Presearch

VISION PAPER

Presearch is a community-powered, decentralized search engine that provides better results while protecting your privacy and rewarding you when you search.

Foreword

From the CEO:

As many of you know, Presearch is my baby.

But when I wrote the first white paper three years ago in a single, crazy week, I had no idea that the project would explode as it has, and that the next draft of the white paper would involve a team of people, months of preparation, and a huge expansion and improvement of the initial Presearch ideas.

What you have here is the result: the Presearch Vision Paper. It summarizes where Presearch is today – which shows how far the project has come – but more importantly, it shows where the project is headed in the short-, mid- and long-term, with solid dates and deliverables.

The next big innovation (following on the heels of staking earlier this year) is search nodes. They're explained in detail in this Vision Paper. I really believe that these nodes will put Presearch into the ranks of the best blockchain projects out there and provide Presearchers with a search experience they love.

I'm looking forward to feedback, ideas, as well as thoughtful critiques from the community. You have been instrumental in the success of Presearch so far. Thanks to all who participate and contribute.

Colin Pape

Colin Pape
CEO, Presearch

From the CTO:

I've spent most of my career building search engines and, in the summer of 2017, Colin and I met for the first time to begin discussing how we could potentially build out a blockchain-based, decentralized web search engine powered by the community.

We knew we wanted to work together on this massive and likely world-changing effort, and I became a founding member of Presearch's Advisory Board in July of 2017, helping Colin form initial vision for the project and also helping Presearch navigate many opportunities and obstacles behind the scenes over the last three years.

While we had discussed me coming onboard multiple times throughout the project's evolution, the timing is now finally right, and I am extremely excited to be officially here in my new role as Presearch's Chief Technology Officer.

The project and the team are set to expand and thrive like never before. Even though Presearch is already one of the top 5 projects in the blockchain space by web traffic, it is not actually that well known… yet.

With our recent developments and those you'll see right around the corner, that is about to change.

We have a very long-term, ambitious vision and I truly believe we can revolutionize the way the world thinks about what a search engine can be and who it should benefit. We're excited to share much of that vision with you in this new Vision Paper, and we look forward to all your amazing feedback.

Trey Grainger

Trey Grainger
CTO, Presearch

From the Chairman of the Advisory Board:

Little did I know when, over three years ago, CNBC asked me to recommend three crypto projects for investors, where the path would lead. I was a complete outsider to the project, but liked what I had read and heard, so I included Presearch in the list as the "small project" recommendation.

Colin then reached out to me and, lo and behold, I'm now the longest-serving Presearch advisor (tied with Trey)!

And proud to be here and to have contributed what I could to this amazing Vision Paper. It is light years ahead of the first, much more conceptual white paper (which makes perfect sense) and provides a clear roadmap for immediate, eventual, and longer-term developments in the project.

More importantly, over the past three-plus years the team has expanded, become more professional and the project has evolved. The foundation has now been laid for the project to grow exponentially – and the team has the execution skills to make that happen.

After all, execution is everything!

Tim Enneking

Tim Enneking
Chairman of the Advisory Board, Presearch

1. Executive Summary

This is the Presearch Vision Paper, the next evolution of the project white paper. It describes why alternative search engines are important and explains in detail what the Presearch project has already accomplished, as well as how it is evolving in specific, concrete terms, and with a timeline for execution.

It has been written by Presearch.org Global Limited.

Presearch operates a search engine that already has more than 1.5 million users, making it one of the largest crypto and blockchain projects in the world. Its users conduct over 10 million searches a month. You can find the search engine here: https://presearch.org

Presearch.org, the website, has an estimated value of over $30 million USD based on current traffic alone. The project is viable, self-sustaining, and set to explode in terms of function, quality of user experience, reach, and the number of users and searches. This Vision Paper explains how and why that will happen.

Why do people use Presearch?

There are three main Unique Value Propositions (UVPs) which explain why. There are several secondary UVPs that certain users also find very attractive.

1. User control over data and privacy
2. Payment for contributing value to the ecosystem
3. Decentralization of the search ecosystem

We all search constantly, and as we do, we may not realize the degree to which every search discloses information about us – information which, once disclosed, we can no longer control or even monitor. Presearch eliminates that loss of privacy by giving the user full control to restrict what, if any, of their information is disclosed or maintained (with full privacy as the default).

With traditional search engines, not only do we often lose control of information about ourselves, we allow others to monetize that information for their own benefit. Presearch changes that equation and enables users to monetize their own actions: searches generate tokens for the searching user, whether or not any personal information is disclosed. After all, search queries are valuable, even when no personal data is shared.

But even further, with traditional search engines, the monetization process itself results in our data being sliced and diced and distributed onward to other parties, unknown to us and well beyond our control.
Why are we not paid for the valuable data we generate by conducting searches? Why do we lose all control over our own data, which we generate ourselves?

The first problem is, in some ways, the easiest to solve. Presearch pays its users when they search using the Presearch engine. Although, as you can imagine, the implementation of that process poses certain challenges, conceptually, the concept is easy to grasp.

Controlling data is more complex. Among the many ways Presearch achieves this greater control is through both its structure and decentralization. Presearch is designed to ultimately be owned and controlled by a non-profit foundation. Thus, the usual, often harmful motivations of for-profit corporations are absent. As a result, the value of the project is driven into the tokens owned by the community, creating a level playing field for all.

Beyond its structure, Presearch has been conceived from the very origin of the project to be decentralized to the maximum extent possible. While the project is too complex to be totally decentralized from day one, a detailed roadmap with specific milestones has been developed to achieve that end. You will find that roadmap in Section 10. By definition, this decentralization puts far more control into the hands of users and the community than exists in other search engines today. The details of the evolution of the project appear through this Vision Paper because decentralization is in Presearch's DNA. However, the most complete discussion can probably be found in Section 5.3.

Some of the secondary, but still very important, UVPs which are discussed in depth throughout the Vision Paper include: search quality, keyword staking, advertising, and control over search parameters and engines.

The technology behind Presearch is sometimes straightforward and sometimes complex. It is described in detail in this Vision Paper. The paper provides a product roadmap, presents marketing strategy, describes tokenomics, addresses governance, explores the amazing Presearch community, outlines the ecosystem and, in general, covers all of the major aspects of Presearch, from the marketplace and browser extensions to mobile apps and search architecture.

The Presearch team is grateful for your support, and we hope you find both this Vision Paper informative and the project beneficial.

2. Presearch By The Numbers

1.5M
Registered Users

7,700
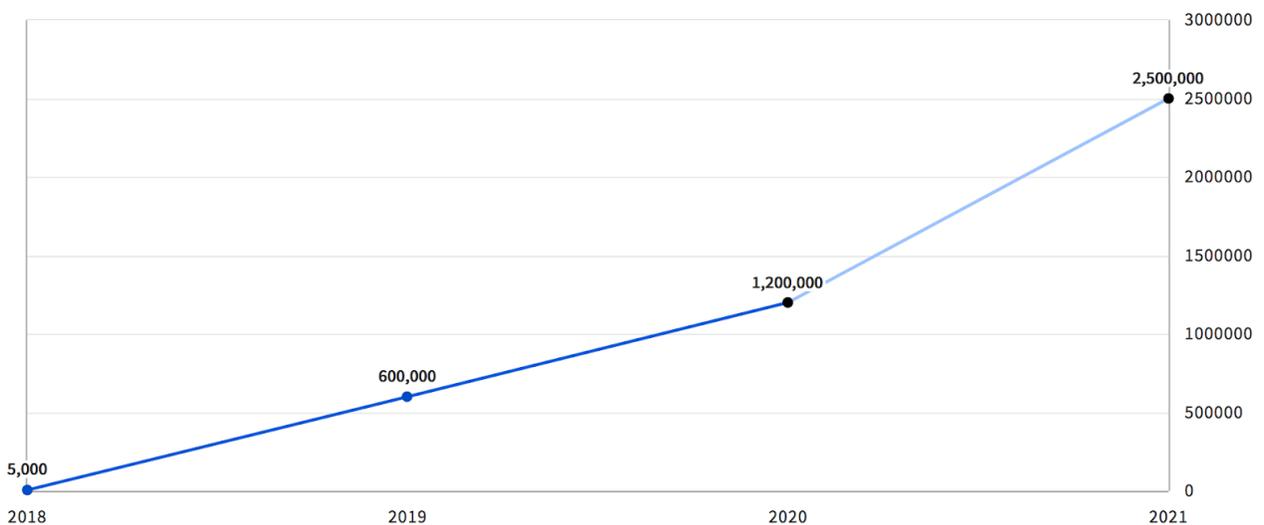Telegram Members

9,900
YouTube Subscribers

10M — Visits per month.

65M — Total PRE Staked

Registered Users

Year	Registered Users
2018	5,000
2019	600,000
2020	1,200,000
2021	2,500,000

3. Why Presearch?

Search engines are *incredibly* valuable and influential resources.

They act as gateways to almost everything the internet has to offer, particularly when you have a specific requirement and are not completely familiar with the topic being researched.

Users are probably at their most vulnerable with search engines. These programs have become universal assistants, and even confidants, and they are the most ubiquitous tool of the internet – everyone searches.

That is why Presearch is in such an interesting and strong position – Presearch continues to be the top search engine in the blockchain space with more than 10 million searches per month.

With so much usage, and with search being such a constant activity for everyone, including non-technical users, Presearch is poised to become the top crypto onramp that introduces millions to blockchain technology.

From that unique position, Presearch can have an outsized impact within the cryptocurrency space on the path to mainstream adoption that stretches well beyond the confines of blockchain enthusiasts.

Search is the gateway to the web. The world deserves an alternative search engine that is open, transparent, and involves the community in product development, consensus and quality control.

Presearch is building a sustainable decentralized search platform that represents the interests of the community, will be open source and transparent, and uses blockchain technology to align all stakeholders across a single unit of value: the Presearch Token (PRE).

Presearch's innovative use of staking, specifically within the Keyword Staking platform, is enabling value to be discovered in ways that just were not possible before. The project is pioneering an entirely new way to launch token-based ecosystems that will have a lasting impact on token values and adoption curves.

By switching to Presearch, you help support the decentralization movement, putting power back in the hands of the people, and you benefit from a better search experience while earning valuable rewards for using Presearch and helping to grow the community.

More than 1.5 million people have already registered to use Presearch and are helping Presearch build a better search engine. It would be wonderful if you could join Presearch, too.
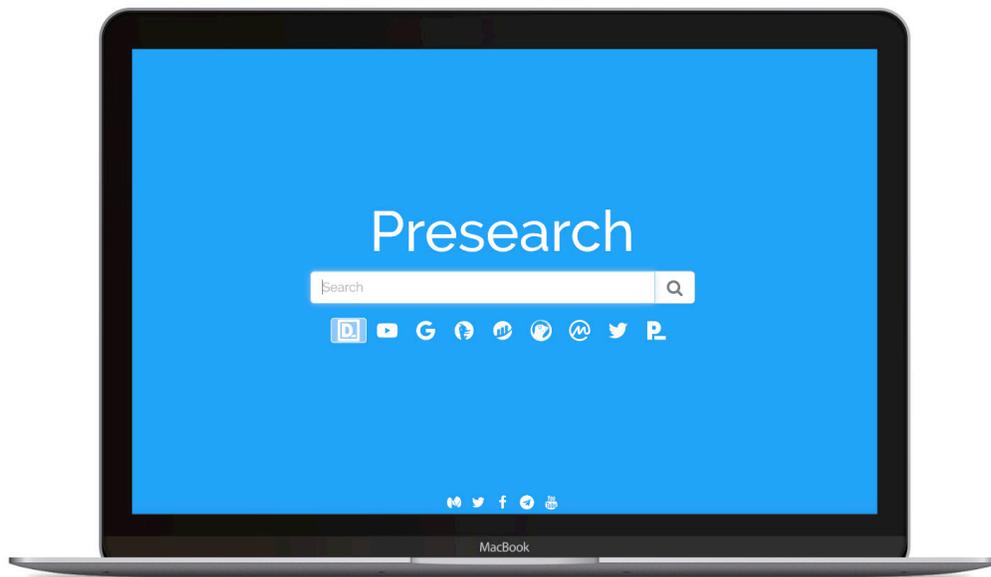
4. About Presearch

Presearch is a community-powered, decentralized search engine that provides better results while protecting your privacy and rewarding you when you search.

COMMUNITY-POWERED
Community members can actively participate in the project using Presearch community chat groups, contributing open source packages to our source code repository, or simply as users or promoters helping build usage and awareness.

DECENTRALIZED
Presearch is now preparing to release its first decentralized technology – a new search engine experience that runs on node servers operated by Presearch community members.

BETTER RESULTS
The new Presearch engine offers results that are as good as the world's top search engines. It also provides an additional layer of data through community packages which makes those results even better. For example, you can search Presearch for "Bitcoin" to see what the crypto package looks like. Over time, there will be additional results provided by a user-curated supplementary index.

PRIVACY
In addition to better results, Presearch also protects your privacy because it does not store any personal information by default, and queries are handled by a decentralized network of nodes running open source software.

REWARDS

As a Presearch community member, you will earn Presearch reward tokens when you search, when you operate a node, and when you refer others to join Presearch. There will be other opportunities to earn rewards as the project evolves further, outlined later in the Tokenomics section.

ADVERTISING

In addition to offering users a great search experience, Presearch is dedicated to creating significant value for marketers who would like to reach Presearchers. Advertisers can stake their PRE to a keyword, and whichever advertiser stakes the most tokens will have its ads displayed when a user searches on the term selected. Advertisers confer the most external value on PRE, so their success is very important to the ecosystem.

4.1 Presearch Token (PRE)

Presearch tokens are the unit of account within the Presearch ecosystem, representing rewards earned, advertising purchased or staked, and, in general, value created.

- ● CIRCULATING
- ● RESERVED
- ● STAKED
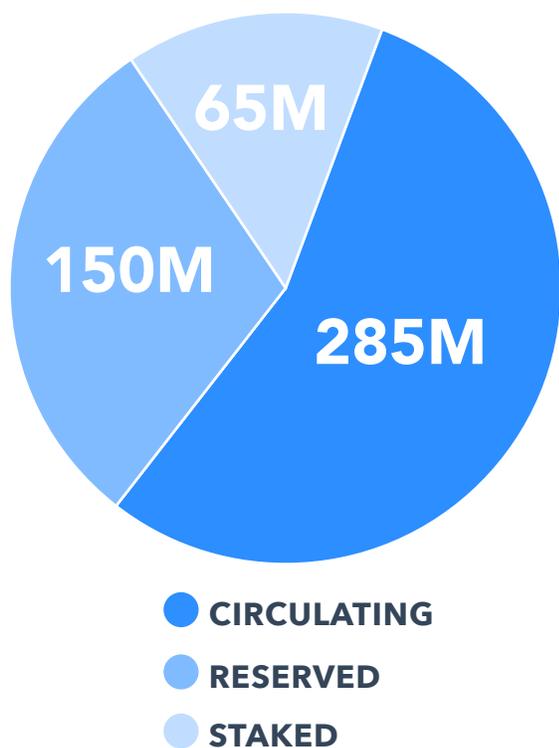
There will never be more than 500 million PRE[1], with approximately 400 million already minted into existence.

PRE tokens are hosted on the Ethereum platform as standard ERC20 blockchain tokens.

This means that PRE are transferable to any Ethereum-compatible wallet that recognizes ERC20 tokens. Token holders are able to sell their PRE directly to any business or individual interested in generating Presearch results at whatever price the seller is able to obtain for their token inventory.

[1] The total supply was originally 1 billion PRE; 50% of supply was cancelled / burned in April 2020.

Any person or company with a product to sell is a potential customer for Presearch tokens -- in particular, local businesses, advertising and marketing firms, or large brands. The tokens can then be converted to be used to purchase advertising on the platform.

Presearch is developing a training program and supporting sales collateral to help sellers obtain top dollar for their PRE, and will also link sellers to best practices for proper invoicing, taxation and reporting for their PRE sales to assist them with their PRE inventory. Ultimately, it is up to the seller to ensure they remain compliant with all local regulations, but Presearch would like to help sellers to stay in compliance.

Presearch views this opportunity as very similar to the multi-billion-dollar Google adwords industry, and plans to create a certification program and a directory of certified partners.

Alternatively, token holders may use an external exchange to buy from or sell to other token holders.

