



HUB

Your data, your HUB

LitePaper

A Decentralized Suite of Data Management Tools for Internet users.

Abstract

This write-up describes challenges ailing creating value from digital data online and how Hub Star intends to solve them. Challenges elaborated are data privacy violation and difficulty finding signals in collected data. Hub Star addresses these challenges by giving users the power to control how and who access their data and enables businesses to collect acquiesced high-value insights from consumers in exchange for Hub Tokens. This is not a technical white paper; here we outline the use cases, a technical white paper will follow.

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Introduction

The concept of big data has been around for a while. In the modern world, most organizations understand that to gain a competitive advantage against opponents and offer services that align with customers' needs, they must collect and retrieve insights from customers' data. Big data analytics helps organizations harness their data and use it to identify new opportunities. That, in turn, leads to smarter business moves, more efficient operations, higher profits, and happier customers. In his report 'Big Data in Big Companies,' IIA Director of Research Tom Davenport interviewed more than 50 businesses to understand how they used big data. He found they got value in the following ways:

Answer Important Customer Questions

The study found that most businesses could find answers to the most pressing business questions in their databases. Using big data and analytics, the surveyed companies could discern what the customers wanted, why they were missing out on conversions, who their best customers were, and why people were more likely to choose specific products. Most businesses gather insights that can be used to drive marketing campaigns and sales. Companies that manage to leverage these acumens are better placed to understand their customers and optimize their campaigns to gain the upper hand over competitors. It was also revealed that a significant number of businesses were using predictive analytics. Predictive analytics is a branch of big data that creates business forecasts and suggests potential solutions to future problems. The

respondents reported that by exploiting predictive analytics, they could determine future customer needs and develop strategies to capitalize on them in advance.

Making A Confident Decision

Decision-making is one of the most complex and challenging processes in any business. Nearly all decision-makers operate in an uncertain environment. The studied companies cited the ability to make confident decisions as one of the leading reasons to use big data. Big data helps businesses understand their marketplace, industry, and customers, enabling them to make confident decisions. Ularu and Puican write that 'Big data analytics gives you a complete overview of everything you've learned so far as you've developed your organization. This means that you don't have to guess whether you should launch a new marketing campaign or try a new product. Instead, you can look back over the information you have and make focused decisions designed to generate the highest possible ROI.' The inclusion of machine learning and AI in decision-making can enhance decisions by suggesting solutions, relieving business owners of the hustle to develop solutions from scratch.

Understanding And Optimizing Business Processes

Knowledge is power. This is one of the central concepts of data analytics. The survey found that organizations that exploit the power of big data tend to stay ahead of the curve by identifying inefficiencies and opportunities in their company practices. This information is vital for redesigning business strategies. For instance, insights retrieved from the sales funnel can be used to determine marketing strategies working and those underperforming. These insights can inform which tactics need more investments,

deserve to be dropped, or modified. Using evidence to make quick decisions ensures the management spends most of the budget on the things that help the business grow and less on strategies that do not work.

Empowering Future Generations

Modern generations such as the millennials and generation X are natural users of technology. Organizations intending to tap into the benefits of contemporary workers must be ready to facilitate them with relevant technologies to help them make timely, accurate decisions. Big data and related technologies such as data analytics and predictive analytics are some of the critical tools many organizations have found to help ease the workplace roles of modern workers.

A few decades ago, some businesses already understood the importance of big data. Even though the term was yet to be coined, evidence suggests that progressive organizations were already using big data concepts but on a small scale. For example, technologized businesses in the 1970s had access to spreadsheets, which they would manually analyze, retrieve impactful insights, and apply them in decision-making. The advent of the Internet and AI data tools has enabled modern businesses to achieve the maximal potential of big data. Companies can readily collect information from Internet users and apply it to marketing and other business operations. While technology has enabled quick access to users' data, it has created various challenges in accessing and sharing.

Big Data Challenges

About 90 per cent of the world's data has been generated in the last three years. With over 2.5 quintillion bytes of data being created every day, it is evident that the future will be filled with more data. Though more data means more business insights for companies, executives must worry about data challenges. Some of the data challenges in the modern age are data privacy violations and limited signals in collected data.

