

DIGITAL-ASSET RESEARCH & RISK MANAGEMENT www.paribusgroup.io

# TRON: DECENTRALIZE THE WEB

 $\mathbf{A}$ 

## DISCLAIMER

We at Paribus Group <u>are not Lawyers or Certified Financial</u> <u>Advisors (CFA)</u> and should not be regarded as such. Our analysis is based off publicly available information and the current recommendations by each country's legal system. Our analysis is our own and you should exercise your own judgement when electing to purchase or use any Digital-Asset. These reports are for educational and informational purposes only.

# CONTENTS

<u>Section I: Team</u>

Section II: Technology

**Section III: Application** 

Section IV: Adoption & Alliance

Section V: Legal

**Section VI: Economic** 

Section VII: Marketing

Section VIII: Sentiment

Section IX: TTAALEMS Risk Assessment

Section X: Donations

### SECTION I: TEAM

#### **Section Overview**

A project is only as good the team that executes it. TRON boasts a large team of over 100 strong, with offices in Beijing, Singapore, and San Francisco. The size of their team has allowed them to develop their project at an accelerated rate, along with being able to operate at multiple locations all over the world. A majority of their tech team have ported over from other large tech companies, with a sizeable group coming from Alibaba. Since listing out all 100+ members would be impractical, we've narrowed down the list to the following main core personnel.

#### **Facts and Figures**

#### Main Team:

#### <u>Justin Sun</u>

Justin Sun is the founder and CEO of the TRON Foundation. He is well known for certain high-profile achievements, such as being listed on the Forbes' Asia 30 under 30 list. Additionally, he is the founder of the PeiWo chat app, which is an audio-based messenger app with allegedly over 10 million users. He is also the former representative of Ripple in China, which is a claim that has been met by some controversy. (**Ripple Denies Justin Sun**)

Justin also claims he is a protégé of Jack Ma, the founder of Alibaba, which if true (It's not) would connect him to one of the richest men in Asia.

#### Lucien Chen

Lucien Chen is the Chief Technological Officer of the TRON Foundation, he leads the development team building the TRON protocol. He is known for his expertise in Big Data, and has worked for top internet companies like Netease, Qihoo and Tencent. Prior to joining the TRON Foundation, Lucien worked in Alibaba.

#### Zhao Hong

Zhao is formerly a chief data mining expert in Alibaba.

#### **Section Analysis**

TRON's team brings many heavy hitters from large internet companies in Asia. Many of their main programmers have moved over from Alibaba. Justin Sun's high profile within the Asian business scene, as well as his publicly known relationship with Jack Ma creates a feeling that there is a strong possibility of some sort of future partnership between the two companies. Along with a formidable network of highprofile investors and well-known companies backing TRON, the project is dead set to make waves all over the world.

Positives	Needs Improvement	Red Flags
-More than 100+ members in their team	-Include more foreigners in their team	-
-Over half a dozen high value, high-profile investors and backers		
-Expertise of CEOs and Entrepreneurs of multi- billion-dollar companies.		

# SECTION II: TECHNOLOGY

#### **Section Overview**

TRON's technological goal is to develop a Fourth Generation Blockchain Protocol which will provide the necessary capacity for data storage, content creation, DAPP development, and smart contracts. The TRON Protocol Main-Net was launched in Q2 of 2018, and since then and it has maintained over 2000 Transactions Per Second (TXPS). In addition, TRON has planned many upgrades to its protocol over the next few years. At the end of the ODYSSEY section of TRON's roadmap, they intend to have a protocol that is over 1000x faster than ETH, with lower energy costs, and much higher scalability. TRON's protocol is divided into five layers:

- 1. Database Layer- This layer is where the files and information will be stored, they base this part of the protocol on CouchDB (DB stand for Database) and LevelDB, both of which are commonly used database architectures, derived from the Apache Software Foundation and Google respectively.
- **2. Network Layer-** This is essentially how peer to peer interactions will take place within the protocol.
- **3. Consensus Layer-** Now this is where TRON begins to truly differentiate itself from previous generation blockchains. The use Delegated Proof of Stake, through a Paxos consensus method in order to curate the TRON protocol. Delegated Proof of Stake simple means that representatives with more authority on the blockchain will be selected to verify new information. In this case it is the TRON Super Representatives. (More on this later)
- **4. Smart-Contracts Layer-** Smart contracts are digital contracts that can be custom coded to specific parameters and will only execute certain actions under certain circumstances. The possibilities are truly limitless within smart contracts, and it is the heart and soul of many blockchain development platforms. The TRON Protocol not only records value in/outputs to its protocol, but also information in/out, giving it higher utility.
- **5. Application Layer-** This is where DAPPS, social media platforms and other things will be linked to and developed on the TRON Protocol.

Though these layers exist in most other blockchains, TRON has distinguished itself by integrating key scalability solutions through sidechaining and a distinctly more efficient consensus algorithm. If you were to take an example from history: Proof of Stake is similar to only allowing landowners voting privileges. In this example, people must demonstrate a vested interest in the physical area to influence what gets done. Delegated Proof of State operates similarly except the land owners vote to select a the most trusted landowner to be their representative. Delegated Proof of Stake is a far more efficient method of consensus than Proof of Work and is even more efficient than regular Proof of Stake. However, it comes at the cost be being more centralized. Which in TRON's case, is not necessarily a bad thing as we will discuss in later sections. TRON also allows for more popular coding languages to be used on its protocol such as Java. Compared to Ethereum's requirement to know Serpent or Solidity to write a DAPP. They also plan to add support for C++ and other common programming languages. Though there are some marked advantages of Solidity and Serpent for DAPP writing.

#### **Facts and Figures**

- TRON's has its own Virtual machine for Developers
- The first iteration of the TRON Protocol has maintained over 2000 Transaction Per Second since launch. Compared to Bitcoin's 2-5 TXPS and Ethereum's 25 TXPS.
- TRON uses Delegated Proof of Stake as it's consensus method, this method is semi-centralized, with only 27 "Super-Reps" elected, though these reps can be removed from their Super-Rep status through another election.
- TRON's main-focus with this protocol is data storage, as it is necessary for social media and content creation applications.
- DAPP Programming on TRON is trying to move in a more programmer friendly direction by utilizing Java, and in the future C++. However, in terms of DAPP development TRON is lagging behind EOS and Ethereum.
- TRON is hoping to use TRX to incentivize voting and governance on the platform, Super-Reps Candidates currently receive 32 TRX per 3 seconds, though distribution is resultant on voting. Individual

Super-Reps can choose how to distribute their block rewards. Currently, several Super-Reps are distributing 100% of their Block Rewards back to the voters in the ecosystem.