CORE PROPERTIES	
Name:	Presearch Tokens (PRE)
Internal Standard:	PRE Credit
External Standard:	PRE Ethereum ERC20 Token
Internal to External:	1:1
Max Supply:	500,000,000
Contract Address:	0xec213f83defb583af3a000b1c0ada660b1902a0f

A list of wallet addresses and smart contract info can be found here:
https://etherscan.io/token/0xEC213F83defB583af3A000B1c0ada660b1902A0F#balances

4.2 Organization

Presearch is a multi-phase project:

Phase I - Launch & Establishing Product-Market Fit
Phase II - Sustainability & Decentralizing Search
Phase III - Decentralizing Governance

Ultimately the community will control the Presearch platform; consequently, the community should have a voice in the actual legal structure of the project. As such, a temporary corporation has been created as the initial legal custodian to launch the project; ultimately, Presearch will evolve into a community-owned and controlled project supported by a non-profit foundation.

Therefore, the current structure of the company is described below, along with the probable path for the community to consider as the final structure.

PHASES I TO II:

1. The legal entity is a Canadian corporation, Presearch.org Global Limited., which was incorporated on July 7th, 2017 and is located at 270 King Street in Midland, Ontario, Canada.

2. There is a single shareholder group for easy voting and transition to Phase III. This structure will continue until the   project is financially sustainable.

TRANSITION TO PHASE III:

1. Complete all steps necessary to ensure a clean and timely transition to Phase III, in accordance with the following guiding principles:

    a. No accumulation of significant debt or long-term liabilities;

    b. Single shareholder group to ensure total responsibility for project; and,

    c. No assignment of IP to any other entity.

2. Presearch covers its operational costs via advertising revenue as well as revenue generated from ongoing token sales through the Presearch Marketplace.

PHASE III:
The creation of the Presearch Foundation to be operated as a Decentralized Autonomous Organization or DAO.

1. Establishment of the DAO community charter, directors and governance / consensus model.

2. Establishment of a permanent Foundation in a country and region with the utmost respect for privacy and data integrity, with a favorable tax and regulatory environment, and a stable and freedom-respecting political climate.

3. Foundation to hold all inventory of minted PRE held in trust.

4. This foundation will operate from a portion of the revenue generated by the sale of advertising and the sale or resale of PRE from inventory.

5. Project Evolution

5.1 Phase I: Launch & Establishing Product Market Fit

Presearch launched in June, 2017.

In the three years since, Presearch has accomplished a lot and become one of the leading projects in the entire blockchain space, with top 5 traffic results and more than 1.5 million registered users.

As Presearch heads into Phase II of the project and prepares to launch the Presearch decentralized search engine, it is timely to recap Presearch's progress in Phase I.

5.1.1 Highlights

Founded
July 7th, 2017
Presearch.org founded in Canada

Token Sale Completed
November 30, 2017
Early adopter sale of PRE is completed

Beta Launched
April 9th, 2018
All users can now join Presearch

Closed Alpha Launched
November 9th, 2017
Alpha release for approved users to do testing.

First Exchange
December 2nd, 2017
Community member lists PRE on HitBTC

Referral Program
May 8th, 2018
Program to offer 25 PRE for referrers goes live

Presearch launched a working platform before the token was available for distribution and before the crowd sale was completed. The referral program significantly exceeded expectations and Presearch hit its initial annual target for beta testers within the first month.

Alpha Search Engine
June 4th, 2018

Released beta search engine for testing

Browser Extension
July, 2018

Released browser extension to set as default engine

Autocomplete
December 18th, 2018

Released to add autocomplete to site

150k Members
June 11, 2018

10x members in 30 days - 15k to 150k

Custom Providers
November 29th, 2018

Released to enable users to add any engine to Presearch

2018 was a challenging year: first there was the crypto crash and ensuing "crypto winter", which slowed the project and impacted reserves as Presearch held mainly crypto. Then, after launching to the public, there was a swarm of token farmers that had to be protected against, which took a lot of focus as Presearch needed to build out its abuse detection system. However, the team pushed through and came out even stronger in 2019 with more than 1M registered users.

Reward System
February 7th, 2019

Released anti-abuse system to mitigate token farmers
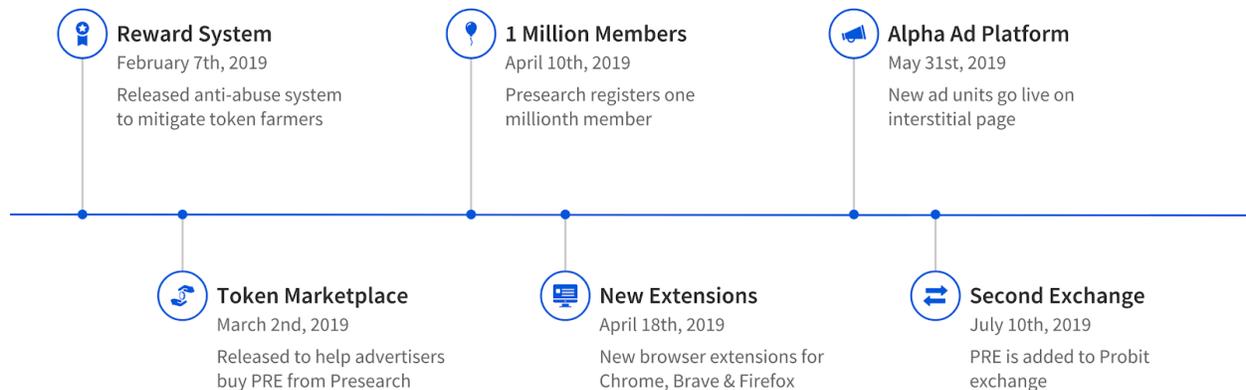
1 Million Members
April 10th, 2019

Presearch registers one millionth member

Alpha Ad Platform
May 31st, 2019

New ad units go live on interstitial page

Token Marketplace
March 2nd, 2019

Released to help advertisers buy PRE from Presearch

New Extensions
April 18th, 2019

New browser extensions for Chrome, Brave & Firefox

Second Exchange
July 10th, 2019

PRE is added to Probit exchange

2019 was challenging, as well, but Presearch made solid progress on the advertising offering, mainly discovering product / market fit. These realizations led to Keyword Staking in 2020, which has already proven to be a great success.
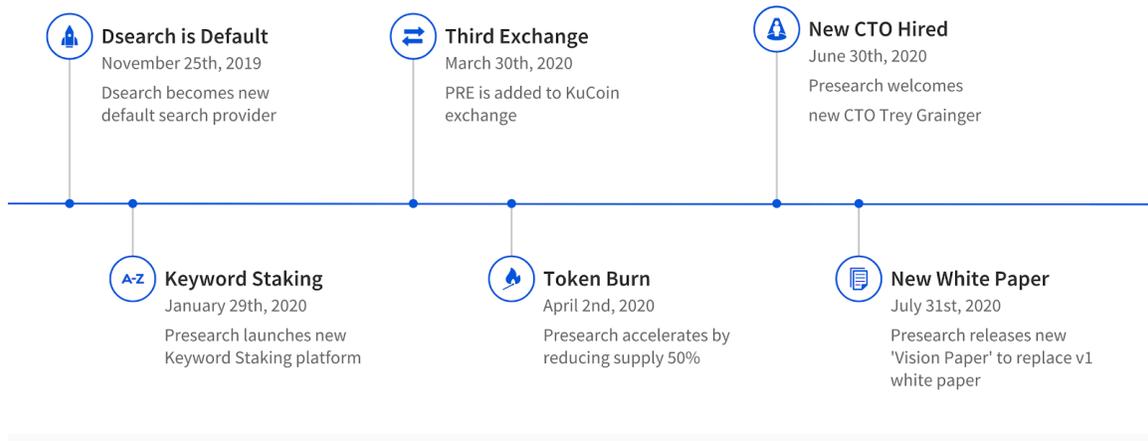
While there have certainly been some hard lessons learned over the past three years, Presearch is proud of all that it has accomplished, including creating one of the top blockchain projects by usage, attracting some great partners and team members, and creating some real innovation with keyword staking and the upcoming decentralized search platform.

5.1.2 Learnings

- In the early days of price discovery, people do not want to spend tokens on the consumptive expenses of a traditional advertising model.
- Having a token supply which is too large, coupled with a drastic decline in market capitalization across the larger cryptocurrency market, caused PRE value to become decoupled from project value.
- When Presearch incentivized search traffic with rewards, some people unfortunately chose to abuse the system.
- Paying rewards for searches that are not ultimately tied to any value received by Presearch for those searches is not a sustainable model.

5.1.3 Changes

- Pivoted from a consumptive CPM model to a keyword-staking model that still enables advertisers to assign value to an ad spot.
- Burned 500M PRE from the maximum supply, forcing the project to run leaner and focus even more on achieving positive tokenomics.

Token Burn (1B to 500M)
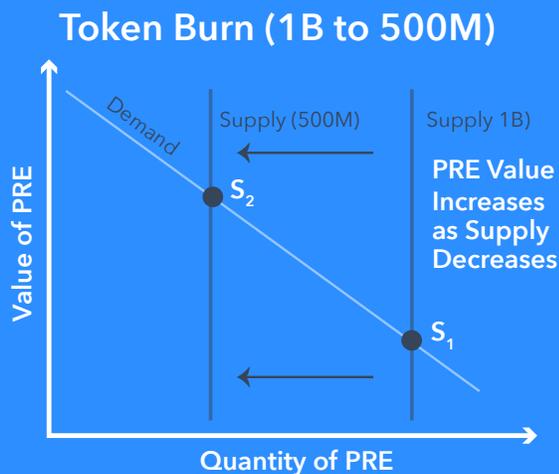
Burning 500M PRE from the maximum supply forced the project to run leaner and focus even more on achieving positive tokenomics.

- Built a Rewards Verification System (RVS) to detect abnormal search activity designed to generate token reward payouts and limit similar fraudulent activity.
- Presearch is building out its own search engine and will soon transition rewards to be based upon the aggregate value of searches (ad views, clicks, etc.) going forward as opposed to a "fixed" reward applied to all searches.

In summary, Phase I focused on launching Presearch, growing the user community and traffic by providing a better, incentivized search experience, and creating a unique Presearch advertising model based upon keyword staking. July 2020 marks the end of Phase I and transition into Phase II.

5.2 Phase II: Sustainability + Decentralized Search Engine

Presearch is currently entering Phase II of the project (July 2020), which will focus upon sustainability, tokenomics, and the buildout of the Presearch Decentralized Search Engine. Phase I allowed Presearch to run many experiments and learn what users value in their search experience, the dynamics around supply and demand for PRE, and how Presearch must evolve to meet growing demand and create a sustainable model that optimally balances both the growth of the platform and the best interests of the community.

Phase II transitions from a "search tool with static rewards that sends you to other search engines" to an actual decentralized web search engine with sustainable tokenomics. This means that Presearch is delivering a world-class search experience that rewards user searches based upon the actual value those searches generate in advertising revenue, and that incoming advertising revenue will need to cover multiple different kinds of rewards (search rewards, rewards for running nodes, rewards for code and other platform improvements, etc.).

Presearch will accomplish this goal by rolling out an integrated search experience, decentralizing the platform, and ultimately closing the loop on tokenomics.

5.2.1 Integrated Search Experience

In addition to the search providers bar, which enables users to search across their favorite external search engines, Presearch currently has several internal beta search engine experiences available within the platform. In Phase II, Presearch is integrating all of these experiences together into a unified search experience, which emphasizes:

1) Using the Presearch search engine as the default, rather than external search engines.

2) Integrating the search provider bar conveniently in the search results page to make switching to other providers easy if the Presearch results are missing the expected result.

3) Rewarding searches to the Presearch search engine instead of incentivizing usage of external engines. It does not make sense for Presearch to pay out rewards for searches to external search engines for which the Presearch network receives no value.

These changes drive value into the Presearch project by having more users leverage the Presearch search results, increasing advertising revenue, and tying PRE rewards to actual value (searches and ad views within the Presearch platform) instead of paying to divert traffic to other sites. Ultimately, this makes the Presearch platform more financially sustainable, increases investment in the decentralized search platform and the quality of search results, and makes the entire search experience more integrated and compelling.
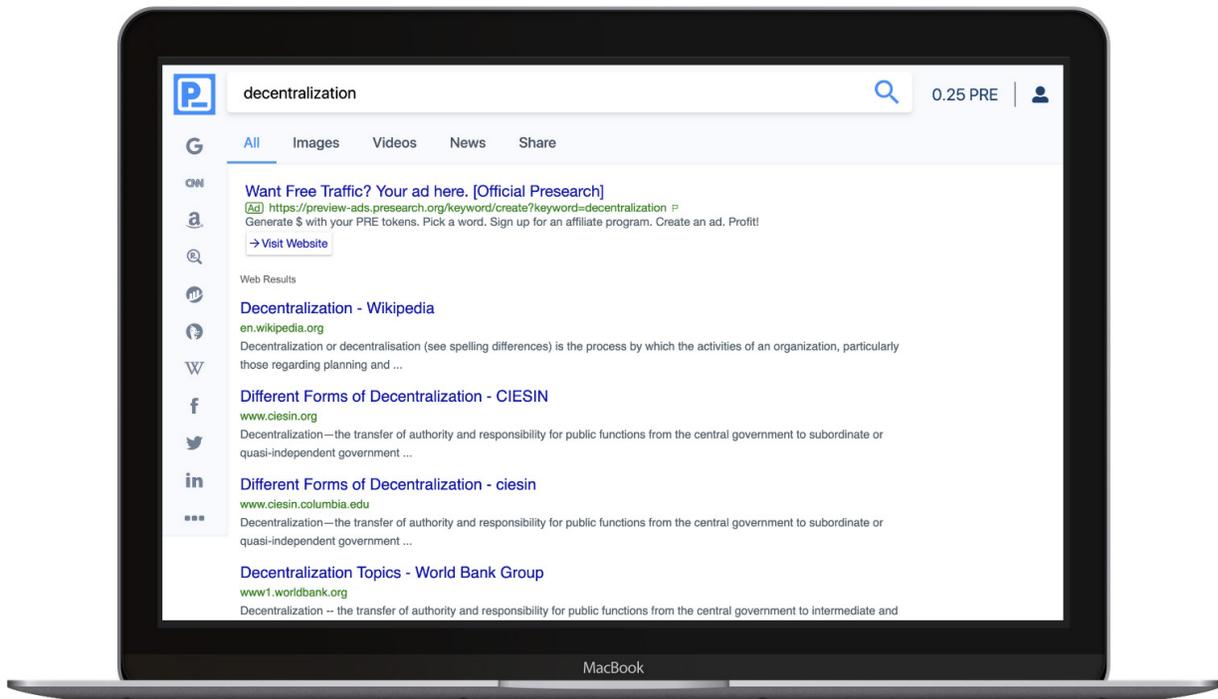
5.2.2 Decentralized Nodes

While Phase I focused on establishing product-market fit, it did so with a centralized technology platform using third-party APIs. The promise of the project has always been to build a decentralized search engine. Phase II will introduce the first component of this decentralization process, Presearch nodes.

Anyone will be able to download and run the software for a node, and will thus be able to help power the decentralized Presearch Search Engine. A beta version of the node software will be released in September 2020, with a production launch in Q4 2020.

5.2.3 Closing the Loop on Tokenomics

After the cryptocurrency market underwent a severe downturn in 2018, almost every project suffered financial setbacks, and, as a result, many failed entirely. Presearch weathered the storm and is now one of the top 5 most-visited websites in the blockchain space, although, at the time of writing, this does not appear to be reflected in the value of the token due to a number of factors, including the need for the project to sell some of its token inventory to advertisers and resellers.

TOKENOMICS

One of Presearch's primary goals in Phase II is to ensure that it closes the loop on tokenomics - ensuring that the value of the token is clearly established by the utility it provides within the Presearch ecosystem. The biggest single use case for the token entering Phase II is its use in Keyword Staking - allowing advertisers to target specific search keywords and to win the top ad spot if they place the highest bid. This feature alone has led to more than 65 Million Presearch tokens being staked since Keyword Staking launched at the end of January, 2020.
With the launch of nodes will also come Node Staking, which will require node operators to stake PRE to participate in the network and be paid for running the node software that will provide decentralized search results.

Additionally, once Presearch launches the new Integrated Search Experience, it expects net cash flows from advertising revenue to increase, enabling it to eventually become a net purchaser of PRE.

Presearch currently has 10 different active use cases for PRE, with an additional 15 planned during Phase II. Please see the Tokenomics section for specific details on all of these, but, needless to say, Presearch is heavily focused on ensuring that the full utility of the token is achieved as Presearch closes the loop on these tokenomics.

5.3 Phase III: Decentralized Governance

When Presearch exits Phase II, it will be a fully self-sustaining and rapidly growing business where every community member receives value out of the Presearch network directly relative to the value they put in, and where every additional active user helps grow the value of the network for all.

Presearch will also run a decentralized and open source platform at that point, enabling anyone in the world to contribute and be rewarded for their contributions.