Data Privacy Violation

When the 4th amendment was ratified in 1791 to grant the United States citizens some level of privacy, it is obvious they had no clue of the privacy complexities of the 21st century. Though the law has been updated several times to keep up with the changing times, there are no precise mechanisms to enforce online privacy. Due to loopholes in the law, many businesses are mining Internet users' data and using it in targeted marketing and other commercial activities without consent. While some of the commercial uses of data collected online are meant to benefit users, such as more tailored services, there is an increasing fear among the public that businesses are misusing their data. In 2018, the European Union adopted the General Data Protection Regulations to 'give citizens control over their data.' In the same year, the United States government began discussing data regulation laws suggested by Federal Communications Commission. Full implementation of these laws will give back Internet users some degree of control over their data. But not total control.

Finding The Signal In The Data

It's difficult to get insights out of a massive lump of data. Maksim Tsvetovat, a prominent data scientist at Intellectsoft and author of the book 'Social Network Analysis for Startups', said that to use big data, "There has to be a discernible signal in the noise that you can detect, and sometimes there just isn't one." Dealing with big data is a classic needle-in-a-haystack problem. Getting the right insights can be challenging because of unreliable data and integration challenges.

Unreliable Data

Big data is not 100 per cent perfect, and not all of it is accurate. A more significant portion of big data is inapplicable. Various studies indicate that a considerable amount of big data is inaccurate. For example, the Experian Data Quality survey showed that 75 percent of businesses believe that their customer contact information is incorrect. Besides incorrect information, most companies leveraging big data face challenges related to duplicate and contradictory details. Though businesses can use technological tools to clean and enhance the quality of their data, significantly inferior quality data cannot generate any valuable insights or shiny opportunities.

Integration Challenges

Big data involves businesses collecting information from multiple sources and bringing it together to have a 360 view of customers. Data collected from different sources come in varying formats. For instance, an eCommerce company can collect data from website logs, competitors' website scans, social media, and call centres. Data from these

sources will differ, thus making it challenging to match and generate customer profiles. It is also essential to understand that modern intelligent machines are not smart enough. These systems cannot discern similar elements with slightly varying naming. For example, most AI systems will treat an item named SALOMON QST 92 17/18, Salomon QST 92 2017-18, and Salomon QST 92 Skis 2018 as different items. Similarly, these systems tend to have challenges distinguishing too similar information. For example, they can categorize ScienceSoft and Sciencesoft as the same thing when they are different companies.

In a nutshell, because of the benefits of big data, many companies are exploiting loopholes in existing laws to collect user data without their consent. This denies Internet users from having control over their data and exposes them to dangers such as fraud. Most companies that unfairly collect user data are never charged. However, the quality of collected data tends to be poor and difficult to retrieve accurately. This limits the usability of the data and urges businesses to invest in sophisticated data analytics tools.

What if there is a way users can be given total control over their data, and businesses have the means to collect accurate, clean data in a safe and legal environment? This is what Hub Star aims to achieve. Hub Star believes that instead of businesses secretly collecting data and employing sophisticated techniques to make sense of it, users can simply be allowed to control how their data is accessed and provide direct information about them. After all, people know themselves better than what a machine can make up.

Hub Star

Hub Star is an innovative browsing solution that enables users to gain control over their online data while allowing them to trade it for cryptocurrencies. Hub Star comes as a browser that can be used on a PC or an app installable on smartphones. Hub Star browser can be used as a specific browser, but its ability to safeguard users' data and only allow websites with consent to access protected data distinguishes it from conventional browsers. Hub Star is designed with privacy concerns of Internet users and the big data challenges of businesses at its core. The resource reconciles Internet users and businesses by providing a platform where Internet enthusiasts can manage access to their data and companies can acquire quality data-rich in impactful insights.