- Super-Rep voting happens 4 times a day, theoretically a bad actor could be removed from Super-Rep status within 6 hours.
- TRON has two token standards called TRX-20 and TRX-10; TRX-20 is a fungible token running on the TRON Protocol, TRX-10 is a non-fungible token on the TRON Protocol.
- ICO methodology is pre-built into the protocol so it is incredibly simple to issue tokens on the TRON Network. Issuing a token currently only costs roughly \$20 USD. (<u>https://medium.com/TRON-foundation/ico-on-TRON-1-weekretro-why-TRON-is-the-future-of-tokens-ab836142fcab</u>)

#### **Section Analysis**

TRON's technology is impressive and is certainly an improvement on current popular networks in regard to transaction speed and data capacity. There is still much room for improvement; given how young TRON is it has more than enough time to improve its product. Luckily, TRON has many more plans to improve their technology, and we expect major speed boosts with Odyssey 3.2 and onwards. Unfortunately, TRON still might not be suitable for more complex data solutions for a couple years. Likewise, while their Distributed Proof-of-Stake does indeed allow for much faster transaction speeds it also provides a degree of centralization which certain people may be uncomfortable with. The security risks which come from 27 Super-Reps confirming the majority of the blocks on a network is mostly mitigated by having hyper-frequent elections; one election every six hours.

Theoretically, this will prevent bad actors from compromising the network, however it relies on strong and continuous community involvement. If we've seen anything in the past few years, it's that communities will often start off strong, but gradually decline in participation. As community participation is hyper important when it comes to the TRON network, the current model lends itself to vulnerabilities through the community, and also the individual Super-Reps. It is important to note, that these vulnerabilities are currently **unlikely** to be exploited. However, a systematic and determined group could compromise the integrity of the network. Also, the integrity of the network depends on the long-term health of the network being valued over potential short-term gain.

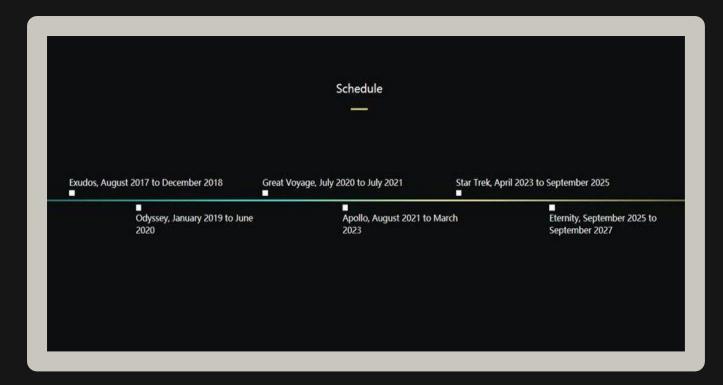
Regardless of these potential flaws, the TRON protocol has many opportunities on the developer side which could unleash the true potential of the TRON protocol. 2000 TXPS is excellent when compared to Ethereum or Bitcoin, however upcoming 5<sup>th</sup> generation projects have tracked over 500,000 TXPS. Although, these protocols are for instant **transactions** and not data storage or transfer. TRON's focus on data storage protocols and the extreme length of their roadmap the Foundation has set in place, we believe that TRON will be an important and powerful player for years to come.

	Positives	Needs Improvement		Red Flags
-	DPOS is much more energy efficient and allows for faster transactions.	<ul> <li>Super-Rep system is a bit complex for the average user to understand.</li> </ul>	-	Only having 27 Super-Reps on the network provides a large potential network
-	Encourages high community			vulnerability.
	involvement		-	Network exploitation could
_	Excellent future development plan.			theoretically be accomplished by exploiting the
-	Highly robust TX network, which is roughly 1000x faster than the			community. This may lead to increased levels of social engineering
	Ethereum network.			attacks against the TRON community.

# SECTION III: APPLICATION

#### **Section Overview**

TRON's original vision is to follow the principles of Sir Tim Berners-Lee and "free the internet." With this they mean to give more control over content to the users of the world wide web, and away from the hands of a few tech companies such as Apple, Google, and Facebook who are currently dominating internet content creation and monetization. The TRON Foundation's original roadmap was highly vague. Luckily, TRON removed this roadmap, and instead has replaced it with a "Trajectory" page on their website, showing the current accomplishments of the project. The original roadmap is listed below:



The TRON Foundation looks to build their Foundation upon five core ideals:

- 1) Users have fundamental ownership of their data, the purpose of the internet is decentralized sharing of knowledge, skills, and services.
- 2) Those who make contributions towards the betterment of the network shall be entitled to proportional profits.

- 3) Contributions are qualitative as well as quantitative. Time and resources spent by participants are equally valuable and as important as capital resources.
- 4) The goal of the TRON foundation is ultimately to provide services to the public. The TRON Foundation exists as a non-profit organization to facilitate the growth and betterment of the participants.
- 5) Content should be derived from the people who consume the content and the creative industries associated with them. Content creation should become unpegged from predatory monetization that degrades the quality of content while simultaneously harming the user-base.

In short, the focus will be on rewarding the work of content creators directly. Content creators will be able to directly sell their content to the masses over the TRON network, cutting out the middleman, without having to compromise the quality or integrity of their work. This ideal applies both to fees and monetization, as well as free speech and anticensorship. Because of this vision, TRON is attempting to create competition for most major social-content platforms such as Instagram, Facebook, YouTube etc. By removing for profit corporations from the equation, wealth can be distributed directly to the creators and supporters without the additional cost of platform fees, forced ads, and privacy invading data-mining.

#### Facts & Figures

• Middle-men will keep roughly 50% of all Ad Revenue, the remainder is mostly lost to fraud, leaving content creators much less revenue for almost all of the work. Google Specifically keeps 49% of all Search-Ad Revenue, and 32% of all Direct Content-Ad Revenue.

