

FOLLOR

Whitepaper



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1 - FOLLOR Mission

Provide a piracy-free P2P environment for content owners and providers(a content delivery network or CDN) that ensures truly unfettered access to the world wide web for transferring files and data securely, and across borders at the lowest possible cost and at the fastest possible speeds (up to 10x faster) with 100% uptime. We set out to achieve this goal by deploying blockchain hashing technology for the storage of data in lieu of the traditional centralized database.



With the absence of centralized data storage, data sharing can be easily monetized and secured as the content can't be pirated or duplicated by anyone but the owner or provider itself. Additionally the possibility of stoppage or shut down by centralized governments or its agencies, ISPs and internet providers are not possible as there is no central database or core to attack, invade or shutdown.

FOLLOR Provides free methods of sharing large files and data. Traditional methods of file sharing are not cost effective for small and mid-sized projects. Transferring files larger than 2 gigs typically come with hefty fees and become very costly to host, stream or transfer for small and mid-sized content providers. The fees become even more costly when your content is stolen or pirated. We have solved this problem at once and for all!

The "FOLLOR" currency is the core of FOLLOR's monetization platform. Users can "spend" FOLLOR in exchange for files/data being offered by other users (seeders) on the network. To accumulate/earn FOLLOR, users can share files with the network (seeding) and be rewarded with FOLLOR each time their file is downloaded. FOLLOR pays more to users to seed files with fewer seeders, so all files stay up and running 24*7*365

FOLLOR will be available on numerous cryptocurrency exchanges on the web and will be directly exchangeable for Ethereum during its betaphase. When fully implemented(Jan-Feb 2019) FOLLOR will be available for trade against a plethora of other currencies.

1.2 - FOLLOR VISION

Provide free methods of sharing large files and data. Traditional methods of file sharing are not cost effective for small and mid-sized projects. Transferring files larger than 2 gigs typically come with hefty fees and become very costly to host, stream or transfer for small and mid-sized content providers. The fees become even more costly when your content is stolen or pirated. We have solved this problem at once and for all.

1.3 - Disclaimer

The information provided in this document is provided “as is” without any warranty whatsoever. FOLLOR disclaims all warranties, either expressed or implied, including any warranties of saleability and/or fitness for a particular purpose or practice. In no event shall FOLLOR be liable nor accountable for any damages whatsoever, including direct, indirect, incidental, consequential, loss of business profits or special damages, even if FOLLOR or its suppliers and/or partners and tributaries have been advised of the possibility of such damages.

The ideas and specifications expressed and proposed in this draft may be considered conceptual, and are subject to revision or change based on the advancement of technologies, strategizing with partners, advisors and the FOLLOR board and community.

Amendments and Revisions

FOLLOR may update and/or amend this whitepaper and our online documentation as the company and app change over time, and in between releases of the related software.

Consequently, if this document was not obtained recently, it may not contain the most up-to-date information. Please refer to www.FOLLOR.com for the most current information.

Product information, documentation, release notes, software updates, and information about the FOLLOR product, licensing, and service, can be found at:
<http://www.FOLLOR.com>

The Application can be found at:
<http://www.FOLLOR.herokuapp.com> Inquiries should be sent to: info@FOLLOR.com For Application help and support: support@FOLLOR.app

1A - Introduction

FOLLOR Is a project combining blockchain and P2P File Sharing Technologies; providing content delivery for websites and other media streaming services.

Data is stored and accessed 10 times faster than traditional methods of client-server communication.

Whats sets FOLLOR apart: Its ability to keep its users anonymous and have their content distributed globally. We do this using blockchain and hashing technology.

FOLLOR pays everyone to participate in the network. The content creator gets paid for his content and the seeders get paid for delivering the file. The user can use the file for free unless its creator intended it for commercial use.

FOLLOR provides ten times the speed of other CDNs at no cost for individuals(non-commercial use only).

Commercial content can be delivered at a cost nearly one hundred times less than the current big name CDNs.