Once Presearch achieves this sustainability, Phase III targets an entirely new goal: decentralization of governance. In short, this means that instead of Presearch being the key driver of decisions for the project, it will enable the community to take over nearly all aspects of governance for Presearch. This is no small feat, and the Presearch software itself will need to enable this through a democratic process tied to community members and PRE token holders.

Since Presearch tokens are given to anyone who runs a search, Presearch could easily enable a democratic voting process among all community members (one vote per member holding any PRE), and Presearch can likewise enable voting among all PRE holders based upon the number of PRE they hold. If all votes required both a majority of members (one vote per PRE holder) and a majority of PRE staked (one vote per PRE token), the voting system could always balance the needs of users versus the needs of token holders.

This is one of many governance models Presearch will explore, and it provides a good general example of how decisions could be made in a decentralized governance model. Thankfully, several other projects are testing these kinds of decentralized governance models already, and Presearch expects to fully leverage learnings from those experiences as it rolls out its own model.

5.3.1 The Presearch Foundation and Community Governance

Since Presearch launched in 2017, it has always had the goal of eventually establishing a non-profit foundation to carry Presearch forward. In the original Presearch roadmap, Presearch intended to establish the Presearch Foundation sooner and to begin decentralizing community governance much earlier in the life of the project. The team learned, however, that some of these goals are hard to achieve, and that they can actually undermine a project if not done well - as demonstrated by large crypto projects like Tezos and EOS that made early decisions focused on organizational structure (Tezos) and decentralized governance (EOS) that ultimately led to well-publicized issues.

While Presearch is fully committed to establishing both a non-profit foundation and a decentralized governance model, it has chosen to delay the execution of both of these goals until:

1) Presearch is fully sustainable on its own from a tokenomics standpoint and a foundation can take over the operation of the platform without being dependent upon outside funding, and

2) Suitable decentralized governance models have been proven successful by other projects.

The Presearch Foundation will be established once sustainable tokenomics are achieved and the decentralized search engine is released, with the decentralized governance model following and leveraging a phased rollout. The goal is to take the utmost care to ensure the long-term success of Presearch.

It is possible that even the Presearch Foundation may eventually be replaced if the governance model can be fully decentralized, but until such time as that may occur, the foundation would be responsible for safeguarding the Presearch mission to provide an open, decentralized and community-driven search engine that respects user privacy and rewards users for the value they provide to the world.

5.3.2 Community Constitution

The constitution is a work in progress, and at the time of writing remains only loosely defined.

Presearch continues to be inspired by blekko's Web Search Bill of Rights[2] and its core tenets:

1) Search shall be open.
2) Search results shall involve people.
3) Ranking data shall not be kept secret.
4) Web data shall be readily available.
5) There is no one-size-fits-all for search.
6) Advanced search shall be accessible.
7) Search engine tools shall be open to all.
8) Search and community go hand-in-hand.
9) Spam does not belong in search results.
10) Privacy of searchers shall not be violated.

Please feel free to provide your insights on how to refine and improve the Presearch community constitution.

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[2] https://web.archive.org/web/20121107201910/http://help.blekko.com/index.php/what-is-blekko/

5.3.3 Community Consensus Model

The community consensus model will be the key to empowering Presearch members and stakeholders to build the platform, believe in the model, and spread the word to their networks.

It really is the protective shield within which all other aspects are housed.

Because of its critical role in protecting the Presearch vision, it is extremely important that Presearch get the consensus model right.

Key considerations include, but are not limited to the following:

1) Maximizing engagement and participation.
2) Minimizing centralization of power.
3) Providing a framework for rapid progress and iteration.
4) Ensuring that the long-term vision cannot be easily corrupted.
5) Creating mechanisms with which to continuously evaluate change and course-correct when necessary.
6) Ensuring that the wisdom of the crowd does not become the tyranny of the majority.
7) Ensuring the interests of all members are protected and accommodated at the same time.

Presearch recognizes that this is no small feat, simply from a philosophical standpoint, let alone from a practical and programmatic one. However,once Presearch figures it out, the applications will be vast.

5.3.4 Active Presearch Community

Presearch has a very engaged, global community comprising over 1.5 million members and hundreds of thousands of active member users. These member users are active in that they search regularly, send emails to Presearch support, post on the Presearch Facebook channel and interact on the Community Telegram chat with feature suggestions, bug fixes, and referrals. Collectively, they vastly improve the user experience and contribute to build the future of search as they see it.

Therefore, the development process has to be an iterative one. Presearch has taken the most popular suggestions, developed base technologies, and released them into open beta for the community to use, bend, break, and ultimately come up with suggested fixes.

Community-driven features that have been released or are in development include:

1) Presearch referral program designed to encourage people who use a particular search engine to break their habit and become active users of Presearch.
2) Browser extension to enable searching Presearch from the web browser URL bar for a better user experience.
3) Mobile Search Tool App that provides better access and encourages active usage.
4) Anti-abuse measures to prevent scammers from drawing down the supply of reward tokens.
5) Community Search Packages - particularly the crypto package that is used heavily.

Presearch will do its best to remain open and transparent with its community with ongoing progress and release expectations for each iteration of development.

6. Current Product Ecosystem

Presearch has become one of the biggest projects in the blockchain space by taking a pragmatic approach and focusing on users over pure technology, enabling community input and user needs to be the key drivers of the technology evolution.

The Presearch platform currently consists of the following components and experiences:

6.1 Blockchain Token (PRE)

Using the Ethereum blockchain, Presearch has its own PRE token that operates on an open, transparent and decentralized ledger.

0x5b4c5b377bf3db…	10 hrs 34 mins ago	0x60dae8d497d33f…	→	0xcac80ed80ec446…	1,000
0xdc3ba6c39bdf53…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x94a9d63b60fed6…	1,000
0x95345857385478…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x60dae8d497d33f…	1,000
0xabe747baddc757…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x6c8cf8ec3fa7cb4…	1,000
0xf551a7b957e7ef1…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x4a8971c33c388c…	1,000
0xb3f1536fc98b926…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x7018e422636300…	1,000
0xe0876e857ba4d0…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x1ab28c73e5ccb3…	1,000
0x13cd4705a79ec0…	11 hrs 25 mins ago	Presearch: Token Sale	→	0xaadae1e29d35aff…	1,000
0x4337af79552aae1…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x19b51a67140893…	1,000
0x76af7679dcf1a86…	11 hrs 25 mins ago	Presearch: Token Sale	→	0x7bec91a51c7ed9…	1,000
0xd39541938d7353…	11 hrs 25 mins ago	Presearch: Token Sale	→	0xb2222166059b8c…	1,000
0xf4266ef18dee0a6…	11 hrs 25 mins ago	Presearch: Token Sale	→	0xedb7dca330912a…	1,000
0x64d4ff1e3886a41…	11 hrs 25 mins ago	Presearch: Token Sale	→	0xba5fef21cae56f6c…	1,000

This means that anyone can use an Ethereum blockchain explorer to see the details of our smart contract, and can take personal possession of their tokens and store them in secure external wallets.

The value of a PRE is fluid. It moves with the supply and demand forces generated by the platform (rewards and token inventory sold to advertisers = supply; advertiser purchases and speculators with more liquid currencies = demand).

PRE tokens can be purchased directly from the project via https://marketplace.presearch.org or within a number of digital marketplaces, such as KuCoin and Probit.

By default, tokens are held in each user's internal wallet, which is accessible under the My Account section of the Presearch platform.

6.2 Search Experience

The Presearch experience has a number of different facets which are being streamlined as Presearch prepares to release the initial version of the Presearch decentralized search experience.

6.2.1 Search Tool

The http://presearch.org search tool enables users to customize their Presearch experience, from their settings and colors to their chosen search providers.
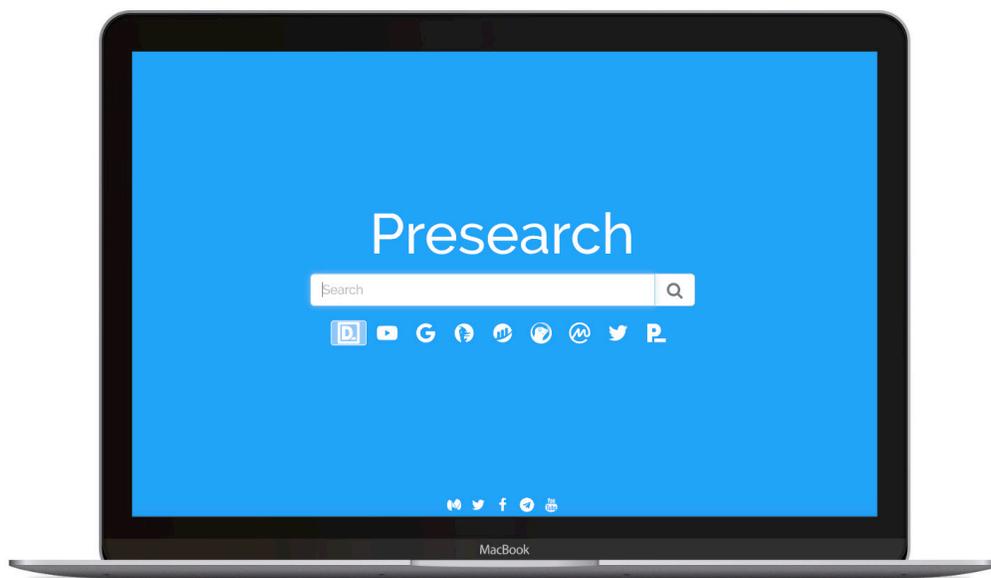
As Presearch aims to offer users more choice and more control over their search experience, it wants to make it easy for users to direct their searches to their selected provider. Users simply enter a search term into the search field and choose the logo of the service they would like to use for the search. When they search on the default Presearch engine, they receive a reward, and their balance increases as they are redirected to the next destination in pursuit of further information.

There are more than 100 different search engine providers available to choose from, including general search engines like Google and DuckDuckGo, media search engines like YouTube and Facebook, and specialized search engines like Etherscan.io and Github.

6.2.2 Search Rewards

Search rewards in the form of PRE are provided to users who search through https://www.presearch.org, either by setting Presearch as their browser's home page and using the search field, or by searching through the browser's URL/search field using the Presearch browser extension.

This system currently provides searchers with the opportunity to earn up to 8 PRE per day at a rate of 0.25 PRE per search, with reward amounts set to adjust automatically based upon platform tokenomics (supply and demand) in Q4 2020. The daily maximum may ultimately be increased, or even eliminated.

Earned reward tokens are held in a user account, where they accumulate until the number of eligible tokens exceeds the minimum withdrawal threshold, currently set at 1,000.

Eligible tokens are calculated by multiplying the total number of tokens earned by the percentage assigned to the user's PRE verification level.

For complete details on the Presearch Rewards Verification System, please see: https://medium.com/@presearch/how-do-rewards-work-73a545ceae60

6.2.3 Presearch Engine

The Presearch Engine can be found at https://engine.presearch.org.

This is where the decentralized search engine Presearch is building will soon be housed. In the interim, since June 2018, the Presearch Engine experience has been powered by APIs, providing users with a private search experience that integrates Presearch Community Packages with traditional search results to form a high-quality search experience in which Presearch ads can be displayed.
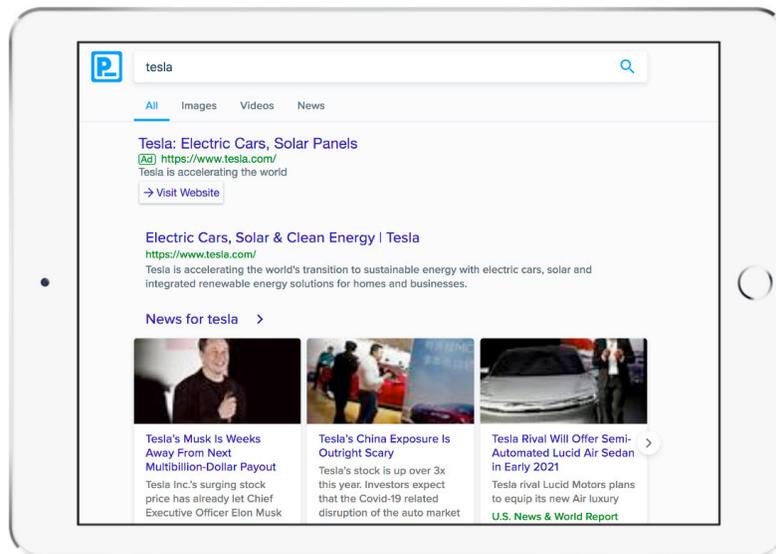
6.3 Advertising & Keyword Staking

The Presearch Keyword Staking platform can be found at https://keywords.presearch.org.

Keyword Staking is a revolutionary new concept pioneered by Presearch as it builds the world's first decentralized search engine ecosystem.

Keyword Staking enables token holders to commit or "stake" their PRE against specific words and multi-word terms.

With Presearch Keyword Staking you choose a keyword (e.g., Bitcoin) and then stake PRE that you have purchased or earned against that term. You can then create an ad that you link to the website of your choice.

While tokens are staked, you continue to own and control your PRE, but you cannot use them to stake toward other words and you cannot remove them from the Presearch platform. While they are staked they are effectively locked up.

You can unlock or unstake PRE at any time to withdraw them to the blockchain or sell them, but then your associated ads will no longer show.

Presearch ads using the staked terms are simple text ads that show up next to the search results in the Presearch Engine.

It is likely that these ads will be embeddable in other relevant web properties at some point in the future as Presearch builds out a PRE-denominated ad network.

The ranking factors associated with Keyword Staking may change over time; the current iteration of the platform works as follows:

- A user types in a keyword or key phrase, for example, "tesla model 3"
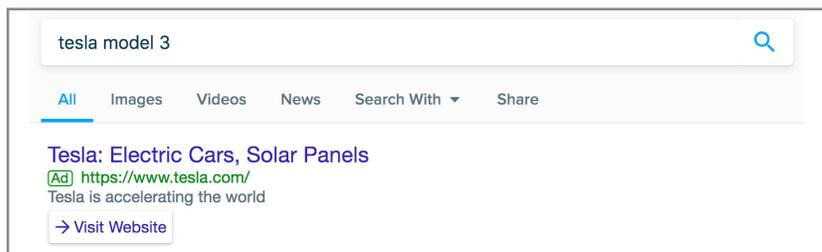
- The ad server will look to find any ads where the advertiser has used the exact term "tesla model 3" as the trigger keyword.

- It will then look to see how many PRE are staked or locked to the keyword, and whichever advertiser has staked the most PRE will have its ad displayed.

- If there are no matches for the exact term "tesla model 3" it will break the phrase down into individual terms. In this case, it will find ads with the keyword "tesla" or "model" or "3" and will pick whichever ad has the most PRE staked to it and display that ad.

It is a fairly simple system to start with. Because of that, it provides many opportunities to capture qualified search traffic at little or no cost.

There is currently no consumptive charge for this traffic and exposure, but that will change in 2021. There are a number of options ranging from flat-rate to auction-based pricing, including cost-per-click, cost-per-view, and cost-per-action options that Presearch continues to evaluate.

The value provided by these ads will be a primary driver of revenue to fund the operation of the project as well as provide user rewards. As a result, it is critical for Presearch to continually test and improve the ad experience.

6.4 Marketplace

The Presearch Marketplace platform can be found at https://marketplace.presearch.org.

Presearch tokens can be purchased directly from the project on this marketplace.
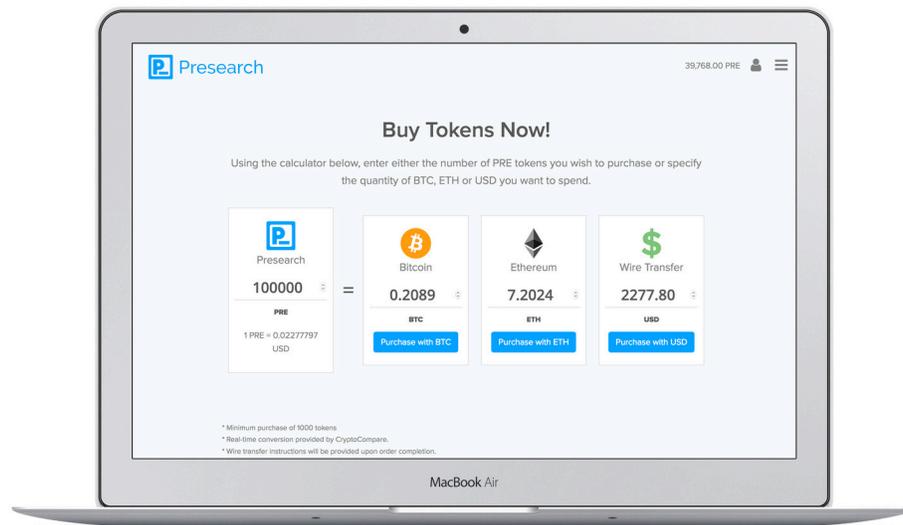
The supply of PRE is limited to unsold inventory, as well as any PRE inventory that the project purchases on secondary markets such as KuCoin, Probit or directly from token holders.

