability.

Sizigi Studios

Sizigi Studios is an experienced creative agency and game studio, which offers services such as app development, creative design, and experience crafting to clients. Services by Sizigi Studios extend from traditional table-top games and card games to modern augmented reality and virtual reality video game experiences.