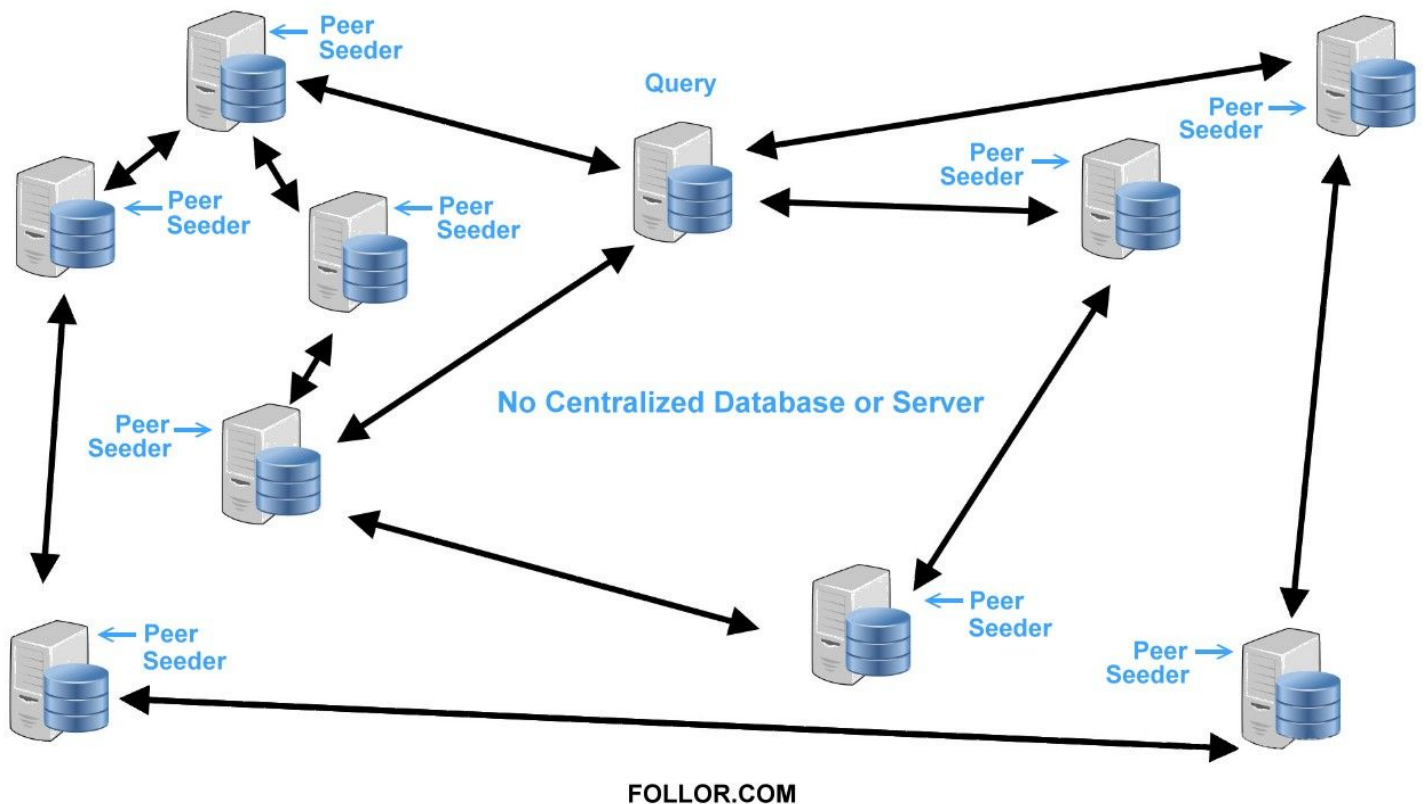
These big name providers charge fees at the rate of about \$10 per gig/monthly for the delivery of this data within a single country. In other words - It can cost a provider approximately \$10-\$15 per month for each movie is stores at a CDN.

The costs get even higher with the advent of 4k, 8k and other new and emerging video and audio technologies. The files just keep getting larger.

FOLLOR eliminates these high costs and delivers content seamlessly across borders anywhere on the globe, and without restriction.

FOLLOR guarantees 100% uptime due to its decentralized architecture. NO other CDN can offer that !

2 - P2P File Sharing



Peer-to-peer, or P2P refers to computer networks that use a distributed architecture. Meaning that all the computers or devices that are part of it share the workload of the network. The computers or devices that are part of a peer-to-peer network are called peers. There is no central administrator or central device in the centre of the network to obstruct, hack or shutdown.

Peer-to-peer file sharing: The distribution and/or redistribution or sharing of digital media using a peer-to-peer (P2P) network or P2P technology. P2P file sharing allows users to access digital media(music, movies, e-books, games and other data of value) using a software program.

The P2P Software, app, or program usually resides on personal computers or handheld devices and searches for other connected devices on a P2P network to locate the content that was queried. P2P was originally brought to the public's attention via music sharing companies like Napster and BitTorrent.