There is a minimum and maximum number of PRE that can be purchased in a single transaction (currently 1,000 - 100,000), and the price is adjusted every 10 minutes to reflect a variable premium over the current price as listed on https://www.coingecko.com/en/coins/presearch.

Payments can be made in Bitcoin, Ethereum, or USD (by wire transfer).

PRE purchased through the marketplace are immediately available for staking.

There are plans to enable sellers to list their PRE for sale on the platform, but this feature is still in a development phase.

6.5 Mobile Apps

Presearch's mobile apps can be found at https://presearch.org/apps.

Presearch recently introduced renewed versions for Presearch's mobile apps that are available for both iOS and Android.
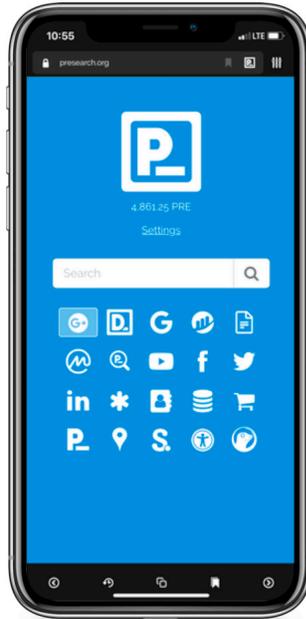
Web browsers like Safari and Brave do not enable their users to select a custom search engine as their default – they only provide a handful of options (Google, Yahoo, Bing, DuckDuckGo, Ask, Startpage, and Qwant), and Presearch needed an easy way to allow users to search.

The Presearch mobile app enables users to have Presearch as their default search engine on their mobile device, allowing them to search (and earn rewards) at any time, anywhere.

The mobile app helps increase Presearch user retention and growth. The mobile app is also more than just a search tool and also acts as a full browser which can be used to surf the web and to earn PRE while you search.

6.6 Browser Extensions

Presearch's browser extensions can be found at https://presearch.org/extensions.

These extensions enable users to search from the address bar in their web browser, which allows them to earn PRE as they search.
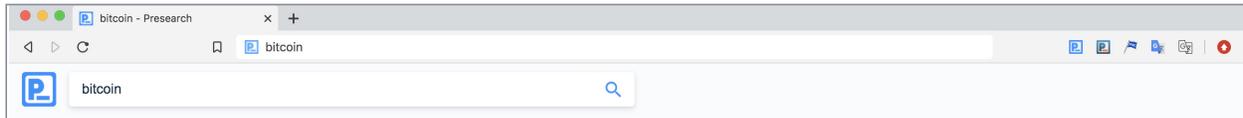
After launching the Presearch.org website, it was apparent that users really wanted a quick, easy way to set Presearch as their default search engine, as well as to set Presearch as their default home page, so the Presearch team built some browser extensions.

Presearch decided to keep these two extensions separate, as not every user wanted both experiences to become defaults in their web browser.

It has become apparent that one of the most important points of control within the search experience is at the browser level, as there are only a limited set of search engines that can be promoted by default. As a result, newer, smaller search engines are not included in the easy-to-select default options.

This means a user must either take the time and have the knowledge to set their default search engine manually, or install a browser extension that simplifies the process. The latter is Presearch's current approach, as the project requires significant scale to be added as a default option.

For instance, Google actually pays Apple more than $12 billion per year to be the default search engine in Safari. It also appears that DuckDuckGo pays Brave millions for the same privilege, so there are some significant economic incentives that prevent browsers from making Presearch an available default.

6.7 Community Packages

Community packages are open source and member-contributed. You can find them on Github here: https://github.com/PresearchOfficial/presearch-packages

They are designed to provide a summary view of a given keyword's information. For example, the community crypto package is displayed whenever someone searches for a crypto project name or ticker symbol.

This is what it looks like at the top of the page for the term "Bitcoin".
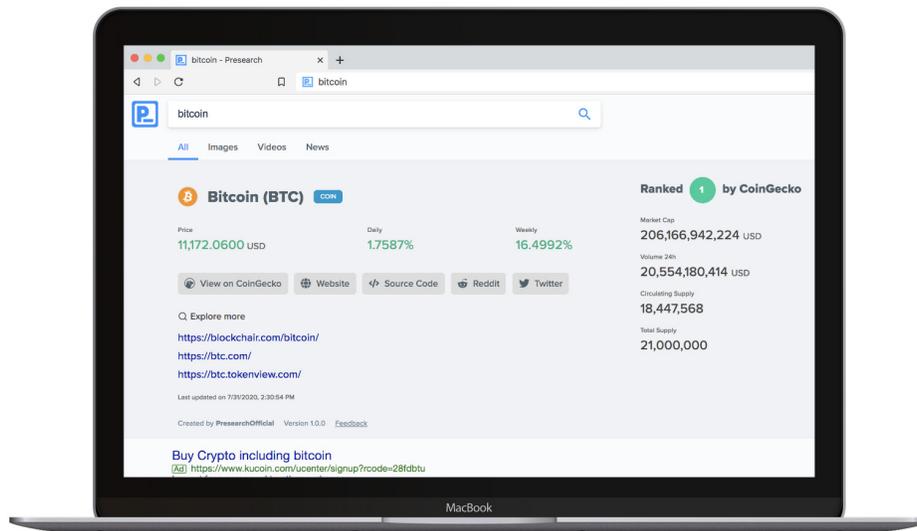
Presearch expects a large number of packages to be created over time and plans to support the custom package ecosystem actively.

In this manner, Presearch will compete with traditional search engines and offer a more compelling search experience, driven by UIs created by subject-matter experts, and eventually enabling community-curated ranking algorithms to be tested and rolled out when they lead to more relevant results.

7. Decentralized Search Engine

Search engines are complicated, and building a decentralized search engine provides some unique challenges which do not apply to centralized search engines. For example: how do you prevent malicious actors from running nodes and either stealing user information or returning dangerous or unwanted content? How do you get fast (hundreds of milliseconds) response times across a massively distributed network of servers with drastic variability in performance and reliability? How do you properly incentivize people to run nodes and fairly balance supply and demand for both nodes and searches within the network?

Some of these issues Presearch has already solved, and some will require continued experimentation and innovation over time, but Presearch will roll out both the platform and the decentralization of the platform incrementally to ensure an optimal ongoing search experience for the amazing Presearch community.

7.1 Decentralized Search Architecture

There are six core layers of the Presearch search engine architecture:

- **Core Services:** Advertising API, Account Management API, Search Rewards Tracking, Keyword Staking, Marketplace, and other critical Presearch services which are centrally managed by Presearch.

- **Web Server:** Receives Search Requests from Presearch users and passes them on to the Gateway to generate results. Returns a final, rendered results page to the user.

- **Node Registry:** Manages the identity of all nodes, node stats, and any rewards payouts to node operators.

- **Node Gateway:** Receives requests from the Web Server, removes personally identifiable information from the search requests, and passes the search to one or more healthy nodes.

- **Nodes:** Decentralized search "workers" which connect to the Node Gateway and perform search operations. Each node is required to have a unique publicly-facing IP address.

- **Search Packages:** Open source plugins which return intelligent answers and info boxes in response to specific queries. The following diagram shows the interactions between the major components within the Presearch Search Architecture.
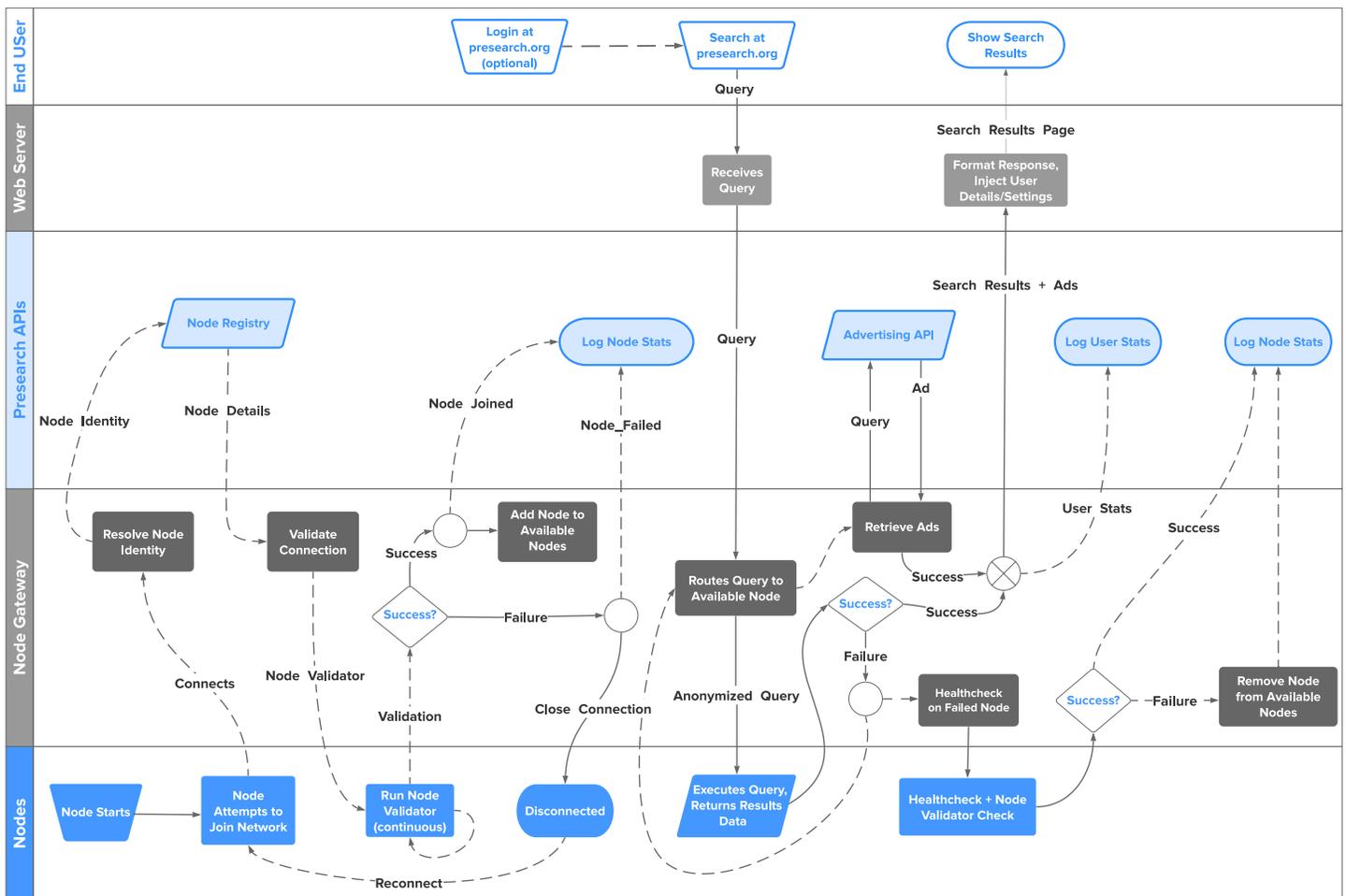
The first major milestone toward decentralization will be the release of the node software, which anyone can run and for which Presearch will build out an expansive and highly decentralized network.

The Gateway is intended to be decentralized in a future phase after the core search network has proven to be robust and secure. Gateway operators will eventually consist of a smaller network of trusted providers that the Presearch community may select (they would have access to and be held accountable for protecting certain incoming user information on requests). For now, Presearch will continue to operate as a single, trusted Gateway provider while the network is being built out. More and more of the platform will be decentralized over time as the project continues to evolve. The availability of the nodes in this initial software release will immediately enable the vast majority of the work performed during each search to be decentralized.

7.2 Node Operations

Node operators will be compensated in PRE for the value of the work and capacity they provide to the network. There are at least seven different kinds of operations that a node can perform (with more likely in the future):

1) **Registering** (all nodes). Registering with a Node Gateway, which can then route queries to the node if it passes health and security validation.

2) **Validating** (all nodes). Coordinating with a Node Validator to ensure that each node is only running trusted Presearch software (to avoid security issues from potential bad actors).

3) **Coordinating.** Processing and distributing queries sent by Node Gateways. This may require routing to multiple serving nodes and aggregating the results.

4) **Federating.** Proxying other data sources and returning their data as part of search results.

5) **Serving.** Hosting portions of the search index used to process queries.

6) **Crawling.** Crawling websites to build out search indices.

7) **Indexing.** Writing federated or crawled data to search indexes to be served by serving nodes.

Different kinds of servers will work better for powering these different use cases. For example:

1) **Coordinating** will work best on nodes with low network latency, high network bandwidth, and high memory (disk space unimportant, CPU useful, but can vary).

2) **Federating** will work best on nodes with: low networking latency (CPU, memory, and disk space unimportant; high bandwidth preferred).

3) **Serving** will work best on nodes with high memory, high uptime, and low network latency (CPU and disk space useful, but can vary).

4) **Crawling** will work best on nodes with: high disk space, high network bandwidth (CPU, memory, network latency, and uptime unimportant).

5) **Indexing** will work best on nodes with: high disk space, high network bandwidth, low network latency, and reasonable CPU, memory, and uptime.

The first component of the Presearch decentralized search engine to be released will be the nodes, with a beta program in September 2020 and a production launch in Q4 2020. For this first release, Presearch will be focused only on the following node operations:

- **Registering**
- **Validating**
- **Federating**

This means that Presesarch will initially aim for a network of as many nodes as possible, provided as cheaply as possible, so long as their network latency is low.

When Preserach later adds **Serving** and **Coordinating** operations (enabling the Presearch search index to be decentralized), this will introduce the need for different and more powerful servers to join the network.

When **Crawling** becomes fully decentralized and supported by nodes, the capacity of the network to crawl the web and refresh data will then be tied directly to the size of the network and its growth.

Presearch will continue to implement the remaining node operations over time, as detailed in the later Product Roadmap section.

7.3 Node Staking and Rewards

When node operators provide server capacity to the Presearch network, they add value and will be compensated in PRE for the value they add. Presearch's Tokenomics Engine will determine the aggregate amount to be paid out across all node operators based upon needs of the network.

Additionally, in order to for a node operator to receive rewards for running a node in the Presearch network, Presearch will require them to stake PRE to reserve their right to provide that capacity. This stake will also acts as a deposit to ensure that the node operator does not violate the Presearch Terms of Service while operating their node.

7.3.1 Node Rewards

If more server capacity is needed in the network, the Tokenomics Engine will increase the current payout level to incentivize more servers to join the network. If too many nodes are operating within the network and there is excess server capacity, the Tokenomics Engine will reduce aggregate rewards for node operators and will increase rewards for other behaviors within the Presearch ecosystem, such as those which increase the number of active users.

When Node Rewards are increased, this should lead to more nodes joining the network, and when Node Rewards are decreased, this should lead to nodes leaving the network.

While most node operators will likely keep their nodes operating continuously, since it will eventually be possible for nodes to receive higher payouts for providing more reliable uptime, Presearch expects for some nodes to also be set up to autoscale up and down in order to take best advantage of periods of elevated rewards payouts that will correspond with normal traffic fluctuations from users running searches on the Presearch search engine.

Because node operators will invest their resources in running nodes and will expect a minimum level of payout to keep the nodes running and financially viable, Presearch will need to ensure that the Node Rewards levels are transparent, published, and up-to-date.

Presearch will provide an autoscaling pool of nodes when the network first launches as a fall-back to ensure smooth operations of the network, but maintaining this fallback will probably become unnecessary over time as the decentralized network grows and more node operators build out their own mechanisms to provide variable capacity based upon current payout amounts.

7.3.2 Node Staking

There are many reasons someone may want to run a node. They may be looking for financial reward, they may want to support the Presearch mission of providing community-powered, decentralized search to the world, they may want to have their own personal search experience, or they may simply want to download the software and try it out using their idle compute resources.

NODE STAKING AS A MECHANISM FOR ALLOCATING CAPACITY
There is a maximum amount of work to be performed by nodes within the Presearch network, and that amount of work is determined by the Tokenomics Engine based upon a combination of current active user search volume (drives both server demand and available ad revenue to be used for Node Rewards) and the amount of capacity node operators are willing to provide for that level of Node Rewards.

Because total payable Node Rewards has a ceiling, this means that should too many nodes try to provide capacity to the network at any given time, there would not be enough demand for that server capacity, and the PRE rewards paid could drop to a level at which all node operators would be operating at a loss.