Apart from providing a novel platform where users can be guaranteed online privacy and businesses can access valuable data, the Hub is designed to address some of the common challenges that face traditional blockchain-based platforms. Some of the blockchain issues Hub intends to address using innovative solutions include:

Privacy And Security

Even though cryptocurrencies are designed to offer pseudonymity, many applications that use blockchain technology utilize smart contracts, which must be linked to known identities. Some of these platforms store identity information on the shared ledger, which can be accessed by the public, raising questions about users' data privacy. There are also cases of some cryptocurrency exchanges employing KYC and AML to extract users' data. Besides technical issues and operational practices that threaten users' data

safety, traditional blockchain systems are susceptible to cyber-attacks. Coin Desk report propounds that \$2.7 million is stolen from exchanges daily, and the security threat has increased by 13 times compared to 2018. Hub Star addresses the privacy and security challenge ailing the crypto industry by employing unique techniques that encrypt and store data in a distributed system.

Costly Transactions

According to a survey by Iris, 37 per cent of crypto lovers are concerned about the high transaction fee. Since 2018 most crypto users have been spending an average of \$28 per transaction. There have also been reports of crypto users paying close to \$16 to complete transactions worth \$20. Some platforms charge a trading fee of between 0.1 to 0.3 per cent of the transaction value. While this figure is small for small transactions, it is outrageous for large transactions. Hub Star exploits Tron Blockchain to reduce the cost of transactions. Customers using the platform will, for the first time, enjoy some of the lowest transaction costs in the cryptocurrency industry.

Usability

Usability is one of the vital aspects of tech systems. Systems meant to be used by the general public must be designed with ease of use in mind. Unfortunately, most cryptosystems are complex to use, thus scaring novices from using them. Hub is a simple system that features a straightforward interface. It has a 'single log on' feature

that will allow users to have just one password for interacting with all websites to enhance usability.

Speed

Most blockchain-based platforms have installed additional measures to verify transactions before they are completed to manage cybersecurity risks. Although these additional security strategies have had a significant impact on limiting the prevalence of successful attacks, they have slowed transaction speed, subjecting crypto lovers to inordinate delays. Hub Star promises to offer faster transactions to enhance users' experience. The platform will run on Tron Blockchain, which supports speedy transactions.

Tokenomics

There will be a fixed amount of HUBS tokens - one trillion distributed as follows.

Token sale: 45% of all tokens 450 billion; any remaining tokens will be used to allow users to stake HUBS tokens and offer rewards.

Team: Will hold only 15% of tokens equal to 150 billion.

Airdrops: 5% (50 billion) of tokens will be used to offer token holders airdrops over time.

Marketing: It is essential to promote the project, and 10% (100 billion) of tokens will be used towards marketing.

Development. 25% of tokens will be used to gain traction with the development of the products.

Core Features Of Hub Star

Hub Star is a browser whose primary objective is to enhance the safety of Internet users by giving them the power to manage how their data is accessed. Furthermore, the platform seeks to enable businesses to collect quality data by buying authentic user data directly from users. Hub Star employs a native coin, Hub Coin, based on Tron Wallet. Hub coin will facilitate transactions between businesses and users and will be tradable with goods and services. For Hub Star to function and meet its core objectives, it is fitted with various features. Here are some of the distinguishing Hub Star features.

Insight Layer

Users can unlock the value of their data by sharing it. The system provides selective sharing, enabling progressive disclosure, allowing users to select attributes they consent to share in exchange for Hub coin. Unlike other platforms in the market, Hub Star selective sharing method grants access to insights based on the result of the request. This implies that the requesting party does not access the entire user data. It is also important to note that access to insights is only granted after the user agrees to the notification request sent by the requesting party. Notification requests sent to users stipulate details of what the site is requesting and a fee they are willing to pay for this

insight. The insight layers can also support-timed requests – it can enforce rules such as the duration a consented business can access particular insights from the user. Information regarding permission consents and how data is accessed is indicated on a receipt stored in the event chain. Also, Hub Star keeps track of users' agreement terms to share their data.