P2P has gained popularity and use due to its efficacy in a digital environment that continues to see larger and larger files and a demand for those files at faster and faster speeds

P2P File sharing allows for distribution globally and user anywhere can access the desired file from his/her nearest node

This makes the content delivery as fast as the user can request multiple nodes to deliver the content which makes downloading faster and independent of the centralised management internet service provider limit, the p2p file

sharing can work on Local Network and without internet too, even if the whole country's internet is down you can still access the content hosted on FOLLOR network.

P2P segments data into smaller pieces and each element is encrypted so that only the user authorised to see can see no other person can see or alter the data present on the blockchain, this means that the data stays to its creator intended and can't be changed or altered by any intermediate parties, Bypassing any censorship or restriction imposed by any third parties.

P2P File Sharing Systems are good but lack file security systems. There is no way to manage the access of these files. Meaning that the files can be downloaded by anyone and anyone can duplicate the same file over the internet with his name or branding.

FOLLOR has introduced a few changes in the P2P protocol to make it compatible with blockchain to allow for a lengthy blockchain, authorization and access for management of the content. P2P is simply serving the purpose of file delivery and distribution. This makes the FOLLOR network more secure than traditional p2p file network systems.

What also makes FOLLOR unique is its ability to identify the original owner of any piece of data or content, allowing the original content owner or creator to remove a pirated copies of his/her content from the network. Giving content owners FULL CONTROL

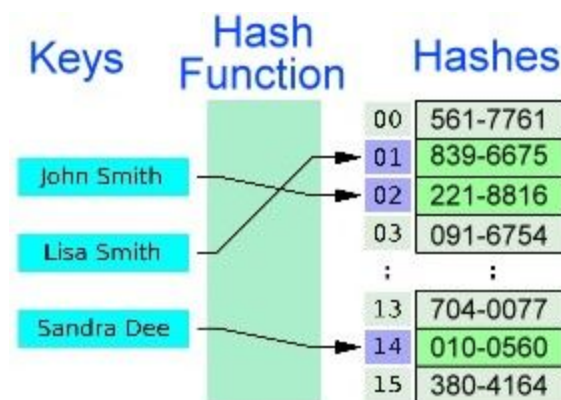
Unlike the traditional P2P systems, the FOLLOR system can only have one original file and file owner. The owner of the file may distribute the file to other users at his/her discretion and it will be recorded, credited and stored in the blockchain. This means that other users you have shared your content with, will not be able to share that content with others. This not only protects the owners content from duplication and piracy but also lets the end-user know whom the owner of the file is - giving full credit to its creator.

3 - Blockchain Data Hashing

A blockchain is a growing list of records, called blocks, which are linked using cryptography thus making it resistant to modification and duplication by anyone but its owner. Each block contains a cryptographic hash of the previous block, a time-stamp, and transaction data. The data is represented by a hash.

Getting over among various project for saving and storing the data due to its high-speed data saving abilities which makes saving the data permanent and true to its creator intent, blockchain is like a book which is having all the entries and the data enlisted from the day 1 to the present day, the data is indexed faster than any database and is available globally for everyone to read but only receiver can decrypt data meaning.

Decryption in data to access the file over p2p network can be embedded in the blockchain transaction which can be accessed by users who want to access the files, To remove piracy and content duplication we introduce data hashing in to blockchain which makes it's impossible for users to have same content listed twice in the blocks in which means after the content creator content in the blockchain no one can duplicate ID and the axis of the data is provided to the users for viewing.



It is a concept in the blockchain of storing encrypted data which is represented in hash instead of the original data, hash is generated from the data and each hash is unique to its file and its only one way, hash requires a key to decode and content owner decides who can have the key to decode the content, It is unique and generated automatically dependent on the private key of content owner and the content receiver.

4 - Content Delivery Principals

Content Management

The content access should be controlled by its owner and no 3rd party should be able to distribute content on the owner's behalf. Each user must obtain content from its owner directly. Blockchain makes this process automatic. Before FOLLOR this process was only accessible to big distributors.