In order to avoid that scenario, and recognizing that there is both an upper limit to capacity demand and a lower limit to profitability for node operators, Presearch needs to prevent any situation where all node operators hit that limit at the same time and leave the network.

The project accomplishes this goal by utilizing the staking of PRE to a node as our mechanism to efficiently allocate the amount of capacity each node is entitled to provide. Through Node Staking, node operators can reserve the right to provide a predetermined amount of capacity based upon the size of their PRE stake. This ultimately enables node operators to also secure a predetermined allocation of Node Rewards for that capacity.

This means that node operators who stake more PRE are going to be more profitable than those that stake less PRE. This provides a needed mechanism for reliable node operators who are potentially running expensive, fixed server farms to commit PRE as a stake to secure stability in their Node Rewards payouts, while still allowing anyone else to operate a node but receive potentially more variable Node Rewards.

NO MAXIMUM STAKE
There is no upper limit to the number of PRE that can be staked to a node. The percentage of the Node Rewards assigned to each node increases as the number of PRE staked to that node increases, so node operators will be incentivized to stake as many PRE for their nodes as they have available in order to maximize their Node Rewards earnings.

Whereas Keyword Staking provides more access to advertising views as the amount of PRE increases, Node Staking secures the right to provide server capacity and to do work, which is then compensated in PRE.

Since there is no upper limit to the amount of PRE stakeable to a node, this provides a significant incentive for node operators to acquire and stake as much PRE as possible.

MINIMUM STAKE FOR NODE REWARDS
For a node operator to receive Node Rewards, they will be required to stake a minimum number of PRE to their node. At launch of the network, the minimum stake to receive Node Rewards will be 1,000 PRE, which is the same current minimum withdrawal limit for PRE received from Search Rewards. This means that, upon achieving 1,000 PRE rewards, any Presearch community member will also be eligible to run a node. The minimum threshold may be adjusted up or down over time.

RUNNING A NODE WITHOUT STAKING
Presearch currently plans to allow anyone to run a node and provide server capacity to the Presearch network, even without requiring them to stake PRE. In this case, however, they will not receive any Node Rewards - they will simply be providing free server capacity to the Presearch network.

This may be an attractive option for someone who just wants to test out running a node before going through the full process of setting up an account, purchasing and transferring PRE, registering their node, and configuring staking. It is unlikely that non-staking nodes will be the most common use case, as most node operators will eventually want to receive Node Rewards. Having this option removes a barrier to entry, however, and provides a convenient option that could ultimately attract more overall interest to the platform. Depending upon how this feature is used, this policy may change such that all node operators may be required to provide a minimum stake in the future.

REWARDS CALCULATION
Node Staking was discussed above as a mechanism for allocating capacity, but there is an important distinction between capacity (providing the ability to do work) and utilization (doing the work). Both keeping capacity available and actually providing utilization of that capacity are valuable to the Presearch network, and so the Node Rewards will balance these two objectives.

While the specific calculation, inputs, and percentages leveraged by the Tokenomics Engine will evolve over time, a general formula for Node Rewards per time period is as follows:

```
available_rewards = [DETERMINED_BASED_ON_AD_REVENUE]
node_quality_score = [DETERMINED_BASED_ON_NODE_RELIABILITY]
node_actual_capacity_% = [DETERMINED_BASED_ON_NODE_AVAILABILITY]

utilization_rewards_% = 50%
capacity_rewards_%    = 50%

staked_capacity_% =
    ( per_node_staked_tokens / all_nodes_staked_tokens)
  * ( node_actual_capacity_% )

utilization_% =
    ( per_node_successful_requests / all_nodes_total_requests )
  * ( node_quality_score )

rewards_per_node =
    ( capacity_rewards_% * staked_capacity_% * available_rewards )
  + ( utilization_rewards_% * utilization_% * available_rewards  )
```

As you can see in this example, the rewards each node receives are based upon a combination of 50% available capacity (allocated based upon PRE staked to the node) and 50% based upon node utilization (based upon number of requests).

This general calculation works well for nodes focused on serving search traffic, but will get more complicated over time as additional node operations are rolled out (**Indexing**, **Serving**, **Coordinating**, **Crawling,** etc.).

MORE NODES VS. BETTER NODES
As mentioned in the Node Operations section, the initial release of the node software will be focused on decentralization of three of the planned node operations: **Registering**, **Validating**, and **Federating**, with the last representing the most valuable work.

For these operations, Presearch wishes to optimize for a large network of many nodes running with low latency on inexpensive hardware. Node operators would be best served with something as cheap as a Raspberry Pi or any home computer or inexpensive cloud server instance. The `node_quality_score` in this case will be primarily determined based upon networking latency, so a fast internet connection will be much more important than the server hardware.

Additionally, traffic will be allocated fairly uniformly across the network for the **Federating** role, which means that while the total PRE rewards paid out based upon the `capacity_rewards_%` will be the same regardless of whether a node operator stakes 1,000,000 tokens to a single node or across 10 nodes, the `utilization_%` payout will be approximately ten times higher when running 10 nodes versus one.

Ultimately, this means the node operator would receive much more in PRE rewards by spreading their staked PRE across more nodes. Of course, for each additional server, the node operator runs, they will incur additional server costs, so it will be up to the node operator to weigh these tradeoffs.

8. Keyword Marketing Platform

The Presearch Keyword Marketing platform is similar to the Google AdWords platform, although there are a number of key differences due to the phase of the project and the unique opportunity to work with blockchain tokens to account for and transfer value.

Like AdWords, there is tremendous potential due to the high value of search traffic, which is highly qualified based on the keyword entered.

Presearch has an opportunity to kickstart the launch of a keyword staking ad network using its own property to attract advertisers. The platform will eventually enable other apps, publishers, and search engines to expand keyword staking on their own properties, driving more use cases for PRE and more opportunities to create value for the network.

8.1 Keyword Advertising: A $100 billion dollar opportunity

The keyword advertising opportunity is enormous: it generated more than $134 billion in revenue for Google alone just in 2019.
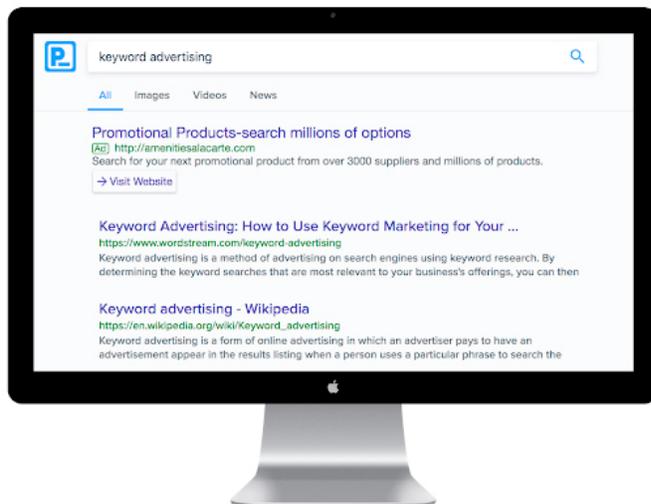
Keyword ads that are triggered based on search terms entered into a search engine constitute one of the most lucrative business models in history. Google is on track to generate $1 trillion in total ad sales from its platform, all at a very high profit margin.

8.2 Why is the opportunity so large?

Keyword ads on search engines are some of the most lucrative ads in the world because they are highly profitable for advertisers.

If someone tells you they are looking for something and you can tell them that you offer exactly what they are looking for at that moment, there's a high likelihood that they will become your customer. The percentage of people who see your ads and then buy from you is known as the "conversion rate".

Keyword ads convert very well because searchers indicate their "transactional intent" or "need" through the keyword which they input into a search engine. This is known as "directional advertising", because the advertiser is not trying to convince someone that they have a need – they already believe they have a need and are looking to be directed to someone who can fulfill their requirement.

Google has built one of the most profitable online businesses in history by introducing pay-per-click (PPC) keyword ads into their search results. It is a now proven model which works extremely well. Even the #2 keyword advertising company, Microsoft's Bing, generates more than $7.5 billion in annual revenue from its ads. Based solely on its query volume, even much smaller, privacy-focused DuckDuckGo would appear to be on track to generate annual ad revenue approaching $1 billion.

Here are some interesting statistics related to search advertising:

- 49% of people say they click on text ads.
- 95.3% of clicks go to the top 4 results.
- On average, 41% of clicks go to the top 3 paid ads.
- For searches with high commercial intent (someone looking to buy a product), paid ads get 65% of all clicks.
- PPC visitors are 50% more likely to purchase something than organic visitors.
- The average cost per click is $2.32.

*Source: https://www.bluecorona.com/blog/pay-per-click-statistics

8.3 How traditional keyword ads work

In traditional keyword advertising, an advertiser chooses a keyword that will trigger its paid ad to show up alongside regular search results (known as "organic results") when someone searches for that term.
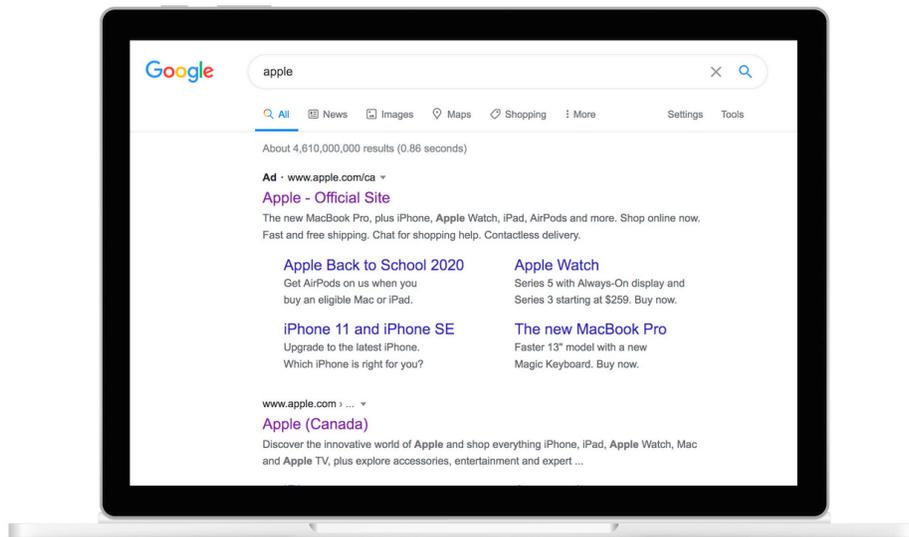
The top result is a paid ad. The bottom result is an unpaid, organic result.

The price paid to trigger an ad is determined through an auction process where the advertiser willing to pay the most for a click on its ad (known as the cost per click) has its ad displayed first.

This process is hugely profitable for the search engine serving the ads because it automatically extracts the most money possible from the market, and companies which best and most profitably convert potential customers are able to pay the most, resulting in quality experiences for users.

PROBLEMS WITH LEGACY PLATFORMS
One of the major complaints advertisers have is the lack of transparency around cost per click – which is supposedly driven by an auction process. However, only the search engine knows how high the bids are and who is bidding, so it is possible for search engines to artificially increase the amounts paid to maximize payment for each keyword, rather than have it be driven by pure market forces.

Another huge issue for advertisers is fraud – either through ad network partners artificially inflating traffic or through competitors clicking on ads simply to run up costs which adversely impact the advertiser.

Because search engines have a vested interest in allowing this to happen (they make more money), there is a certain level of skepticism regarding their efforts to combat fraud. It is generally acknowledged that "click fraud" is just a cost of doing business when advertising on search engines.

As Presearch matures, it may incorporate these and other mechanisms to combat fraud and increase transparency into its model, albeit by using PRE in a way which benefits all members of the community.

In the interim, Presearch is changing the paradigm on keyword ads completely with its Keyword Staking ad platform.

8.4 What Is Keyword Staking?

Keyword Staking is a revolutionary new concept being pioneered by Presearch as it builds the world's first decentralized search engine framework.

8.5 How Presearch Keyword Staking ads work

Step 1: Choose Keyword

"Bitcoin"

Step 2: Decide how much to stake

500,000 PRE

Step 3: Create ad

www.MyAffiliateLink.com

Keyword Staking enables token holders to commit or "stake" their PRE against specific words and multi-word terms.

With Presearch Keyword Staking, you select a keyword (e.g., "Bitcoin") and then stake PRE that you have purchased or earned against that term. You can then create an ad that you link to the website of your choice.
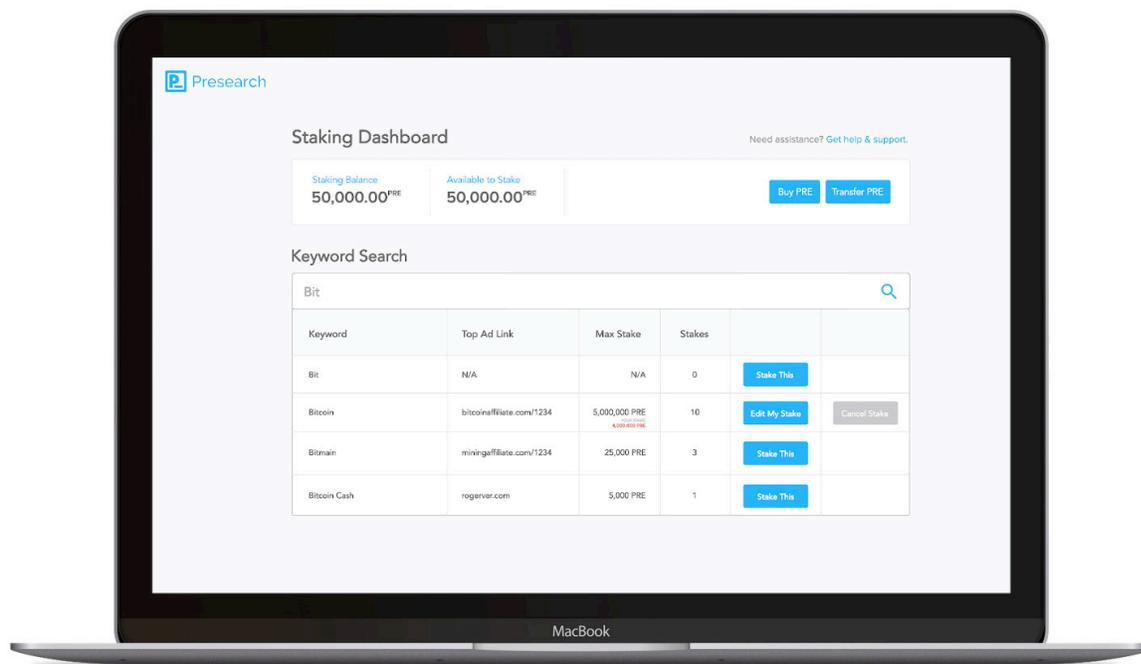
While your PRE are staked, you continue to own and control them, but you cannot use them to stake against other words and you cannot remove them from the Presearch platform. While they are staked they are effectively locked up.

You can unlock or unstake them at any time and withdraw them to the blockchain or sell them, but then your associated ads will not show.

This means that if you buy PRE and stake them against keywords, you can receive traffic while you have them locked up. You can move or sell your PRE later once you stop using them for staking, making the traffic you received absolutely free.

8.6 Free traffic until January 2021

Traffic from ads will be free during the alpha release, so the value of staking a keyword is potentially enormous and could prove to be one of advertisers' most profitable sources of traffic.

Presearch has more than 1.5M registered users and more than 10M visits per month, making it a top-five blockchain property. More about size and make up of the Presearch audience can be found here: https://medium.com/@presearch/who-uses-presearch-7ec65c4170ad

Presearch currently plans to offer free traffic until January, 2021 but the ultimate duration will depend on the uptake of the platform and need to reward users.

8.7 Keyword ranking

The ranking factors associated with keyword staking may change over time, but the platform currently works as described below.

A user types in a keyword or key phrase, say "Toronto Real Estate".

The ad server will look to find any ads where the advertiser has used the exact term "Toronto Real Estate" as its trigger keyword.

It will then look to see how many PRE are staked or locked to the keyword and whichever advertiser has staked the most PRE will have its ad displayed.

If there are no matches for the exact term "Toronto Real Estate", the ad server will break the phrase down into individual terms and will find ads with the keyword "Toronto" or "Real" or "Estate" and will pick whichever ad has the most PRE staked to it and display it.

It is a fairly simple system to start with and, because of that, it provides many opportunities to capture qualified search traffic at little or no low cost.

In time, the platform will become more robust, offering advertisers additional reporting and targeting mechanisms, while also implementing more advanced staking and pricing models that include proportional traffic (each staker receives a portion of ad traffic relative to their percentage of the total amount staked) and consumptive traffic costs (cost-per-click or cost-per-impression).