Security Features

Hub Star is built to foster personal private space. The platform's design allows users to collect and manage their data in a secure environment where companies cannot access insights without consent. The collected data is encrypted, split into 30 shards, and stored across a computer network utilizing the distributed file storage BTFS. Only legitimate owners of the data can grant permission to encrypted, stored data. Besides giving access, users have the power to revoke consents. When users feel unsafe about approval they have already permission, they can go back and withdraw the consent, barring the involved party from collecting further insights. Hub Star can operate on multiple devices. Users can run a single account on various devices to achieve maximum returns on data generated on each device. However, some users may feel uncomfortable allowing some devices to access specific data. For example, some users may not want an iPad to control the music system in the living room to access their medical data. Hub allows users to control the type of data accessible to different devices.

Payments

All payments on the Hub Star platform will be completed in Hub tokens. Users who agree to share their insights with businesses will be paid in Hub tokens. Goods and services offered on the platform will also be exchanged with Hub tokens. Prior to payment, participants in the transaction will be notified, and if the transaction is approved, the system processes the transaction using a smart contract. Hub platform employs smart contracts in processing transactions because it offers reliable security and minimizes surplus transaction costs. Smart contracts save time, prevent conflicts, and are also cheaper, faster, and more secure payment methods than traditional methods. The Hub payment system is designed to be straightforward for every user. Besides, it is structured so that online retailers can conveniently integrate with it using APIs.

Single Log On

One of the reasons traditional systems are easily penetrable is their overreliance on authentication factors that are stored in the system. Hackers who manage to access these details usually find it easy breaking into user accounts. Systems that leverage two-factor authentication tend to have robust security features; however, they are susceptible to social engineering frauds. Hub Star dumps traditional authentication methods for a modern passwordless approach. Hub Star users will manage their online identity using a private key. The platform will enable a user to create a single sign-in that will integrate with any website. When users land on web pages, they will automatically be authenticated – no more account creation, no more managing

passwords – one login, one Hub. This feature promotes the anonymity of users with an option to provide basic personal information or alias. As long as no consent has been given, users will enjoy websites they visit without bothering about their data being secretly siphoned.

Incentives

To promote the adoption of the Hub Star platform, users will enjoy various incentives such as airdrops. According to the current plan, there will be three rounds of airdrops; pre-token sale, post token sale, and after the first years. The pre-token sale will target all registered users on the platform. The second round of airdrops will only be available to those participating in buying tokens after launching the platform. The last assortment of airdrops will also be exclusively available to token holders. It will be distributed as a celebration for clocking one year.

Users

Hub Star is meant for all Internet users. Internet users can use the platform to conceal crucial personal information like travel history, health and medical information, services they regularly use, memberships like gyms and social groups, social media activities, finance services, insurance providers, education, contact details, and even identity. Besides regular users, companies can use the resource to protect data regarding their online activities. Hub Star can be installed on company devices to shield information about the company's social networks, financial services they use, and information about

products and services they are planning to acquire. Most B2B businesses leverage online data from potential customers to determine products and services they may need. In doing so, they contradict other businesses' privacy and even undermine their business strategy. Besides using Hub Star to protect their privacy, companies can use the platform to access good quality data from users for business insights. Various studies indicate that about 30 per cent of enterprises' revenue is at risk due to poor quality customer data. These studies also suggest that close to 78 per cent of customers have trust issues with companies that collect their personal information online.

Organizations can address these concerns by using Hub Star – it provides a means to collect high-value data in a trustable ecosystem. Government agencies can also use Hub Star. Like businesses, public agencies can use the platform to regulate access to data generated by devices used by employees. They can also use it to buy high-value data from consenting Internet users. In other words, Hub Star is for everyone who uses the web. Individual Internet users, businesses, and government organizations can use the Hub resource to generate value from their data.

Benefits Of Hub

Hub Star users will reap various benefits from using the platform. For conventional users, they will protect their personal data from getting into the wrong hands and give them the means to commoditize their data and earn from it. Businesses and government agencies will also use the technology to safeguard their data and acquire quality insights from users. Here are some of the key benefits of using Hub Star.