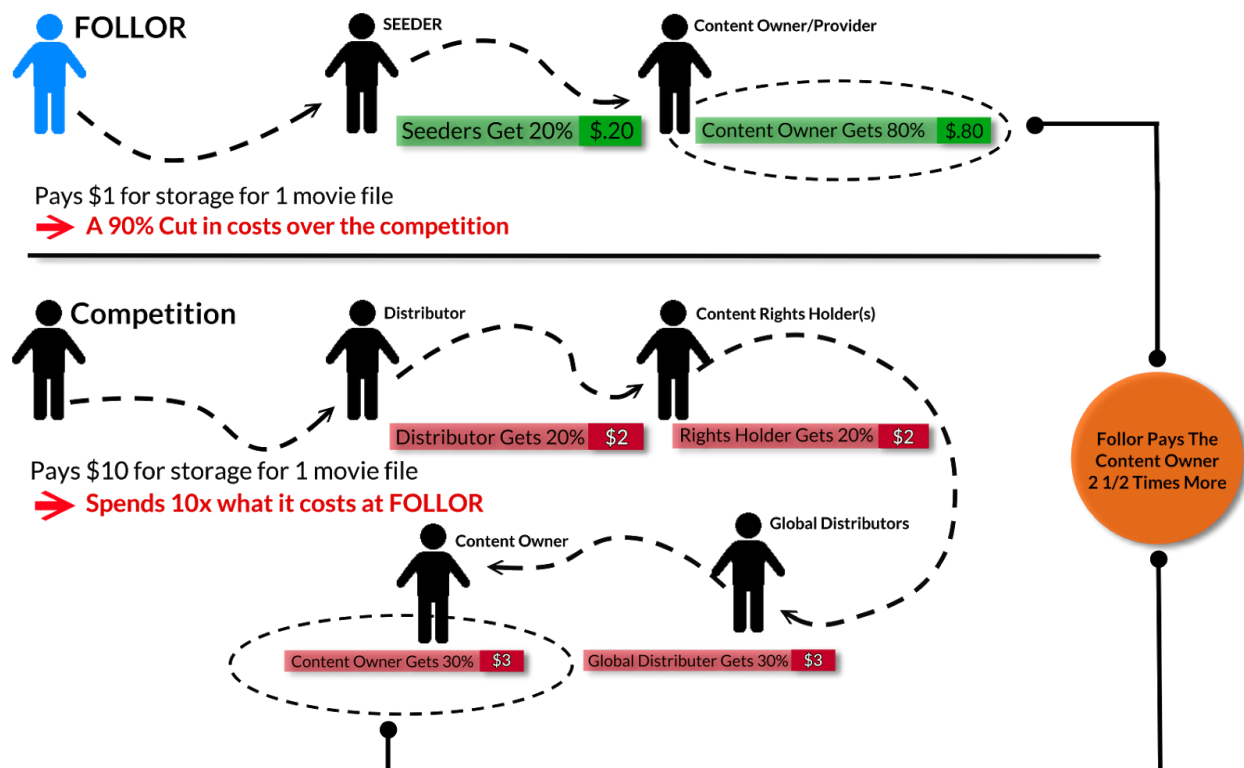
4.2 - Content Delivery

Content will be delivered with the fastest speeds possible and without any lag. The content will be encrypted until it reaches the user and then it will be decrypted on users end.