9. Tokenomics

The Presearch Platform is an ecosystem focused on building out the world's first and best decentralized search engine, with a path to eventually becoming the best search engine in the world. The Platform will provide a search engine not controlled by a single, centralized, for-profit corporation acting as a one-size-fits-all gatekeeper to the internet, but instead as a platform that gives you choice:

- Choice around privacy vs. personalization.
- Choice around the kinds of search results you see and how you can direct the experience to your own benefit -- rather than algorithms driving you to content designed primarily to optimize corporate profits.
- Choice to receive value out of the platform, in terms of both improved experience and rewards, directly corresponding to the value which you contribute to the platform.

Presearch will be built by the community and for the community, ensuring that everyone in the community benefits as the platform evolves. This is a long-term goal that requires significant expertise, execution, community support and adoption, and investment. Given that the leading search platforms today spend billions each year to operate their search businesses, it would be foolish to believe that Presearch (or any company) could reasonably ever raise enough money or hire enough smart developers, product managers, and data scientists to compete at that level.

That's why the Presearch model is drastically different. When Presearch earns advertising revenue, instead of being a big, for-profit corporation trying to take advantage of users, Presearch funnels that earned value back into the platform, leveraging PRE as the unit of accounting and value transfer between the various stakeholders. Presearch has no traditional shareholders expecting a return on investment, as for-profit corporations do; therefore, PRE represent and hold all value over and above that which is required to operate the Platform.

9.1 Accounting and Value Transfer

PRE is the central unit of account and value transfer between the various stakeholders within the Presearch ecosystem. There are numerous types of transactions that can take place:

1) **Revenue Transactions:** Presearch gets paid in either PRE or fiat currency (such as US dollars) for services or products.
    a. If revenue is received in PRE, the tokens go back into the Presearch "treasury", Presearch's protected internal wallet.
    b. If revenue is in fiat currency, Presearch will typically convert from the fiat currency to PRE, which requires purchasing tokens on the open market or on the Presearch Marketplace.

2) **Expense Transactions:** Presearch obviously incurs recurring expenses to fund operations and growth. It can often pay expenses directly in PRE, but also sometimes needs to convert tokens into fiat currency or other cryptocurrencies to make payments.

3) **Staking Transactions:** For many activities on the Platform, community members must "stake" PRE. Staking means that they send the tokens to Presearch and "reserve" them for a particular purpose. For example:
    a. An advertiser (or anyone) can stake 1,000,000 tokens for the keyword "presearch vision paper" and then, if nobody has staked a larger number of tokens, the advertiser's ad will display when a search is conducted on that keyword. They can unstake their tokens at any time and use them for any other valid purpose.

    b. Anyone can become a node operator by running the Presearch node software to operate a server that joins Presearch's decentralized Search Engine Network. These node operators can stake tokens to obtain the right to provide that server capacity to the network. Rewards are then paid out both based upon capacity provided and utilization of that capacity.

    c. Numerous other uses for the token, particularly for consumers to influence the platform, are planned. See the Token Utility section.

If a staker is found to have violated the terms of service (the ad is abusive or the node does something malicious), they could lose their stake, but otherwise the stake is simply used to secure their right to use the network and receive the associated value.

4) **Reward Transactions:** Net income (revenue minus expenses) is reinvested into the Presearch network. Presearch pays users for running searches and node operators for providing servers to power the Presearch Decentralized Search Engine. Presearch also pays other stakeholders for the various types of value they provide.

Presearch will eventually become a standalone, non-profit foundation. Before that step is taken, however, Presearch needs to achieve a sustainable business model based upon solid tokenomics, which will ensure the long-term success of the project. PRE acting as the core unit of value within a thriving Presearch ecosystem is critical to achieving that mission. In this model, every member of the Presearch community is rewarded based upon the specific value they add to the network, creating a continuous value cycle where the value of the entire ecosystem grows with each additional community contribution. The tokenomics of this system will be described in the Supply and Demand Value Cycle section below after each of the uses of the PRE token ("token utility") are described.

9.2 Token Utility

As the central unit of accounting and value within the Presearch ecosystem, PRE is essential to every aspect of Presearch. PRE is the means to create a giant value cycle where community members consistently both contribute and receive increasing value the more they use the platform.

As more and more people run searches, advertising revenue increases, and more nodes are needed. The advertising revenue funds marketing efforts and increases referral rewards to drive more users, which further drives more searches. This increases the value that each stakeholder contributes to the network, which in turn increases the rewards they receive for the value they add. As rewards increase, there is a greater incentive for engineers and data scientists to contribute better algorithms, which in turn increases the value of the network for searchers and advertisers.

This self-perpetuating cycle of growth, where the value and size of the network grows as more people join and the value they receive grows (often exponentially), is known as the "Network Effect". The Network Effect is the same phenomenon which has enabled large social networks and other large search engines to grow.

Whereas shareholders of traditional for-profit corporations receive all the monetary benefit and often try to increase profits at the expense of their users, the Presearch network is built by and for the community and each community member is actually paid in the form of PRE for the value they add to the network.

PRE provides significant utility within the Presearch ecosystem, with the use cases growing constantly. The following are examples of the current and planned utility of PRE for the various members of the Presearch community.

PRE TOKEN UTILITY FOR VARIOUS STAKEHOLDERS:

USERS:

- Current Utility:

    Search Rewards: Receive PRE as a reward for searches based upon the value their searches add to the network.

    Become an Advertiser: Use PRE to display ads on the Presearch Platform.

    Referral Rewards: Receive PRE for introducing new active members to Presearch.

    Shop: Use PRE to make purchases in the Presearch store.

    Cash Out: Sell PRE on public cryptocurrency exchanges to convert to fiat or other cryptocurrencies.

- Future Utility:

    Ad Blocking (Personal): Use PRE to avoid seeing advertisements in results.

    Inverse Keyword Staking (Global): Use PRE to stake "against" ads they find undesirable. This increases the cost to advertisers to run ads and reduces advertisers' ability to spread undesirable messages to others.

    Data Sharing Rewards: Control your data. By default, Presearch does not log users' search histories in order to fully respect user privacy. However, sharing some of this data can provide more value to you (better personalization) and to the Presearch network (more relevant ads, ability to learn better relevance algorithms), for which you'll receive increased rewards if you opt in.

    Abuse Reporting Rewards: Detect and remove abusive ads that violate the Presearch Terms of Service. These should be detected and taken down as soon as possible and, in certain cases, advertisers may forfeit their keyword stake. In the future, users could be rewarded with some of this forfeited PRE based upon their help identifying these abusive ads.

    Search Provider Voting: Stake PRE to influence the placement of Search Providers in the global search providers list.

    Relevance Staking: Vote on the relevance of search results to influence and improve global relevance ranking. A user could opt in to automatically apply their tokens as influence through either explicit voting or implicit influence based upon their search history (if they have enabled their search history to be used).

ADVERTISERS:

- Current Utility:

    Keyword Staking: Advertise targeting any keywords by staking the largest number PRE tokens for that keyword.

- Future Utility:

    Advertising Credits: Pay for ads directly based upon a CPC (Cost Per Click) or CPM (Cost Per Thousand Impressions) model.

    Hybrid Keyword Staking + Credits: Leverage PRE for both Keyword Staking and as Advertising Credits in a hybrid advertising model that pulls in the best aspects of both approaches. Presearch is currently experimenting with various advertising models.

    Direct Rewards to Users: Reward users on a CPA (cost per action) basis for direct interaction with specific content. For example, watching a video, filling out a survey, sharing content, etc.

NODE OPERATORS:

- Future Utility:

    Node Staking: Stake PRE as a security deposit in order to provide server capacity to the Presearch network. The more PRE you stake, the more capacity your node can provide.

    Node Operator Rewards: Receive PRE as a reward based upon a combination of the amount of capacity your node provides to the network plus the amount of that capacity that is actively utilized.

    Gateway Staking: Stake a significant amount of PRE as a security deposit to become one of a select number of trusted, public gateways for the Presearch network. Presearch will be the only gateway provider for Phase II of the platform, but will look to decentralize the gateway responsibility in Phase III.

PARTNERS:

- Current Utility:

    Search Provider Listing: Pay PRE (one-time fee) and stake PRE (ongoing) to be added as an available Presearch Search Provider. Remain on the providers list as long as terms of service are honored and the stake remains active.

    Default Provider Priority: Pay PRE (one-time fee) and stake PRE (ongoing) to influence placement in the default providers list.

    Highlighted Provider: Pay PRE (one-time fee) and stake PRE (ongoing) to have your search provider icon stand out from the crowd with a colored icon.

- Future Utility:

    Data Partner Rewards: Receive PRE for data which helps the Presearch Platform, or data providers may alternatively pay Presearch in PRE for traffic, depending on the type of partnership.

SUBJECT MATTER EXPERTS:

- Current Utility:

    Development Grants: Receive PRE to deliver work, approved in advance from development proposals, that Presearch believes are important and will substantially improve the Presearch platform. Presearch has provided a handful of development grants already (mostly for designs, apps, browser extensions, and other software development) and hopes to have a formal grant proposal and approval process in future phases of the project.

- Future Utility:

    Relevance Algorithms Rewards: Engineers, data scientists, and subject matter experts will receive rewards for contributed improvements to the Presearch search algorithms. These improvements will be quantified and the amount of PRE determined based on the measurable ongoing value of those contributions.

    Platform Capabilities Rewards: Web developers, designers, engineers, and subject matter experts will receive rewards for Presearch packages, functional changes, themes, or data they contribute. Again, payment will be in PRE based on the measurable ongoing value of those contributions.

As you can see, Presearch already provides significant utility to many stakeholders (users, advertisers, node operators, partners, and subject matter experts) and significant additional use cases for both staking PRE and acquiring and spending PRE are being developed. These token uses all influence supply and demand in various ways, which are described in the following section.

9.3 Token Value Drivers

While PRE is the primary store of value within the Presearch ecosystem, user searches are the primary generator of value. Advertisers pay either in PRE (removing token supply from the market) or in fiat, which injects external value into the Presearch ecosystem which ultimately should have the same effect.

As you may expect, the number of searches increases directly in proportion to active users, so increasing active users is one of the primary mechanisms to enhance the value of the Presearch network for all community members. Of course, as active users and searches increase, advertising revenue also increases.
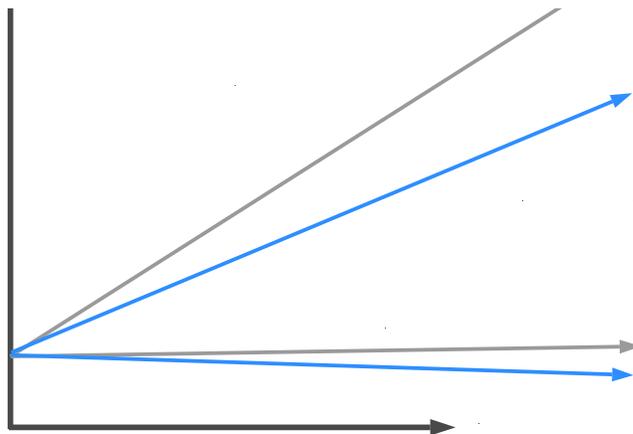
In the above figure, advertising revenue grows as the number of active users increases, but it grows faster when denominated in fiat. If you look at the "Average Advertising Revenue" at the bottom, you will actually see that average revenue (per Ad) decreases slightly when denominated in PRE, whereas it increases slightly when denominated in fiat. Why? Simply put, there is a fixed supply of PRE in the world (500M) which means that, as the network grows, demand for PRE should increase, eventually impacting the price as there is no corresponding increase in supply.

In contrast, fiat currencies can be printed at any time by central banks and have no limit on supply. Since the vast majority of the world does business in fiat currencies, global advertising rates (CPM or CPC) are typically pegged to fiat currencies. This means that the cost, in average number of PRE required to purchase ads, should decline over time as demand for advertising increases, but only because the value of PRE relative to fiat currencies would likely increase. However, actual revenue, if converted into fiat, would remain approximately the same, other than any difference attributable to keyword staking.

Keyword staking introduces an entirely different market dynamic than traditional CPC- and CPM-based advertising models. Since keyword staking does not "spend" your PRE, as active users, searches, and advertising revenue increase, there is more utility to advertisers in staking tokens for keywords, increasing demand for the token. Since the total supply of PRE is fixed at 500M, this means that, if there were no other uses for PRE, the price should logically increase as demand increases (see the figure on the left).

Keyword Staking, as Searches Increase (Total Supply Basis)

Keyword Staking, as Searches Increase (Circulating Supply Basis)
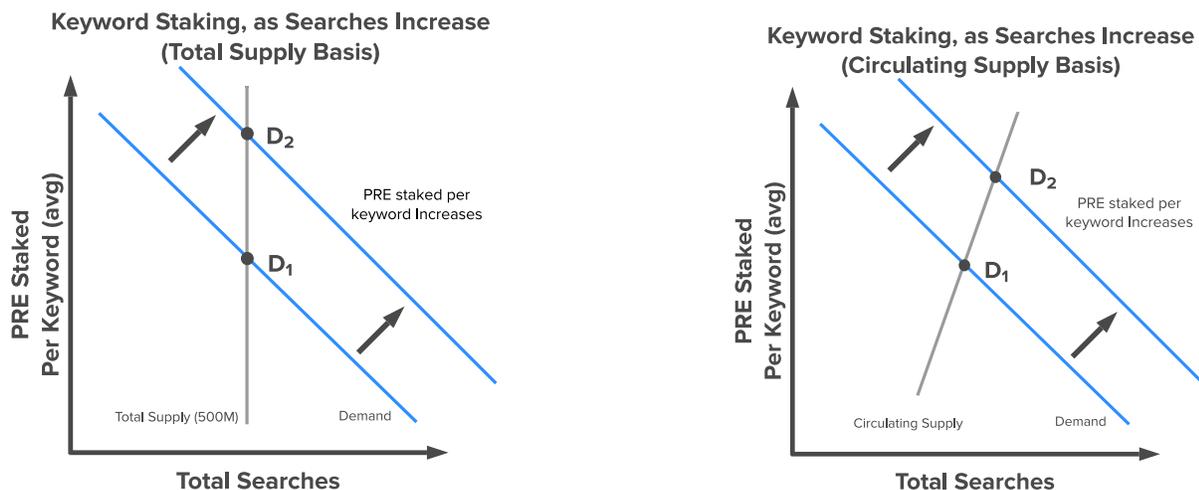
Due to the fact that PRE serves several other use cases (staking and payment for operating nodes, however, the actual number of PRE available for keyword staking can increase or decrease at any time, and is likely to increase as demand for staking increases and PRE holders reallocate their PRE.

The figure on the right demonstrates a supply and demand curve based upon the ability of circulating supply to change over time. Both of these charts ultimately demonstrate the same phenomenon, however. Point D_1 shows initial demand and point D_2 shows how the demand curve shifts as total searches increase. The end result is that the number of PRE staked should generally increase as the number of total searches increases (as the number of active users grows).

The above explanation is entirely based upon traditional supply and demand economics. Please note that at any given point prices may increase or decrease based upon evolving platform dynamics or other market factors, and Presearch does not control the market price of PRE. Prices can increase or decrease at any time for known or unknown reasons. Presearch's focus is on helping community members to continually add value to the Presearch network and receive corresponding value back based upon the value they contribute.

9.4 Increasing Active Users and Searches

Two fundamental mechanisms exist for increasing user searches:
1. Grow the number of **active users**: adding new users or getting former users engaged again.

2. Improve the **search experience** for current active users so that they use Presearch more often.

Growth in **active users** is achieved through three primary mechanisms:
1. Referrals from current users inviting their friends and other contacts.

2. Search Rewards: helping visitors convert to new active users.

3. Marketing and Community Engagement.

Improvement to the **search experience** is achieved through a combination of:
1. **Platform and Operations Improvements**: Presearch and its supporters continually allocate resources to develop the platform's product and engineering roadmap.

2. **Algorithm Improvements**: Presearch is working to enable engineers and data scientists around the world to submit measurable relevance improvements to the Presearch search algorithms.

3. **Product Capability Improvements**: Presearch is working to enable web developers, engineers, and other subject matter experts to submit contributions that improve the Presearch product capabilities in a measurable way.

4. **Data Partners**: Presearch is working with key data providers who can enhance the Presearch search results.

5. **Development Grants**: Presearch provides funding for approved project proposals that are likely to substantially improve the Presearch Platform (design, software development, etc.)

6. **Marketing Spend**: Presearch conducts marketing efforts to attract and maintain active user growth.

Because all of these activities help drive our primary value driver (growth in active users), they each add value to the Presearch Platform. Presearch then returns the corresponding value in the form of rewards and grants paid in PRE.