Increased Collaboration And Privacy

Identity is moving beyond issued instruments such as social security cards, identity cards, and passwords. Futuristic systems are embracing contextual identity whereby users prove who they are in the context of what they are doing. The single log-on feature assumes this new technology. Using a private key, Hub Star users will access websites that support single sign-in spontaneously. If many websites assimilate this feature, there will be increased collaboration between businesses using the Hub platform. The primary objective of Hub Star is to give back consumers control over their data. Users of the platform will have the privilege of choosing what to share, whom it is shared with, and the sharing duration. Tron and BTFS architecture facilitates a verifiable and trustable exchange of insights.

Increased Revenue And Cost-Saving

As aforementioned, in most companies, 30 per cent of their business revenue is at risk because of insufficient quality data. Businesses can alleviate this risk by collecting high-impact data through Hub Star. Besides, using high-quality data from Hub Star can help enterprises find new business opportunities, increasing their revenues. Insights collected via the platform can be used to identify business areas where cost cuts can be implemented. Organizations that actively use big data invest in sophisticated tools to enhance the quality of collected data and locate signals. Since data collected from Hub Star is of high quality, there will be no need to invest in too expensive data analytics tools.

Better Decision Making And Increased Efficiency

Good quality data translates to accurate insights. Accurate insights foster informed decisions. Christoph Samitsch (2015) asserts that companies with capabilities to access accurate insights usually make more informed and precise decisions. He adds that accurate acumens enhance the efficiency of the decision-making process – it takes less time arriving at decisions, and there is a reduced risk of wasting time revising decisions because they failed to achieve their intentions. Some businesses get their data from intermediaries. This model of data acquisition is prone to poor quality, delays and is expensive. These businesses can replace intermediaries with the Hub Star system.

Enhanced Consumer Trust

Hub Star makes it possible for consumers to decide what they can share and whom they can share it with. People using the platform can choose to share their information only with businesses they trust. Progressive disclosure enables users to disclose minimal information to companies, allowing them to conceal information they may deem too sensitive to give out. The single log-on capability gives users the ability to remain anonymous and still enjoy personalized services. The feature can hide users' identities while allowing consented businesses to access necessary information for tailored services.

Commercialize Personal Data

In the modern world, data is a valuable commodity. Businesses understand this, and they have been trading it behind the back of the very people who generate it for a long time. Hub Star is giving this back to the people. Every Hub Star user will own his/her data. Any business that will be interested in accessing users' data must pay users using Hub Token. Users can then use accumulated tokens to buy goods and services from the platform.

Opportunities

Various regulatory changes are compelling businesses to adopt data wallets and give users more control over their data. An excellent example of these regulatory changes is the General Data Protection Regulation (GDPR) act adopted by the European Union in 2018. This act impels all businesses holding information about European Union citizens to adhere to privacy standards stipulated by the commission. Companies that fail to align their practices with EU standards risk being expelled or fined heavily. The United States is also contemplating adopting such laws. Many businesses are looking for ways to access customers' data legally and transparently to avoid penalties and fines. These businesses may find Hub Star a valuable resource since it precisely fulfils this need.

Another reason Hub Star stands a better chance to succeed is that it creates value for both businesses and individual users. It is not one-sided; it will enable companies to access high-quality data in a legal framework and customers to manage their data and earn from sharing it. As more people start using the platform, websites will be forced to allow seamless login. The Hub has ready tools such as an SDK and APIs to enable website owners to integrate their sites with Hub Star.

Conclusion

The vision of Hub Star is to create an ecosystem where Internet users and businesses can exchange business insights in a secure and transparent environment. Hub Star envisions a future where consumer trust is restored and business organizations have access to valuable insights that can drive growth. While this platform is revolutionary, it does not intend to seclude anyone; instead, it aims to increase collaboration and efficiency in the big data industry by giving all involved parties value. The team behind the development of Hub Star has a reputable track record in developing and delivering distributed ledger technologies. The platform's management is also composed of dedicated professionals determined to see the project completed and launched soon. Hub Star platform is a worthy investment with great potential of transforming how users and businesses share data. However, this transformation is unachievable without people like you. That is why this whitepaper is inviting you to join us. Take this opportunity and join us in making the online personal data revolution a reality.