(https://support.google.com/adsense/answer/180195?hl=en)

- It is more efficient to sell or market directly to your viewership than to rely on trickle-down payments from ads or fees.
- A YouTube video with over 1,000,000,000 views will USUALLY only make \$2000 USD or less from Google Ad- Sense. (<u>https://www.youtube.com/watch?v=X34ffR79EvQ</u>)

- Facebook and other social media platforms have complex algorithms which prioritize content based on pay walls, key words, average bid of 3<sup>rd</sup> parties, and others. Resulting in highly unequal opportunity for content creators. (<u>https://www.facebook.com/business/help/163066663757985?loca</u> <u>le=en\_US</u>)
- Systems tend to develop toward centralization, rather than away from it.
- Content creation requires multiple different mediums to be most effective.

#### **Section Analysis**

The idea of creating a decentralized network for content creation and consumption is not a new idea in the crypto-space; there are also a myriad of other projects attempting to create media platforms which rewards content creators with direct peer-to-peer transactions. Where TRON differs however, is in the approach and extent of their vision. TRON is not focused on providing a single platform for content distribution and creation, but rather creating a strategic network of blockchain infrastructure for multiple platforms which will be developed by third parties integrating into the TRON ecosystem. By seeking to provide infrastructure and creative vision TRON is attempting to position itself as a key competitor to projects like Ethereum, EOS, and NEO; as well as becoming key competitor for most social media and sharing sites.

As mentioned previously, systems tend to gravitate towards centralization, and TRON is no exception. The struggle to maintain the pure ideals of the foundation will be difficult as it expands; the possibility of abuse or exploitation of users will increase as time goes on. One needs only to looks at the quality of projects built on Ethereum to see what kind of issues TRX will face in the future.

The main value of TRX is found in the raw potential of the network, filtered through the vision the TRON Foundation. We fully expect TRON to accomplish tremendous progress toward building a decentralized internet for content creation, but the original vision will be difficult to maintain. Given the amount of industries that TRX is directly competing with, and the wealth and influence within those industries, it is possible that TRON will experience direct resistance and competition from them. Over-all, given that TRON's vision is shared by many people within the crypto-space, coupled with the fact that their technology is currently superior to established DAPP development platforms, means that their potential is nearly unlimited.

	Positives	Needs Improvement	Red Flags
a	Tech is sufficient to accomplish the vision	<ul> <li>Guiding the vision without resorting to censorship will be difficult.</li> </ul>	<ul> <li>Ads, Paywalls, and other traditional forms of monetization are</li> </ul>
f t r	The vision is broad enough sustain Future growth while the execution is narrow enough to be useful.	<ul> <li>Directly competing with a variety of large smart-contract projects.</li> </ul>	not actually incompatible with DAPPS built on the TRON Protocol.
r s p f	Removing niddlemen through smart-contracts is a primary use-case For Blockchain Systems.	<ul> <li>Direct competition with so many industries is expensive and dangerous.</li> </ul>	
i	Strategic creation of nfrastructure for the vision.		

## SECTION IV: ADOPTION & ALLIANCE

#### **Section Overview**

TRON is known for its tremendous amounts of marketing and hype surrounding the project. For most people, it remains to be seen whether or not that hype is justified. However, behind all the flashy marketing, promotions, and media attention, some genuinely impressive progress is being made towards the goals of the TRON Foundation. The quality of the initial investment group, as well as the unique social advantage that TRON has in the Chinese Market leads us to believe that TRON will do very well in Asia, however they may struggle more than they expect in the Western Market.

#### Facts & Figures

TRON is known for having an A-list of top tier investors in Asia, here are some of the most prominent ones:

#### Key Investors and Backers:

The other side of the TRON team that makes the project very appealing are those backing the project. Fortunately for TRON, they have in their corner a veritable group of investors and backers who have allowed their high-profile names to be associated with the TRON foundation, or have themselves invested in the project:

#### <u>JIHAN WU</u>

Jihan Wu is the co-founder of Bitmain, which is the world's largest designer for ASIC chips meant to mine bitcoin. Headquartered in Beijing, Bitmain has offices in several locations within China and also in Amsterdam, Hong Kong, and Tel Aviv. Before co-founding Bitmain, Wu was a financial analyst and private equity fund manager.

#### <u>SHUOJI ZHOU</u>

Zhou is a founding partner of FBG Capital, which is a Digital-Asset Investment Company. Prior to FBG, he worked for Oracle and IBM.

#### **BINSHEN TANG**

Tang is the founder of Clash of Kings, a mobile MMO strategy game with over 10 million monthly active users worldwide.

#### <u>WEI DAI</u>

Dai is the founder of Ofo, one of the largest global bike sharing companies with a valuation of over 2 billion USD.

#### MINGSHAN YIN

Yin is the owner of the Lifan Group, a motorcycle company, valued at over 2 billion USD

#### **CHAOYONG WANG**

Founder of China Equity Group (CEG), an investment group valued at over 3 billion USD. Prior to founding CEG, Wang was the former head of Morgan Stanley China and the Senior Investment Advisor of China Development Bank.

#### LINKE YANG

Yang is the founder of BTC China, and exchange that at one point was the second largest bitcoin exchange globally. He is also the founder of Bitcoin Diamond.

#### HITTERS XU

Xu is a high-profile person within blockchain, having found Bitsclub which is the very first blockchain community in China. He is also the founder of the crypto projects Antshares, now called NEO, Nebulas, and the ICO platform ICO 365.

#### WEIXING CHEN

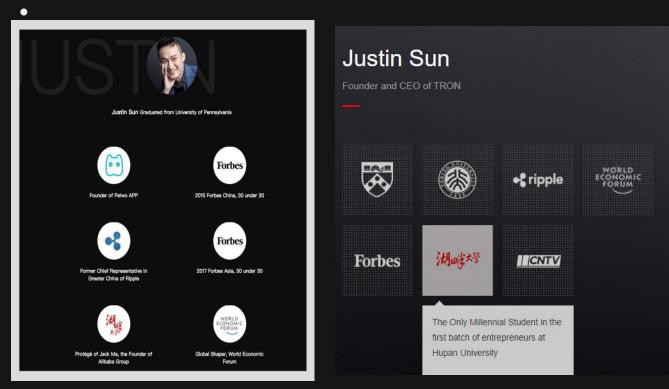
Chen is the Founder of Kuaidi, now called Didi Chuxing, a ride-hailing company regarded as the 'Chinese Uber,' with a recent valuation of 56 billion USD.