The following figure demonstrates an example of how value received (revenue) may be allocated to compensate Presearch community members for their contributions:
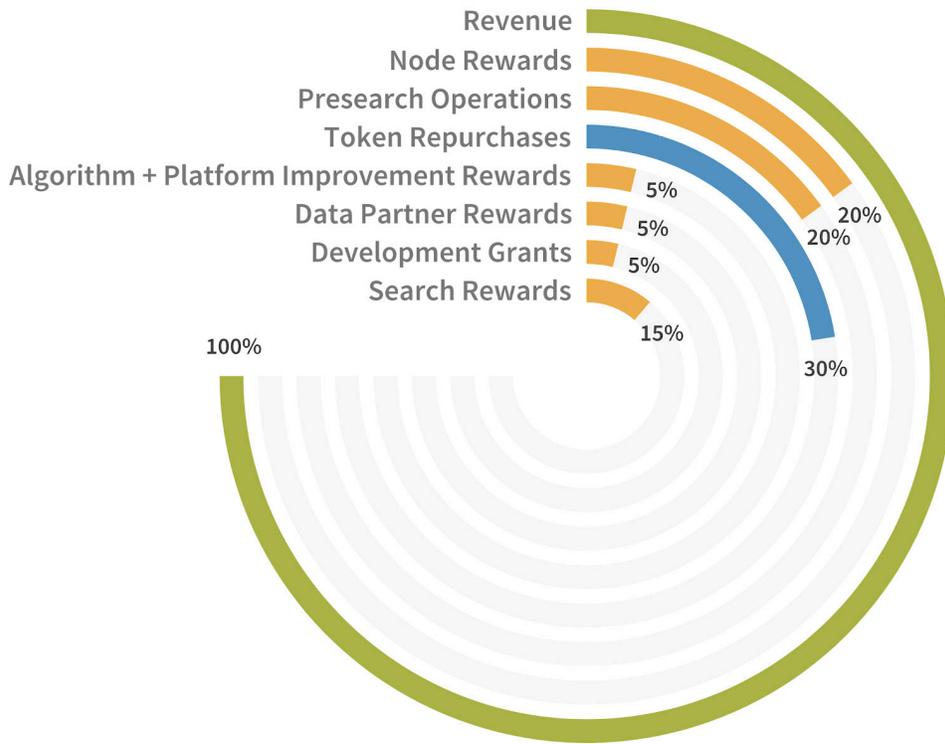
In this example, 20% of available revenue is used to pay node providers for running the decentralized search engine, 20% is used to fund Presearch Operations (platform investment, marketing, and other operations), 30% is used to repurchase tokens and reduce circulating supply, and 5% is allocated each to Algorithm + Platform Improvement Rewards, Data Partner Rewards, and Development Grants. Finally, the remaining 15% of available funds is used as Search Rewards to incentivize active users for the value their searches provide to the platform.

Token Repurchases may be undertaken as needed. Because Presearch gives out rewards to community members for their contributions, this increases circulating supply, which could lead to a supply / demand imbalance. An increase in tokens for sale could drive the token price down, making the token and ultimately the rewards less attractive.
By purchasing this tokens from the market, Presearch simultaneously accomplishes two things:

1) Provides liquidity to the market for community members to be able to convert their PRE into other currencies.

2) Replenishes the PRE in the Presearch inventory for future use, leveraging PRE as a store of value.

9.5 Supply and Demand Value Cycle

Ultimately, the value of the token is tied to its utility on the Presearch Platform, and the platform's ability to efficiently measure the value of the contributions of each community member (searchers, advertisers, node operators, partners, and subject matter experts) and then reward them with either PRE or with views and traffic (advertisers and partners).

Efficient value allocation is accomplished by a supply-and-demand-based, market-driven approach. If more searches occur than available nodes can handle, then Search Rewards may be reduced and node rewards increased to return to market equilibrium.

If an algorithm improvement drives substantial additional searches and ad views, then the Algorithm Improvement Rewards for that user will increase and the relative payout for Algorithm Improvement Rewards may increase.

If the relative value of Presearch Operations decreases over time compared to contributions by the community (which is expected to be the case), then the relative allocation of funding to Presearch Operations will decrease and more will be allocated to the community and other stakeholders.

The following diagram demonstrates how this supply and demand approach functions in a continuous value-generation cycle. The two primary nodes in the diagram (highlighted in solid blue) are "Active User Growth", which creates value within the ecosystem, and "Value of PRE", which is the ultimate mechanism for storing the value created and returning it to community members based upon their contributions.
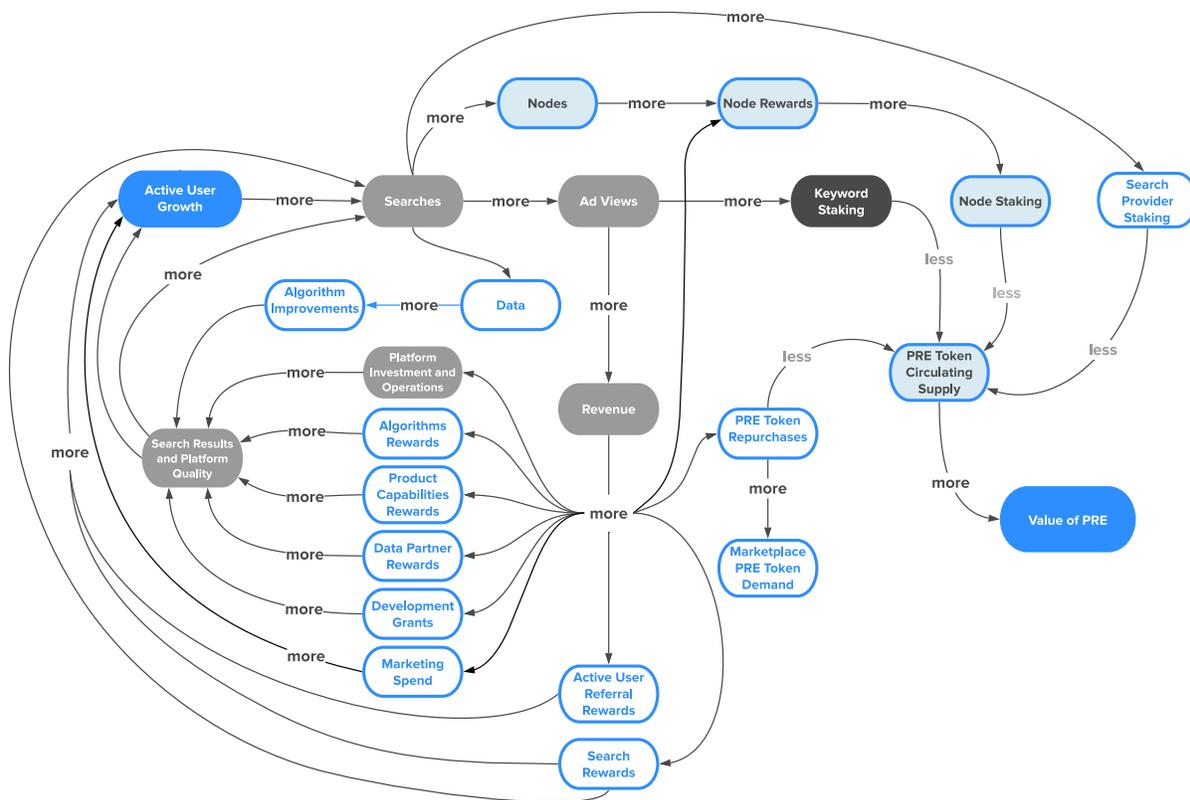
In this diagram, it is clear how an increase in **Active User Growth** sets in motion a cycle that both increases the value of the network (and thus of the PRE token), and also creates additional Active User Growth. If you follow the path of the highlighted gray nodes, you will see the following Sequence:

1. **Active User Growth** increases, thus
2. **Searches** increase, thus
3. **Ad Views** increase, thus
4. **Revenue** increases, thus
5. **Platform Investment and Operations** increases, thus
6. **Search Results and Platform Quality** increases, thus
7. Repeat Step 1 (**Active User Growth** Increases…)

You can also follow many other similar paths within this self-reinforcing feedback loop. On the value store side, you can follow the light-blue highlighted nodes as they branch off from the same initial path:

1. **Active User Growth** increases, thus
2. **Searches** increase, thus
3. The number of **Nodes** must be increased, thus
4. The **Node Rewards** must be increased, thus
5. **Node Staking** increases (to capture the greater rewards), thus
6. **PRE Circulating Supply** decreases, thus
7. The **Utility Value of PRE** likely increases.

The black node, branching off the gray path, ends with a similar outcome related to increased Keyword Staking

1. **Active User Growth** increases, thus
2. **Searches** increase, thus
3. **Ad Views** increase, thus
4. **Keyword Staking** increases, thus
5. **PRE Circulating Supply** decreases, thus
6. The **Utility Value of PRE** likely increases.

You can use the diagram to walk through many other paths, but they all lead to the same conclusion: The value of PRE is based upon the value of the Presearch Network and its utility within that network. The value should grow if its utility within the Presearch network increases, and it should decrease if its utility within the Presearch network falls.

Active users and searches are the key driver of value, and leveraging a market supply and demand model will enable Presearch to efficiently allocate value to each member of the Presearch community based upon the specific, measurable value they provide to the network.
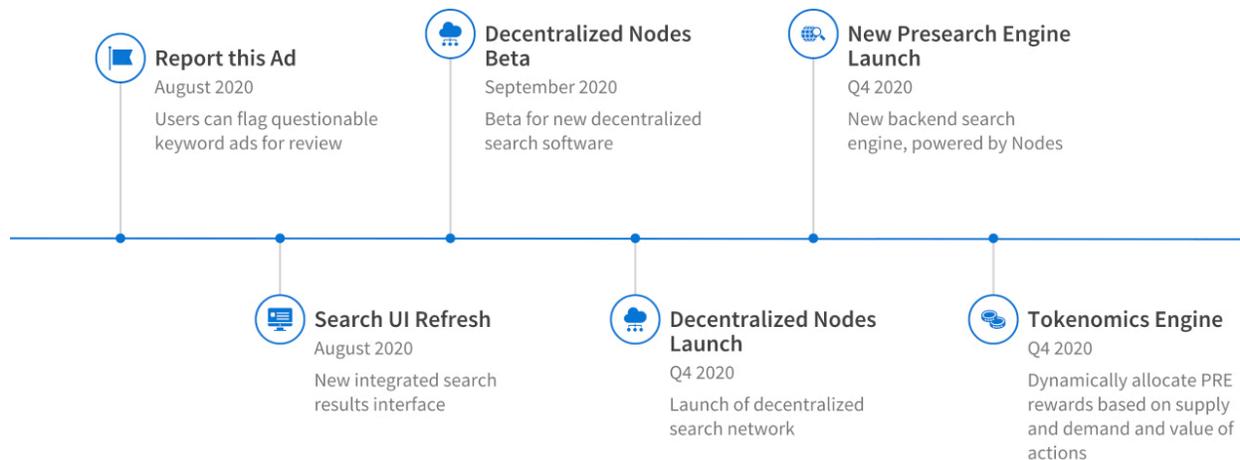
10. Product Roadmap

The Presearch Engineering team is hard at work preparing to launch the first decentralized part of the Presearch platform: Presearch nodes. The release will be available to beta program members in Q3 2020, with a final release and production launch in Q4 2020. Anyone who wishes to become a Presearch node operator will be able to provide server capacity to the decentralized Presearch Engine.

Presearch will be launching a search UI refresh prior to the Presearch nodes launch to deliver a more integrated search results experience, and a brand new Presearch Engine built on top of nodes will be delivered in Q4 2020. Presearch will also be rolling out its Tokenomics Engine, which will power the distribution of rewards based upon supply and demand for searches, nodes, and other value drivers within the Presearch Platform.

10.1 Roadmap through End of 2020

2020 Q4

Report this Ad
August 2020
Users can flag questionable keyword ads for review

Decentralized Nodes Beta
September 2020
Beta for new decentralized search software

New Presearch Engine Launch
Q4 2020
New backend search engine, powered by Nodes

Search UI Refresh
August 2020
New integrated search results interface

Decentralized Nodes Launch
Q4 2020
Launch of decentralized search network

Tokenomics Engine
Q4 2020
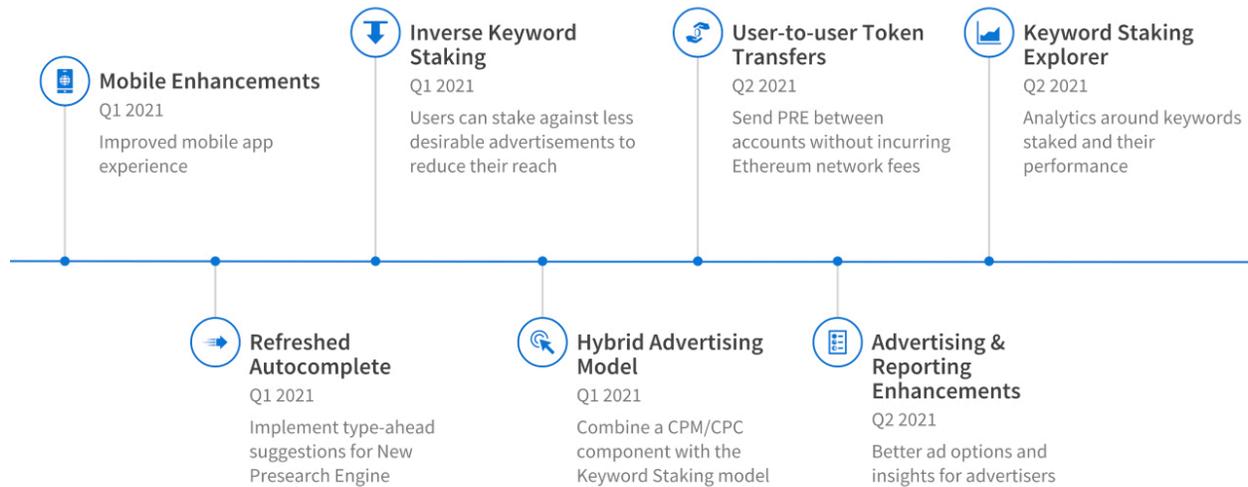Dynamically allocate PRE rewards based on supply and demand and value of actions
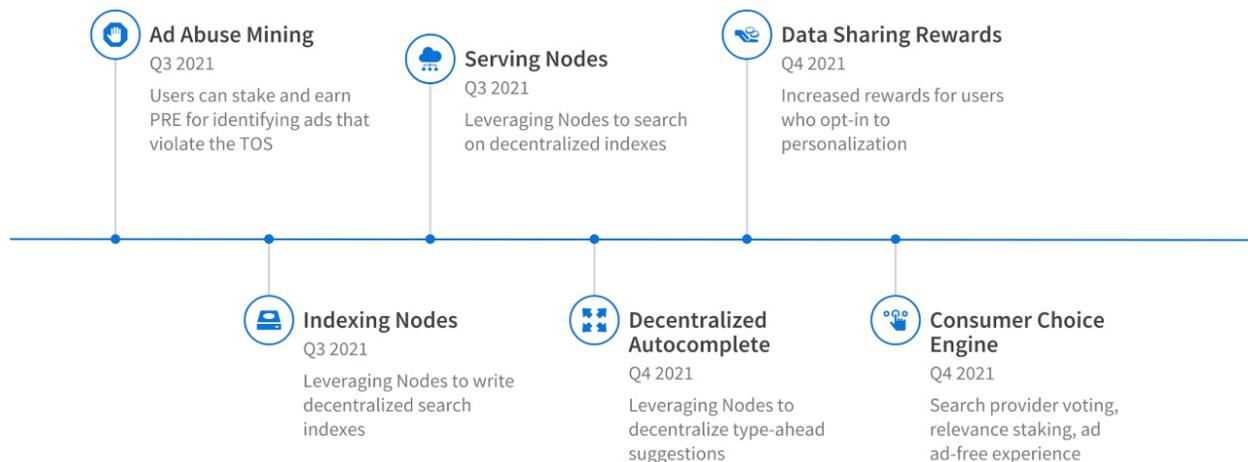
In addition to the firm Q4 2020 roadmap, a tentative roadmap is also included for 2021. The initiatives and rough dates are being included in this Vision Paper to provide an understanding to the community of current product plans. Please keep in mind, however, that Presearch may alter the roadmap to reprioritize initiatives at any time, so it's safe to expect that the roadmap will evolve to accommodate changing market dynamics or new opportunities.