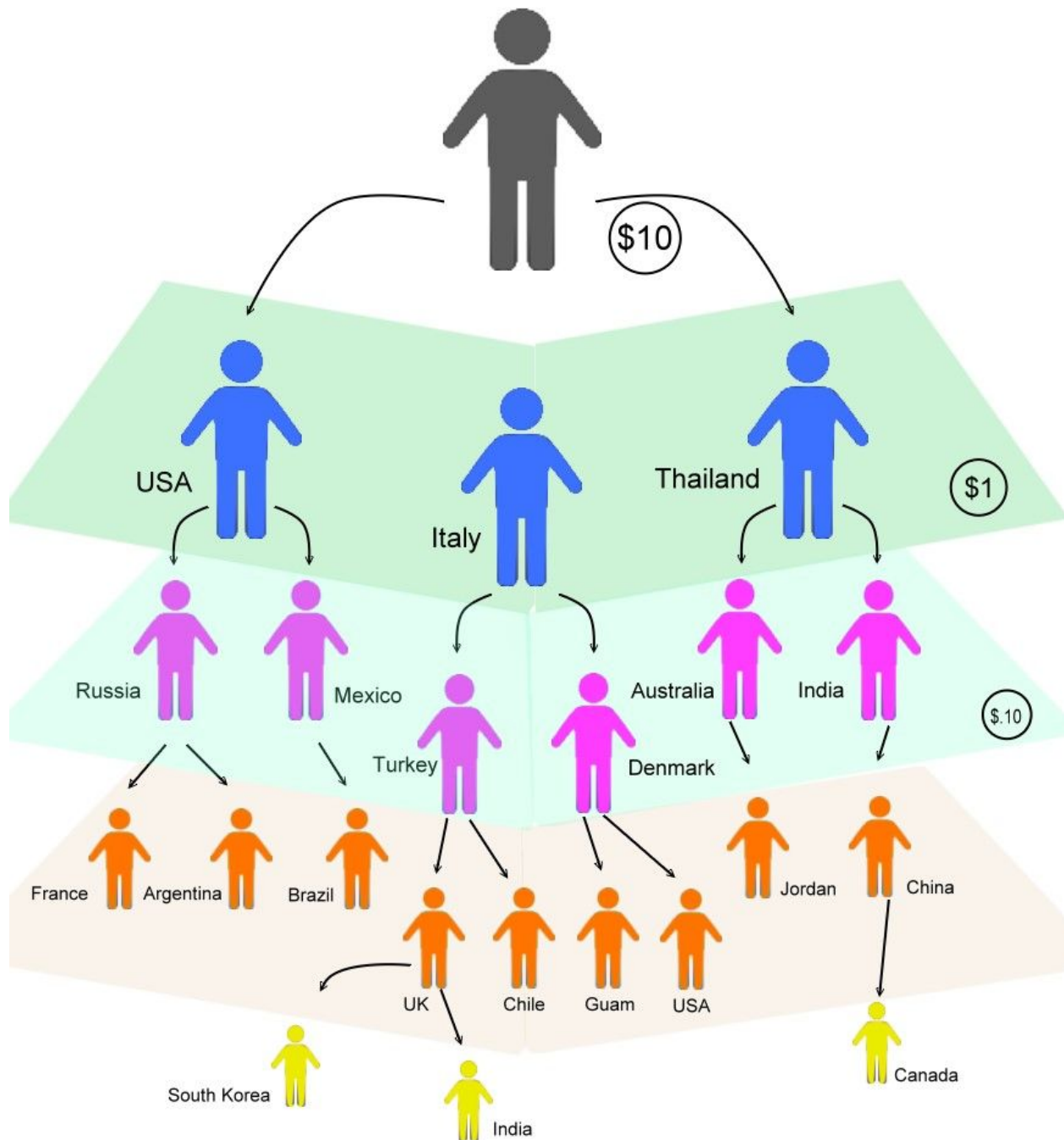
4.3 - Content Authorization

Content will be accessible to authorized users only and the authorization process is itself automatic. This means the content owner doesn't need any manual authorization for access. As soon as the user selects the content for delivery to his system, the access is obtained instantly.

5 - Business model



5.2 - Incentivized Compensation Plan



5.3 - Features

- 10x Content Delivery Speed
- P2P is the fastest form of file delivery over the internet
- P2P ensures content availability and deliver-ability without censorship 24/7/365
- Data authorization and Anti-Piracy
- Data indexing and data access is controlled by the blockchain
- Only authorized users/customers may access your data
- NO third party can duplicate, share or resell your data
- Global distribution: no downtime even if your entire country goes down, you can still download from cross border seeders.
- Everyone gets paid!
- The nodes(seeders) get paid for seeding the data.
- Users enjoy permanent free access.
- Content owners/creators are paid for premium content
- - There are no limitations on earnings
- Anyone can join and start hosting data
- Anyone with an internet enabled device can join FOLLOR for free and start contributing to FOLLOR's decentralized content delivery network
- ALL are welcome and paid for their efforts.

- 100% uptime and 0% Downtime
- Your content stays in the network and is secure, even if your entire country lost internet access.
- Your files stay put!

5.4 - Deployment

Our Github is filled with code to deploy a working copy right now, and for free on various free cloud platforms such as Heroku and Amazon Web Services.

For Content Creators :

FOLLOR is compatible with all torrent clients. You can create torrents anywhere and follow the FOLLOR standards to generate the hash.

Get Lifetime payments from Users/Audience for your content. Whether it is a movie, mp3, image file or other digital media or data

For Content Seeders :

Automatic seeding of content you have already downloaded will ensure you get paid for hosting content.

Get Paid for every piece of content uploaded by those in your network chain.

For Content Downloaders:

- Download “Individual hosted” content for free.
- Access premium commercial hosted content for 1/100th (1%) of the cost.

Why pay 10\$ for each movie you host, when you can own it for 0.10 \$ *ten cents) for life?

- Even cover that ten cent cost by seeding content for the next few days.
- Simply leave the application running in the background of your device and get paid!

For Blockchain Users :

Transfer Funds & Get paid for Life for helping to grow the blockchain.

Each transaction increases the FOLLOR index capability.