#### FENG LI

Li is an influential figure in the crypto space and has provided seed capital for Coinbase, and currently serves in Ripple's board of directors.

• TRON founder and CEO Justin Sun has described himself as a "Protégé of Jack Ma" However, while Sun does have notable connections to Hupan University and other Alibaba Group related projects; there is no notable evidence to suggest that Sun is the direct Protégé of Ma. In

fact, when challenged on the claim by a reporter for Buzzfeed, Sun removed the reference to himself as the Protégé of Jack Ma from the TRON Website. (<u>Protoge of Ma?</u>)



- In Q3 2018, TRON officially Partnered with Shift Markets in order to bring cryptocurrency directly into the forex market. Shift Exchanges are regulated in the UK. (Shift Marketplace Announcement)
- Jack Ma is stepping down as the head of Alibaba Group, and handing the reigns over to his Protégé Daniel Zhang. (Jack Ma Stepping Down)
- In Q3 2018 TRON also partnered with Japan's famous LINE Corp. Creators of the LINE messaging system, to both be listed and work with the new LINE exchange, BITBOX.
- TRON boasts listings on 69 exchanges and includes direct fiat to TRX trading pairs on BITREX.
- TRON is partnered with GIFT.com in order to help monetize content and incentivize content creation on its network.
- The TRON Foundation recently acquired Bit-Torrent, a popular decentralized peer-to-peer file sharing company, though the acquisition amount was not published. Initial figures were put anywhere from 120-140 Million.

- TRON Recently announced "Project Atlas" designed to merge Bit-Torrent's and TRON's platforms and technology to provide value through the networks.
- TRON has both announced GitHub Repositories of the Beta Version of TRONLink, the TRON blockchain version of Metamask. Allowing people to interact with TRON's Smart Contract System in browser, however it has not been fully released yet.
- In Q1 2018, TRON launched "Project Genesis" a 2 Billion Dollar Development Fund meant to reward innovation and creation on the TRON network. Examples of rewards already given are: Bug Bounties, 20,000 USD rewards for project development, GitHub contributions, and more.

#### **Section Analysis**

TRON is one of the very few crypto-projects that has hit level of concrete development after only a year. The TRON foundation's vision is well on it's way to being fulfilled. Very few blockchain projects can claim that they have done any of the following:

- 1) Acquired another company.
- 2) Launched a Main-net in well under a year.
- 3) Launched a Virtual Machine for DAPP Development.
- 4) Launched a 2 Billion Dollar reward and development fund.
- 5) Gained Access to the FOREX market as a Cryptocurrency project.

Yet, TRON has accomplished all of these and more within it's first year. The backing of large investors both gives TRON legitimacy in the Asian Markets and more funds than a simple ICO would have brought in, this lends itself to a level of stability that TRON is currently enjoying. This is not to say that TRON has not had its hiccups, particularly when it comes to marketing to Western audiences. Even though TRX is traded against the U.S. dollar directly and TRON has opened offices in San Francisco, unless something changes, TRON will have difficulties continuing their momentum into U.S. markets. However, TRON has been adaptable this far, as seen by how they have made significant improvements over the course of this last year. We are confident that the TRON Foundation will continue to grow and push past any barriers into the U.S. market, however, it will take a significant amount of time due to cultural and legal hurdles in Western Markets.

Positives	Needs Improvement	Red Flags
-Strong Investor Base	<ul> <li>TRONs marketing and style are</li> </ul>	- The Chinese Government has
- Excellent penetration	extremely	been exercising
of the Asian Market	gimmicky, which is preventing them	crackdowns on Blockchain projects,
- TRON Main-Net	from achieving	and though TRON is
already launched and	more adoption in	based in Singapore
over 2000 TXPS	the West.	it could prevent
confirmed		larger moves in the Chinese market.
-Odyssey 3.1+ has	- Justin Sun, at times	
made TRON even	has been accused of	- U.S. Regulation is
faster.	being	very restrictive, with TRON opening
- Over 1,000,000	underprepared and unprofessional	U.S. offices it will
Unique TRX wallet	when it comes to	encourage much
addresses indicates	communication and	scrutiny of TRX by
wide user base.	presentation.	regulatory bodies. ( <b>See LEGAL</b> )
- TRX is already	- Sun's connection to	
integrated and used as	Jack Ma appears to	
payment on many merchant websites.	be purposefully overstated.	
Including PornHub, the		
largest adult	- TRON participates in	
entertainment website in the world.	questionable marketing in order to hype TRX.	
	in order to hype rick.	
- TRX acquired		
BitTorrent, indicating both large scale		
implementation, and		
fiscal stability.		
- Partnerships with		
SHIFT to bring FOREX		
and Crypto markets		

together.	
-LINE Corp. BITBOX partnership will help introduce TRON and it's network to even more markets in Asia.	

### SECTION V: LEGAL

#### **Section Overview**

Despite TRONs accomplishments in the Asian Market, the uncertainty of U.S. regulations regarding Digital-Assets could be a potential issue for TRON as it attempts to penetrate the U.S. market with it's office in San Francisco.