10.2 Roadmap for 2021

2021 Q1-Q2

Mobile Enhancements
Q1 2021
Improved mobile app experience

Inverse Keyword Staking
Q1 2021
Users can stake against less desirable advertisements to reduce their reach

User-to-user Token Transfers
Q2 2021
Send PRE between accounts without incurring Ethereum network fees

Keyword Staking Explorer
Q2 2021
Analytics around keywords staked and their performance

Refreshed Autocomplete
Q1 2021
Implement type-ahead suggestions for New Presearch Engine

Hybrid Advertising Model
Q1 2021
Combine a CPM/CPC component with the Keyword Staking model

Advertising & Reporting Enhancements
Q2 2021
Better ad options and insights for advertisers

2021 Q3-Q4

Ad Abuse Mining
Q3 2021
Users can stake and earn PRE for identifying ads that violate the TOS

Serving Nodes
Q3 2021
Leveraging Nodes to search on decentralized indexes

Data Sharing Rewards
Q4 2021
Increased rewards for users who opt-in to personalization

Indexing Nodes
Q3 2021
Leveraging Nodes to write decentralized search indexes

Decentralized Autocomplete
Q4 2021
Leveraging Nodes to decentralize type-ahead suggestions

Consumer Choice Engine
Q4 2021
Search provider voting, relevance staking, ad ad-free experience

10.3 Future Opportunities

Beyond 2021, several key pieces of the Presearch Platform will still need to be implemented for Presearch to achieve a fully decentralized platform. This includes building a web crawler, decentralizing the Node Gateway, and enabling algorithms and other product improvements to be contributed by the community, measured for impact, and for the contributor to be rewarded based upon the ongoing value provided. Presearch will also have an internal ad network built out and a public search index, both of which could be externalized to expand the reach and utility of the Presearch network. Additional roadmap items which are currently under consideration include:

- **Token Leasing:** Ability for Advertisers to borrow PRE from token holders to facilitate cheaper and easier access to tokens that can be staked for advertising inventory or for operating nodes. Allows token holders to earn interest from advertisers or node operators for the right to use their PRE within the platform.

- **External Site Search:** Using the Presearch search index to power search for external websites. Provides the ability for website owners to customize their search experience.

- **External Ad Network:** Expanding the reach of the Presearch advertising platform to include advertising on external websites.

- **Decentralized Presearch Web Crawler:** Crawl the web leveraging the decentralized network of Presearch nodes.

- **Community Contribution Framework:** Ability for anyone in the world to contribute relevance algorithms or platform improvements and receive rewards for the ongoing value those contributions provide. This component will be responsible for testing and measuring those improvements within the Presearch Engine, and integrating with the Tokenomics Engine to generate rewards.

- **Decentralized Node Gateway:** Create a small network of trusted gateway providers to decentralize Presearch's current role as "gatekeeper" to the platform. Gateway providers will require a significant PRE stake to operate, will be incentivized to secure and protect all search traffic, and will be the next step towards full decentralization and transition of the governance model leading into Presearch's Phase III roadmap.

11. Marketing Plan

Presearch has been successful in building a significant user base of more than 1.5 million registered users and 65 million tokens staked for keyword ads because it has focused on building easy-to-use products that solve a problem for users.

Now that Phase I of the project has been completed, Presearch is preparing to launch its first decentralized search engine, which will be able to compete with the world's best search engines.

Once this new search experience is online to the public (Q4 2020), Presearch will have all of the components it needs to begin mass marketing and have its user acquisition campaign generate a significant increase in active users, driving more searches and resulting in increasingly positive tokenomics.

Presearch is in the process of recruiting a new head of marketing to execute on its plans and work with its new head of advertiser relations and keyword staking.

Due to the success Presearch has seen with its referral program (about 50% of all new users join through a referrer), Presearch will leverage that platform throughout all of its campaigns, both as an incentive mechanism to increase sign-ups, and as a tracking mechanism to enable Presearch to reward promoters with PRE.

There are three primary ways Presearch will increase usage of Presearch:

1) Improved user experience.

2) User growth campaigns.

3) Improved distribution of Presearch and PRE.

11.1 Improving the User Experience

There are a number of improvements Presearch will make to the platform that should result in increased usage, notably a new search experience, tighter integration between the Presearch platform and Presearch Engine, improved mobile apps, and improvements to its autocomplete functionality and others.

Not only will these improvements enable Presearch to retain more of the users that sign up, they will provide Presearch with an opportunity to reconnect with registered users who may have stopped using the platform due to usability issues in the past.

11.2 Growth Campaigns

There are two main marketing objectives for Presearch:

    1) Increase searches (more searchers doing more queries).

    2) Increase number of advertisers and ensure ad inventory (queries) is sold.

Each objective has a distinct audience and approach, and so Presearch is running two totally separate campaigns described in detail below.

11.2.1 Increase Searches

EXISTING USER REACTIVATION
Goal: 500k registered users who accumulated some PRE, but stopped searching
Profile: Identify those who were frequent users but have stopped using Presearch
Channels: Email from site registration
Strategy: Encourage people who have collected PRE and have an incentive to continue to get back onboard before their tokens expire
Message: "Don't lose your ### PRE" - login
Timeline: August, 2020

STIMULATE MORE USAGE
Goal: 20% increase in searches
Profile: Existing active users
Channels: Site messaging, mass email to list
Strategy: Release product improvements that improve search quality and ease of use and then tell users
Message: "Presearching just got better and easier" - links to new mobile apps and decentralized search engine
Timeline: Q4, 2020

NEW USER ACQUISITION
Goal: 2.5m users total, 1m increase
Location: Global, focus on North America where possible
Profile: "Degoogle" movement, cryptocurrency, liberty, privacy - Brave users, memes, life hacks, gaming, customizing software - power users, web workers (those who generate income working online)
Channels: Reddit, Facebook, Quora, BitcoinTalk, Telegram Groups, Crypto Twitter, YouTubers
Strategy: First work with promotional partners, then expand to new communities. Hold AMAs, contests and challenges, leverage sponsorships where Presearch will receive a "brought to you by" credit at the beginning / end of videos, embed logo in memes and other graphics
Messages: "Earn when you learn", "Get paid when you search", "What the duck? Try Presearch for truly private search"
Timeline: September, 2020 - January, 2021

ONGOING COMMUNITY BUILDING
Existing Presearch Community
Location: Global
Profile: Engage existing Presearchers more actively to build community via referrals
Strategy: Continued ongoing information sharing - increase frequency of updates to once per month, continued new product releases, community contests and challenges
Channels: Social, community channels, email
Messages: Help spread the word about Presearch and earn PRE
Timeline: Ongoing

11.2.3 Increase Number of Advertisers

CRYPTO LEADERSHIP
Location: Global
Profile: Cryptocurrency projects staking their name & symbol, crypto information sites staking project names and symbols
Strategy: Direct outreach to projects and crypto info sites via trusted partner introductions
Channels: DM / email
Messages: Stake your project name before someone else does
Timeline: Q3 2020

CRYPTO PROJECT COMMUNITIES
Location: Global
Profile: Cryptocurrency projects staking their name & symbol
Strategy: Connect with project community members directly and invite them to stake their project name and symbol and direct visitors to their favourite resource
Channels: Telegram / Discord
Messages: No one has staked your project name yet - someone should do it to get more exposure for the project and protect it from scammers
Timeline: Q3 2020

DOMAIN NAME COLLECTORS
Location: Global
Profile: Domain name collectors
Channels: Domain name trade publications, domainer forums, virtual conferences, bring on industry influencers to promote the Presearch opportunity
Messages: PRE is the new digital asset you need in your portfolio - keywords, traffic, liquidity and support for the open web
Timeline: Q4 2020

SEARCH MARKETERS
Location: Global
Profile: Search marketing agencies
Channels: Direct outreach to search marketers
Messages: Get in on the ground floor of the next big search marketing opportunity and become a Presearch stakeholder.
Timeline: Q1 2021

11.3 Improved Distribution

When it comes to improving distribution, there are two main focuses:

1) Increase number of pre-installations of Presearch.

2) Increase number of channels to buy and sell PRE.

11.3.1 Securing Pre-installations of Presearch

Pre-installation involves concluding deals with software developers and groups who can set Presearch as the default search engine within their environments, ensuring that new users are exposed to Presearch and making it especially easy for their users to become Presearch users.

There are many different, little-known web browsers and apps which collectively have hundreds of millions of users. Brave is one, but there are a number of others that are much larger. Presearch will attempt to secure partnerships with developers to become the default search engine in their systems in exchange for PRE. The goal is for Presearch to secure hundreds of thousands or millions of users at once.

A variation on this strategy is targeting large employers, schools and other groups that control the computing environments that their employees and students operate in. These groups have the power to mandate use of Presearch or pre-configuration of settings so it is a default option when a new user comes into the network.

11.3.2 Securing New Venues for PRE

One of the key drivers of usage of the keyword staking platform is the ease with which a potential advertiser can purchase Presearch tokens. If an advertiser cannot easily buy PRE in the currency or marketplace that they prefer, this could limit purchases and, by extension, usage.

A key focus in the second half of 2020 will be securing the ability for buyers to purchase PRE with a credit card. This is a significant missing link that would dramatically increase purchases of PRE.

Alternately, many within the cryptocurrency space would prefer to purchase PRE with other cryptocurrencies such as Bitcoin, Ethereum and various stablecoins. To reach these buyers, Presearch plans to facilitate the inclusion of PRE on as many reputable cryptocurrency exchanges that have significant user bases as possible. It has been demonstrated that many purchasers have a favorite exchange that becomes the primary channel for them to buy cryptocurrencies; therefore, Presearch needs PRE to be accessible on the exchanges of choice.

An increased exchange presence also provides those who have collected search rewards with additional options for converting their PRE rewards to other currencies if they choose.

Presearch continues to explore the concept of an escrow-like internal peer-to-peer marketplace connecting PRE buyers and sellers, but may leverage existing platforms that support P2P transfers until Presearch is ready to focus on creating a Presearch P2P venue. When Presearch enables user-to-user PRE transfers within Presearch.org in 2021, it will be able to gauge demand for such a service and may re-prioritize the effort if warranted.

12. Clients & Partners

Early Keyword Staking Adopters

saltlending.com

publish0x.com

threefold.io

gda.capital

trimaxmedia.com

Promotional Partners

kucoin.com

probit.com

coingecko.com

transformgroup.com

uptrennd.com

flote.app

somee.social

13. Team

COLIN PAPE
Founder & CEO

Colin is passionate about liberty, privacy and using technology for good. Prior to Presearch, Colin founded ShopCity.com. He began his career as a web application developer and domain name investor.

TREY GRAINGER
Chief Technology Officer

Trey is the Founder of Searchkernel and former Chief Algorithms Officer and SVP of Engineering at Lucidworks. He is an author, speaker, and recognized expert in building large-scale, intelligent search engines.

ED REESE
Director of Advertiser
Relations & Keyword Staking

Ed is the founder and principal of the online marketing agency Sixth Man Marketing and an Adjunct Professor of Digital Marketing at Gonzaga University. He's been involved in search engine optimization, paid search, analytics and website usability since the early 2000's.

MARCO VAN DEN HEUVEL
Head of Community

Marco is a community manager and marketeer with a huge passion for blockchain technology and cryptocurrencies. Marco has (co-)founded multiple agencies and loves to educate people about this industry. As a huge people person he has helped to grow and maintain the Presearch community since 2017.

THOMAS LECLAIR
Co-Founder & Marketing

Thomas is a crypto investor who was the first purchaser of PRE tokens. Thomas started working at ShopCity.com doing marketing and video production more than a decade ago. He is a all-in, go-to guy who thrives in project launches.

TIM ENNEKING
Chairman of
the Advisory Board

Timothy is the founder and the principal of Digital Capital Management. In 2013, he was engaged to manage the world's first crypto (Bitcoin) fund and shortly thereatfter founded Crypto Currency Fund, one of the world's first cryptocurrency trading funds. He also runs Mana Companies Asset Management, a family office based in San Diego. He speaks several languages and has five university degrees.

COREY PIITZ
Developer

Corey has been programming for more than 25 years, working at vertical marketplace LabX Media Group, environmentally-friendly OnlyGreen, and local marketplace ShopCity.com, as well as teaching computer science at The Toronto School of Business.

JEREMIASZ KLOPOT
Developer

Jeremiasz joined the Presearch community in 2017 and soon became a community administrator. He is a self-taught developer, and his talent soon became obvious when he started building tools for Presearch that the community loved, leading to a full-time role as a developer at Presearch.

LINDSAY PAPP
Customer Support

Lindsay is the friendly voice of Presearch customer support, working directly with users to help resolve their problems and communicate their feedback to the team. Prior to working with Presearch, Lindsay's career in sales and marketing led her to join the ShopCity.com team.

MELISSA McCOSKER
Communications

Melissa is an entrepreneur, social media specialist and content creator. Through her 10fold Projects company, she provides communication services to Presearch and others - when she's not busy running her family's organic farm with her husband and children.

14. Contact information

Presearch.io

270 King St. Midland, Ontario, Canada L4R 3M3

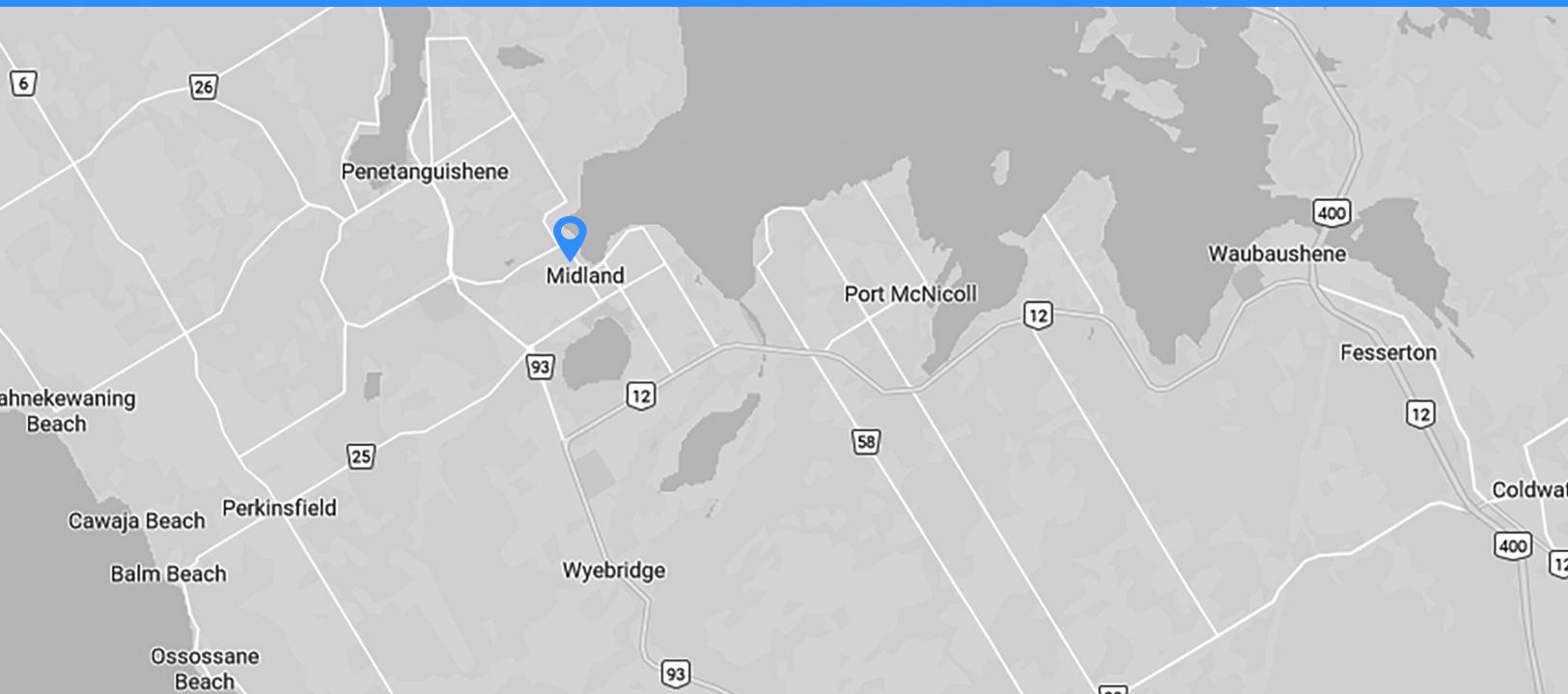✉ info@presearch.io

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15. Changelog

Version 2.0 was released on July 31st, 2020.

This section documents any changes made to the Vision Paper since its release.

Version 2.1 - released October 17th, 2020 - changes include:

- Contract address added to core properties.
- PRE Contract address updated due to October token swap.
- Title changes in contact section.

Presearch