Content Delivery is possible via:

- Blockchain
- Static Sites
- Dynamic Sites
- Address (BLOCKCHAIN)
- Transaction (BLOCKCHAIN)

5.5 - SUDO Algorithm

1 - USER creates torrent for his Content File
almost all torrent & file sharing types are supported by default on FOLLOR. The user does not need to update his file sharing protocols. Everything works by default

2 - User mark's content using our SDK (Software Development Kit).
Content metadata is encrypted and converted to hex formats, so the blockchain can decipher it, and a transaction is created with all of that information.

3 - When a user seeds a file it is chopped into small parts and each part is uniquely encrypted and then distributed globally throughout the network and made available for local seeding for faster delivery to end users.

4 - FOLLOR Network Indexes File
File is indexed and will be included in the blockchain for life,. It is linked to the address that made transaction, allowing only the owner file access and control.

5 - Implement SDK

SDK provides Web Developer & Applications the method to access the file and embed file in the web pages or provide a streaming service, for which is directly accessed by the WHOLE internet, independent of FOLLOR network.

6 - Public access to the content

Each time premium content item is accessed the content owner and seeders get paid.

6 - Summary

Development To Go

With the money raised we will create a blockchain which will provide more cost effective transactions than does ETHEREUM.

We will provide the ability to vote on misguided content and rollback these particular transactions.

We aim to achieve transaction fees of 0.01\$ per transaction. This allows for anyone, anywhere, to freely add content.

We will Introduce META-DATA adding features to the blockchain itself, so data details can be viewed even with an encrypted source, allowing for faster searching and easily recognizable file names and add the ability to bookmark links over the blockchain directly.

-FOLLOR will be self minable by the nodes running the block explorer for it. This results in no mining competition.

A user can host content over any device, mobile or full scale computer, and get paid for every file seeded through their network chain. The blockchain reward will be distributed to the network users hosting the files for recent transactions.

Which means: **Everyone gets paid for participating in network!**

Free Access And Free Premium Content

With the blockchain itself being run by the users, users can collect rewards by being a part of network and accumulate FOLLOR for paying for the premium content.

Example: *You watch "MOVIE A" and pay 0.50\$ for lifetime access to it. You can easily make back the 50 cents in a few days or a week by simply keeping that movie file in your hard drive, so*

that it is available for seeding to others in the network desiring that movie file.

This makes viewing, listening or reading Premium Content 100% Free!

NEW SDK : with the present SDK the project is limited to ethereum capabilities and not yet available to public at large, due to its excessively high fees.

Our new SDK released soon after the FOLLOR Blockchain will provide:

- Metadata access
- File(s) preview-Automatic language selection for content
- And Even Automatic Buffering Quality Compression built right into a Single SDK (-Software Development Kit).
- Developers can build applications and multimedia websites using a simple 1 click deployment, and the SDK is not limited to any specific device.
- ANDROID, IPHONE, WINDOWS, LINUX, UNIX, MAC OS all can be handled with single SDK
- **The SDK will be available in:**
- NODE JS, JAVA, C, PHP, PYTHON and other popular programming languages.

- Now anyone can deploy a project like YOUTUBE or NETFLIX in 2 minutes.
- Users and content providers need not worry about content, content distribution rights, or the like.
- Everything is handled by FOLLOR SDK automatically and updated on blockchain real time.

6.1 - Incentivize monetization

We will partner with various companies and content creators regardless of size, capital, market-share or corporate holdings to grow our popularity, demand and numerous implementations; now and in the future. Agreements have already been made and others are in negotiations presently.

6.2 - Network Growth

- Open campaigns in schools, universities and colleges for students and eager learners to implement our framework creatively
- Allow professional developers to work and improve FOLLOR
- Make private investment partnerships for content delivery on a mass scale, approaching content distributors for obtaining what consumers demand:

primarily music and movies. Other media and data of value will also be available, such as e-books, docs, WikiLeaks and the like

- Get regional content added and delivered globally and across borders without censorship.
- **Example:** *Mexicans living in Canada and the USA want Spanish language content, not English content.-Provide Dedicated Mobile Application SDK for developers to have content delivered quickly on mobile devices*
- Launch Media Apps Like Netflix & Spotify to stream movies and music directly from content creators.

7 - Working Demo And Project Links

<https://github.com/projectFOLLOR/FOLLOR-ethereum>

<http://FOLLOR.herokuapp.com>

DEMO AND PROJECT GUIDE ARE AVAILABLE ON THEIR RESPECTIVE PAGES