#### **Facts and Figures**

- The TRON Foundation is registered in Singapore as a non-profit entity, it's filing number is: <u>201721312Z</u>
- The TRON Foundation has three authorized representatives: JAMES PHUA KAY CHOON, SUN YUCHEN, and HELEN TAN POH CHOO. The three individuals listed are located at three different locations within Singapore and Beijing.
- In the United States, regulations have not been set specifically regarding Digital-Assets in terms of taxation and asset classification.
- In the U.S. Digital -Assets are concurrently recognized as potential securities at ICO stage by the SEC, commodities by the CFTC, and property by some state regulation as well as by the IRS. This means that technically every single transaction utilizing crypto-currency is liable for capital-gains and property tax. However, the IRS has not established any solid reporting procedures, nor have they established <u>concrete guidelines on Digital-Assets</u>. To view the IRS' current vague and frustrating guidelines on tax reporting, follow this link: (<u>https://www.irs.gov/newsroom/irs-virtual-currency-guidance</u>)
- The SEC is heavily scrutinizing many Digital-Assets for functioning like securities, however, they have also stated that Digital-Assets bought on an exchange are <u>less</u> likely to be securities. In short, the legal status in the U.S. is convoluted beyond belief.
- For companies offering up ICOs in the U.S. or to U.S. investors, they must register with the SEC as either a securities offering, or as a securities-exempt offering. Either way, companies offering ICOs to U.S. citizens, OR companies based in the U.S. <u>MUST</u> be involved at some level with the SEC to avoid potential legal repercussions.
- TRON does not have an SEC filing number; however, they did not directly intend to sell to U.S. citizens during ICO, nor are they based in the U.S.

- Because the Digital-Asset marketplace is so immature and there has not been a distinct legal status granted to Digital-Assets, there are not many consumer protections being applied to the market. Things like insider trading, price manipulation, and other such events are still commonplace. Currently, these events are not prosecuted because it is still a poorly regulated market. However, it is possible that once regulation is solidified over the next few years, such things will be globally prosecutable.
- Justin Sun is known for over-hyping TRON and communicating in a way which could be considered price manipulation if current regulations for traditional assets were applied to the Digital-Asset Marketplace.

#### **Section Analysis**

Given that TRON is an Asian project that is backed by several influential, wealthy individuals in East-Asia, it is no wonder they are achieving good penetration of the Asian market. The utility of TRX as essential infrastructure in the network, makes it possible that TRX could be regarded as a securities-exempt asset in the U.S. However, because TRX is also used as a medium of payment and a store of value, it is TRX could also become subject to the U.S.' money changing regulations. This current legal uncertainty as well as Justin Sun's propensity to deliver over-hyped social media posts, which could be construed as price manipulation, will make pushing further into Western Markets more difficult. That being said, the TRON foundation appears to have fully sufficient resources and ambition to do so, it may just take a bit longer than they expect. Over-all TRON is in no worse a [legal] position in the U.S. than other legitimate projects and it appears to be legally compliant within Singapore. It is worth noting however, that we found *no filing* with the SEC for a securities-exempt status, meaning that there is a chance TRX could be ruled a security under U.S. law.

POSITIVES	NEEDS IMPROVEMENT	RED FLAGS
- TRX has utility, payment capability,	-Justin Sun should reduce	-
is used to incentivize network	his output of material	
participation, as such it is unlikely to	that could be considered	
be considered a Security in the U.S.	questionable under U.S.	
	customer protection	
- Publicly registered as a non-profit	practices, * <i>if</i> * he intends	
in Singapore.	to launch compliant U.S.	

-Has the size and resources to handle legal hurdles in the ever-adapting market.	based services through the San Francisco office.	
--	---	--

### SECTION VI: ECONOMICS

TRON's vision of "healing the internet" brings with it a very sophisticated tokenomic model. The amount of activity that TRON envisions within their ecosystem is limited only by the collective imaginations of the DAPP developers that they expect will be building on the TRON platform. The following analysis brings to light the economics behind the current and future functions of TRON.

#### **Basic Token Data**

<u>Name</u>: TRONIX <u>Symbol</u>: TRX <u>ICO Date</u>: August 31, 2017- September 2, 2017 <u>ICO Price</u>: [\$0.0019] [ B0.0000038] [E 0.00000481] <u>Current Price</u> (Dec. 25, 2018): [\$ 0.0216] [B 0.00000526] [E 0.000148] <u>Circulation Supply</u>: 65,748,111,645 TRX [coin burn mechanism per transaction] [about 34 billion TRX to be released in 2020] <u>Max Supply</u>: 99,000,000,000 TRX <u>Current Market Capitalization</u> (Dec. 25, 2018): [\$1,438,767,313] [ B 348,242]

#### Exchanges Listed

#### EXCHANGE LISTINGS (as per the TRON website)

TRADE EXCHANGES (ORDERBOOKS)			
Abucoins (defunct	Bibox- BTC ETH	Binance- BNB BTC ETH	
exchange)		USDT	
Bit-Z – BTC ETC	Bitbns – INR	Bitflip- USD EUR RUB	
		THB UAH BTC	
Bitfinex – USD EUR	Bitoporo – TWD	Bitforex- UDT	
GBP JPY BTC ETH			
Bithumb – KRW	Bitkop- BTC	Bittrex- USD BTC ETH	
		USDT	
Braziliex – BTC	Cobinhood – BTC ETH	Coinbene – USDT	
	USDT		
Coinegg – BTC	Coinexchange – BTC	Coinfalcon – BTC	
	ETH LTC		
Coinnest – KRW	Cointiger - BTC ETH	Cryptopia- BTC LTC	
	BitCNY	DOGE	
Cryptomate – GBP	Coinex – BTC ETH BCH	Ddex – ETH	

Dragonex - DT ETH	Ethfinex – ()		Fatbtc – ETH FCNY
Gate.io – ETH USDT	Gatecoin - (	NOT	Hitbtc – BTC ETH USDT
	LISTED)		EOS
Hotbit – BTC ETH	Huobi – BTC	ETH USDT	Idax – BTC ETH USDT
IDex – (NOT LISTED)	Indodax- IDI	R	Koinex – INR BTC ETH
			XRP
Kucoin BTC ETH USDT	Latoken – (N	JOT	Lbank – ETH
	LISTED)		
Liqui – BTC ETH USDT	Litebit – EU	R	Livecoin – BTC ETH
			USD
Mercatox – BTC ETH	Max (Maicoi	in) – TWD	Neraex – BTC
	BTC ETH TW	/DT USDT	
	MAX		
Oex – (NOT LISTED)	OKex – BTC	ETH USDT	OTCBTC – BTC ETH
	OKB		
Ovis – TRL	Vebitcoin – I	BTC TUSD	Liquid – BTC ETH
Rfinex – ETH	Rightbtc – BTC ETH		Sistemkoin – BTC TRL
	ETP		
Stocks Exchange – BTC	Tidex – (NO	T LISTED)	Upbit – SGD BTC EH
ETH			USDT
Yobit – BTC ETH DOGE	Zebpay – BTC XRP		Bitvavo – EUR
WAVES USD RUR			
Exrates – USD BTC ETH	Btc-Alpha –	USD BTC	Coindeal – BTC
Bitbay – USD EUR PLN	Bitexbook – BTC IGG		
BTC	TWM TWX T	GOLD	
	TRXBF		
SWAP EXCHANGES (DEX, Non-orderbooks)			
Bancor - (NOT LISTED) E		Bixin (App)	- Swap system
Changelly - (NOT LISTED		Bestrate (Aggregator) – Depends on	
			destination coin

#### EXCHANGES NOT LISTED ON TRON WEBSITE

DigiFinex – BTC ETH	BitMart- BTC ETH	Exmo- BTC USD RUB
USDT	USDT	
Coinsuper – BTC ETH	Stex- BTC ETH	ForkDelta- ETH
USD		

TRON has two things in abundance, the number of exchanges they are listed on, and their circulating supply. Their presence in dozens of exchanges helps with liquidity and accessibility. More exposure and liquidity increase the likelihood of retail investors injecting capital into the project. The problem is that their circulating supply makes it hard for the price to rise without massive amounts of capital injection (specifically \$657,481,116.45 per 1 cent in price).



#### **Technical Analysis**

(Courtesy of tradingview.com. Chart accessed December 28, 2018)

The current technical analysis on TRX, as of December 28, 2018, is <u>Ranging</u>. The ranging window sits between \$0.017 and \$0.023, and should continue to do so in the lull of the holiday season. The ascending triangle that formed between the months of September and October failed completely as the bulls were unable to pierce the \$0.027 zone despite four attempts at testing the resistance line formed by the thinning Kumo (Cloud). November and December have formed the shape of what could be the cup portion of a "Cup and Handle" formation, with the last week and a half consolidating in a narrow range and forming what could be the "Handle" portion of the formation, which could signal a huge reversal to the upside. However, the bulls will still need to break solidly past the hard resistance line at the \$0.027 zone if they wish to signal a true reversal in the current overall bearish trend.

On the other hand, the bears have casually dwindled down and touched the \$0.010 zone, which is now acting as a support for the "Cup and Handle" formation. Bullish sentiment has fought back and seems determined to keep the price action around the \$0.02 zone for now. Another thing to note is how the current price action is straddling the upper portion of the Kumo (Cloud), which could potentially signal the overall weakening of the bears, and the consolidation of a new support zone for the bulls. One thing to consider is that failure of any major bullish movement can send the price of TRX back down to \$0.01. Any additional collapse beyond that can see the price plunge down to the next hard resistance at the \$0.002 zone.

Purchase of TRX around the current price could yield hefty profits for traders, if the Fibonacci retracement lines are to be used as take profit areas. Buyers could produce approximately 49%, 111%, and 163% profit at the 23.6, 38.2, and 50 Fibonacci retracements. However, proper risk management strategies will need to be at the forefront of all consideration as the overall crypto market is still currently bearish.

#### Making Money on TRON

There are 4 ways to make money on TRON:

- 1) **Buy and Hold:** The buy and hold strategy is the most obvious way to make money on TRON. As the above technical analysis shows, TRX is showing signs of leaning towards bullish sentiment. The current volume may be relatively thin due to the overall bearish posture of the market, but should an upward breakout occur, those buying under the \$0.027 zone can expect at least 33% profitability under the right conditions.
- 2) **Day-Trading:** With their exposure to 39 exchanges and counting, TRON enjoys a liquidity rivaled by very few other crypto coins. Additionally, their partnership with Shift Markets, an FX exchange, will make crypto-FX trading a viable option. Actively trading TRX can be lucrative for experienced traders, or for algo-traders that utilize trading robots, since TRX has recently stably ranged in a narrow price window.
- 3) **Future Airdrops** Currently, there are plans that holders of TRX will be rewarded with airdrops from future projects built on the protocol. This can help encourage accumulation and hold strategies for those with a longer-term view.
- 4) TRON Super Representative System TRON's Super Representative (SR) system can be a little difficult to understand at first. In general, the process works as follows:

- 1) A TRX holder chooses to lock up a certain amount of TRX. This TRX is converted to TRON POWER
- 2) Using TRON POWER, the individual can choose which SR they wish to vote for. The vote resets every 6 hours.
- 3) Once an SR retains one of the available 27 positions, they receive compensation every 3 seconds from the transactions made on the TRON network. As of this writing, the current rate is 32 TRX/3 seconds.
- 4) It is up to the SR to determine what he will do with his compensations, although the current trend that 70% of SR's re-distribute their compensation to their voters.

Currently there are about 120 individuals and organizations vying for the 27 spots as SR. The positions will constantly be changing based on the voting decisions of the community.

#### **Section Analysis**

The TRON team has made multiple avenues of profiting from their system aside from the standard buy and hold strategy. However, the barriers to entry for these some of these methods makes it difficult for the common retail investor to compete. Let's take a look at some examples. Let's begin with day-trading. Day trading, in general, is a skillset that takes a long time to acquire and is usually not something that the average retail investor is capable of sustaining. Statistically speaking, only 1-5% of day traders are successful. That leaves 95-99% at the losing end of trades. Those are not very good odds.

Let's take a look at the Super Representative system. Becoming a Super-Rep poses its own challenges as well. With so many competing to place in the limited number of spots, there will be constant competition between voter bases looking to place their SR into the chosen 27. For the individual retailer, becoming an SR is usually far from reach, as these spots are dominated by individuals and organizations who are backed by large amounts of capital, or are already well-known influencers within the TRON ecosystem. The best the average retailer can hope for is to stake his TRON power on an SR that will retain his SR position, and who will ultimately decide to redistribute the compensation to his voters.

For first time retail investors, the only real viable strategy for profitability is to buy and hold, taking advantage of current and future airdrop programs. This strategy allows for the highest margin of safety with better upside potential.

POSITIVES	<b>NEEDS IMPROVEMENT</b>	RED FLAGS
-Trades on 69	-Super Representative	-Excessively high
exchanges (and	slots could stand to be	circulating supply
counting)	increased.	count (65 billion,
Over 120 trading		with a pending 34 billion to be
-Over 120 trading instruments and		released in 2020)
counting		released in 2020)
-Has direct crypto-fiat		
tradability		
Uncoming TDV EV		
-Upcoming TRX-FX tradability		
-Platform promises		
many potential		
airdrops in the future		

# SECTION VII: MARKETING

#### **Section Overview**

Having a massive team comes with major advantages, and TRON definitely puts theirs to good use. With a little over a year in the game, the TRON Foundation's news machine grinds out news and updates on a constant basis. The following table shows the major elements of TRON's news and update apparatus:

SOCIAL MEDIA I	SOCIAL MEDIA PRESENCE: By the Numbers		
TWITTER	FACEBOOK		
TRON Foundation:	TRON Foundation:		
<u>https://twitter.com/TRONfou</u>	https://www.facebook.com/TRONfoundat		
ndation	ion		
Followers: 338,000+	Followers: 415,452		
Justin Sun:			
https://twitter.com/justinsun	Justin Sun:		
TRON	https://www.facebook.com/justinsunTRO		
Followers: 474,000+	N		
	Followers: 1,834,163		
TELEGRAM	INSTAGRAM		
Chinese Channel: 2,083	TRON Foundation:		
members	https://www.instagram.com/TRONfound		
English Channel: 3,151	ation/		
members	Followers: 11,200+		
Korean Channel: 8,081			
members	Justin Sun:		
Russian Channel: 4,211	<u>https://www.instagram.com/justinsun/</u>		
members	Followers: 7,680		
Japan Channel: 1,190			
members			
Arab Channel: 526 members			
Spanish Channel: 1,605			
members			
Farsi Channel: 121 members			
Total: 20,968 members			
REDDIT	YOUTUBE		
TRON Foundation:	TRON Foundation:		
https://www.reddit.com/r/TR	https://www.youtube.com/channel/UC50		
<u>ONix/</u>	POGRq02iK-		
Subscribers: 67,775	<u>OT9sKse kA?view as=subscriber</u>		

Subscribers: 19,841		
OTHER NEWS OUTLETS AND CHANNELS		
WECHAT ANNOUNCEMENT QQ		
(Chinese-Mandarin Only)	(Chinese-Mandarin Only)	

Aside from their own team using multiple channels, TRON has been featured in many mainstream crypto news sources such as coincentral.com, coindesk.com, and business news outlets such as Forbes. On the Asian side of things, TRON's exposure has been promoted by key influencers such as UNCLE, who is a major key opinion leader in China with an estimated 10 million fans, and Lifen Wang, a high-profile media personality in China, who is also known for making Jack Ma famous during his rise to fame in the early 2000's.

#### **Section Analysis**

From the very beginning, TRON has had always had high media exposure. Starting with high profile media personalities in China. Utilizing Chinese social media, TRON has been able to draw a wide range of attention to their project. In the recent months, they have steadily gained media traction in the West as well, as their progress on the tech end has caught the attention of increasingly larger sections of both the crypto and tech communities. Justin Sun has always been at the forefront of promoting TRON, with Twitter as his main platform. TRON seems to favor two particular strategies for their marketing approach:

- 1) The upstart challenger
- 2) The liberator.

For strategy 1, Justin Sun openly challenged (and continues to challenge) Ethereum, claiming that the TRON protocol will be far superior to Ethereum in terms of speed, application, scalability. Sun has aggressively pushed this angle and has succeeded in at least catching the attention of many titans in the industry. The second strategy pivots around TRON's original vision of "healing the internet." Posturing themselves as the organization that will liberate the internet has gained appeal among many in the crypto community, especially among content creators. The tech behind this "liberation" narrative has also attracted a large number of DAPP developers looking to test the capabilities of the TRON protocol. Combine this with TRON's almost unending announcements of multiple partnerships; it is apparent that their marketing has been quite successful. Though it has angered members of both communities, who feel that Justin is out of line. Likewise, TRON has often been called a scam by legitimate conferences due to their incessant over use of hype, which previously had only been a hallmark of scam projects. This type of sentiment seems to have died out as TRON has matured.

POSITIVES	NEEDS IMPROVEMENT	RED FLAGS
-Extensive social	-On occasion, Justin Sun's	-At times,
media presence	tweets are for hype	"partnership"
	purposes only.	announces imply a
-Multiple channels for		bigger relationship
news output	-Stop making	than what really
	announcements of	exists.
-Very consistent	announcements.	
coordination between		
various outlets		
- Various channels		
accommodate multiple		
languages		

### SECTION VIII: SENTIMENTAL ANALYSIS

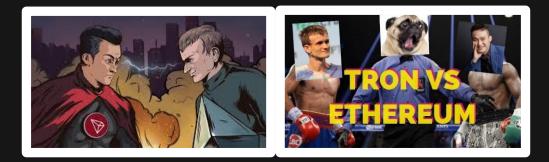
#### **Section Overview**

The early months of TRON's first year, they faced heavy criticism in the crypto space for not having a clear enough roadmap as well as plagiarism in their Whitepaper. Although the founder, Justin Sun, kept an active presence on Twitter in announcing developments and updating the community, many accused him of showboating for the sake of hyping up the price. Accusations of TRON being a scam coin flew hard and fast, with mainstream crypto conventions labeling the project as such. Several live streams from Justin Sun and his team met with poor reception and criticism from western communities. To make things worse, an allegation that parts of TRON's Whitepaper were plagiarized, and that parts of the TRON protocol had elements where source crediting citations within the code were being removed. Justin Sun and the team immediately addressed these issues. The Whitepaper was pulled, the citations sourcing creators of parts of the early code were returned, and the live streams became professionally set and scripted events.

As the project grew and more tangible project developments rolled out, Justin's team eventually started to win the respect of some in the community. The release of TRON's Main Net became the primary silencer of earlier skeptics of the project. The team went as far as to make a side by side comparison of the TRON protocol and Ethereum

PROJ	ECT	TRON	ETHEREUM
		2000	25
		POPULAR SOVEREIGNTY OF THE TOKEN	AUTHORITARIAN RULE BY THE FOUNDATION
		NEARLY TOO MILLION USERS, Q3-4 WILL INCREASE ACTIVE USERS AND SURPASS 100 MILLION USERS	THOUSANDS OF USFRS
		NONE	HIGH
		COIN BURN FOR CREATING DIGITAL ASSETS, TRANSFERS TO NEW ACCOUNTS, AND APPLYING FOR SR	No coin burn
		USD\$28	NONE
		PROTOCOL USES GOOGLE PROTOBUE, HIGH-SCALABILITY	

The crypto community were immediately all over the public challenge, churning out memes:



The constant barrage of announcements regarding team expansion, partnerships, and a competitive developer rewards program flipped the public sentiment in favor of TRON. One of the bigger events that really put TRON on everyone's radar was when they purchased BitTorrent. Very few crypto projects are able to buy out other companies, much less an internet giant like BitTorrent. A corporate strategy move like this solidifies TRON's legitimacy as a company, as well as proves the financial stability of the company. Industry titan Charles Hoskinson, founder of the Cardano project and Ethereum co-creator, has commended TRON on the acquisition, emphasizing the potential for scalability with the integration of both projects.

To add to their already snowballing momentum, TRON recently released the TRON Virtual Machine (TVM) making DAPP development and testing a lot easier for those looking to build on the protocol. Just this month (October 2018), TRON finally hit a major landmark achievement by surpassing the daily transactions of Ethereum. If this is just the beginning for TRON, then they are definitely setting themselves up to be a major mover in the crypto space.

POSITIVES	<b>NEEDS IMPROVEMENT</b>	RED FLAGS
-Major developmental releases	-	-Early plagiarism
(Testnet, Mainnet, TRON		attempts will mean
Virtual Machine) has increased		greater scrutiny for
the legitimacy of the project		their products later
among the tech community.		in the future.
-Acquisition of BitTorrent shows their competence and stability as a corporate entity.		
-Industry pioneers have acknowledged the progress that TRON is making in the space.		

# SECTION IX: TTAALEMS RISK ASSESSMENT

Needs Improvement/Red- Flag	Assessment	Deduction
-Include more foreigners in their team	The TRON team is lacking in Western employees, which is a hindrance to Western Market penetration, however this is easily fixed, and they are already taking steps to remedy this.	-0.5
-Super-Rep system is a bit complex for the average user to understand. -Super-Reps Could Be	While DPOS is remarkably faster and more scalable than POW and POS, it does centralize the process somewhat. There are good security measures in	-2.5
Increased -Community involvement requirement is a key vulnerability in the network. -Only having 27 Super-Reps on the network provides a	place, and it is unlikely that the Super-Rep system would be exploited. However, should this occur it would be catastrophic, thus from a Risk- Management perspective, it requires a higher deduction. In addition, the Super-Rep system can be difficult to understand	
large potential network vulnerability.	for novice users.	
<ul> <li>-Directly competing with a variety of large smart-contract projects.</li> <li>-Direct competition with so many industries is expensive and dangerous.</li> </ul>	Competition is excellent, it provides much needed stimulus for development. However, given the power of the entities that could be threatened by TRON and the complex nature of economics it does increase the risk factor.	-1.0
-Ads, Paywalls, and other traditional forms of monetization are not actually incompatible with DAPPS built on the TRON	The difficulty in curating TRONs vision in the future will play a role in future development. However, even if the vision ends up changing,	-0.5

Protocol. -Guiding TRON's vision without resorting to censorship will be difficult.	the stability of the project is not necessarily at risk because of it.	
<ul> <li>-TRONs marketing style is extremely gimmicky at times, which has prevented them from achieving a better reputation in the space.</li> <li>-Certain actions taken by the TRON Foundation could be construed as price manipulation in a more regulated market.</li> <li>Justin Sun should reduce his output of material that could be considered questionable under U.S. customer protection practices, *<i>if</i> * he intends to launch compliant, U.S. based services through the San Francisco Office.</li> <li>-The TRON Foundation at times has been accused of being under-prepared and unprofessional when it comes to communication and presentation.</li> </ul>	Gimmicky marketing and questionable marketing actions by the TRON Foundation are not the end of the world but it does ultimately undercut the credibility of the project to more serious users and investors. As stated in other areas, the digital-asset marketplace is relatively unregulated when compared to other markets but this doesn't mean that it will remain so in the coming years. As we have seen this year (2018) the SEC and other regulatory agencies are willing to go after projects and founders retroactively from legal decisions. Thus a large deduction needs to be made in case anti-price manipulation laws are leveraged against the digital- asset space.	2.5
-Sun's connection to Jack Ma appears to be highly overstated.	While surely done for marketing purposes, Sun has vastly overstated his relationship with Ma. The damage to the project itself is negligible, however, again nothing but complete transparency will suffice.	-0.5
-U.S. Regulation is very	This deduction is not a knock	-1.5

behind, with TRON opening U.S. offices it will encourage much scrutiny of TRX by regulatory bodies and possibly it's investors.	on TRON but rather a knock on the U.S. regulatory environment, the uncertain environment poses a risk to all projects attempting to penetrate the U.S. markets.	
-Early plagiarism attempts will mean greater scrutiny for their products later in the future.	Lack of transparency and taking shortcuts is unacceptable for any project.	-1.8
-At times, "partnership" announces imply a bigger relationship than what really exists.	This is a common occurrence in the digital-asset marketplace, however it is still not industry good practice and thus deserves a deduction, as it does not encompass the values of transparency and honesty that a project should present.	-0.8
-Excessively high circulating supply count (65 billion, with a pending 34 billion to be released in 2020)	This is not an actual problem, however, as far as asymmetrical leverage is concerned, TRX is a tough sell.	1.5
		96 0 /
TTAALEMS		86.9 /
RISK SCORE		100

## DONATIONS

We hope you enjoyed our report on TRON! Our goal is to provide retail investors and early-adopters with sound information, good analysis, and easy to understand research from a risk management perspective. We put a lot of research hours into these reports. We would like to continue to offer them to the community for free! If you benefited from this report, please consider donating!



Ethereum Wallet Bitcoin Wallet

Tron Wallet