Appay

White paper

November, 2017

Executive summary

In 2015, global mobile app revenues amounted to 69.7 billion U.S. dollars. In 2020, mobile apps are projected to generate 188.9 billion U.S. dollars. That's a 300% increase in revenue over 5 years with no end of growth in sight.

Despite this huge growth, app developers and users are still stuck using an antiquated payment processing system. All of the app stores charge a 30% fee on every transaction. There currently exists 3 major problems facing the mobile payment application market.

1) Trust: In order to make an in app purchase, users must provide their personal information along with credit card info. This information is then stored by the app store. With new data breaches occurring seemingly every day exposing more and more personal information people are becoming reluctant to give out this information as freely as before. This is resulting in lost sales as people shy away from buying in app due to lack of trust in the underlying payment system.

With Appay purchases are anonymous and no personal information is ever asked or stored. Also our payment platform is built on top of Ethereum's blockchain which helps to bridge the trust issues potential buyers may have. The increased level of trust will lead to higher revenue for app developers due to increased sales.

2) Payment Fees: Publisher create apps, market apps, maintain apps, they do all the work yet the app stores charges a 30% fee on every purchase that occurs within an app. Publishers currently have no choice but to pay those fees. Business practices' like these are considered extortion in most industries. This business model is making big companies such as Apple and Google very rich at the expense of the hard working developers and publishers. Appay fixes this issue by only charging a 2.5% fee on transactions. This will instantly result in a 27.5% revenue increase for every app that uses Appay.

3) Payment wait times: The app stores pay Net30 or Net45. This means that publishers can wait as long as 75 days after a sale before they see any funds. That is an unacceptably long delay that needs to be corrected. With Appay payments are instant. They will show up in publishers wallets in seconds not months. This in turn will put more money back into the hands of the app developers who then will have more money to market their apps. Leading to more downloads and more transactions.

1. Payment fees, chargebacks and payment wait times

Publishers are forced to wait weeks and sometimes months for payment. They also have to pay a 30% fee on each transaction. Buyers are forced to expose their credit cards to companies that have shown to not care about security. This echo system is broken and is in need of a fix. Using Ethereum's blockchain Appay will fix all of these problems with a simple, secure, intuitive solution.

1.1 Apple Payment Fees

Currently all apps and in app subscriptions work on a 30/70 split. Apple gets 30% of what's paid for an app or service, while the company or developer offering the app gets a 70% cut. That means when someone purchases Netflix through the Netflix iOS app, Apple collects over $2 of the fee $7 the consumer pays. Apple has also disabled direct links to outside subscription sign-up services within apps in order to maintain their monopoly.

Apple's 30% subscription cut has been a sticking point for many companies, especially those with tight margins like music services. It's even gotten Apple into hot water in the past, most notably during the e-book price fixing case levied against it by the U.S. Department of Justice.

1.2 Google Payment Fees

Things don't get any better on the Google Play store. Google charges a 30% fee on every in app purchase just like Apple. Apple also has been known to chargeback publishers for purchases when user complain to Visa and Mastercard.

1.2 Amazon Payment Fees

Similar to both Apple and Google, Amazon charges a 30% fee on every in app purchase. They also reserve the right to chargeback any amounts they so choose.

1.4 Long payment wait times and thresholds

When does Apple and Google pay out?

The current payment schedules are Net30 for Google and Net45 for Apple. This means that app developers need to wait between 30 - 45 days from the end of a calendar month before funds are sent to them. Even after funds are sent they could still wait 1-3 weeks for payment to arrive depending on their location.

Payout Threshold

Apple has a minimum payout of $10 for a select list of banks. If your aren't lucky enough to have an account with those bans then your minimum payout threshold is $150usd.

For small app developers this means payment can be delayed for months while the earnings accumulate above the threshold.

To receive payment from Apple, you must have provided all required banking and tax information and documentation, as well as meeting the minimum payment threshold.

Google Play has a one-time fee of $25. Unfortunately, you don't get your money immediately when you make a sale. Almost every Android app market holds on to your money for a period of time.

1.5 Chargebacks

Kids with access to their parents' devices or accounts make tens of millions of dollars in unauthorized in app purchases every year. While most micro-transactions are very small, some of these totals easily exceed $100 cumulatively before the parent is aware of the situation. By then the damage is already done.

In April 2017, Amazon agreed to refund consumers of roughly $70 million of unauthorized in-app purchases. However, the culprits weren't criminals—instead, these transactions were all made by children.

In 2014 both Google and Apple settled with the FTC for combined amount of $51.5 million in relation to chargebacks for in app purchases. This amount was in addition to the amounts already charged back to publishers.

With Appay chargebacks are a thing of the past. Once funds are sent and confirmed into the publishers wallet there is no way for those funds to be charged back at a later time. This will be something that publishers find very attractive. Chargebacks are a major problem for publishers currently, it is very hard to do budget planning when you never know when someone will scoop in and steal funds you collected months prior. Appay gives the control of funds back to the publisher and lets the publisher decide when to process the chargeback.

1.6 Inability to be part of the crypto revolution

Since app payments are currently controlled by the appstores, buyers have no way to pay for their purchases using crypto currency. App developers have no way to collect cryptocurrency as payment and the entire payment ecosystem is stuck where it's been for the past 15 years. The solution Appay is developing will bring mobile application purchases into the 21st century. The framework we lay will allow for continuous improvements that will benefit publishers and users for the next 15 years.

2. Appay's solution: create a payment gateway using Ethereum's blockchain technology

Appay will develop a payment gateway that will allow for purchases to be made by sending APY tokens. In order to facilitate this functionality into mobile applications we will develop a software development kit. This SDK will allow the app developer to easily setup in app purchases with a few simple lines of code. The process of transferring funds will occur on Ethereum's network by transferring APY coins from the purchasers wallet to the app owner's wallet.
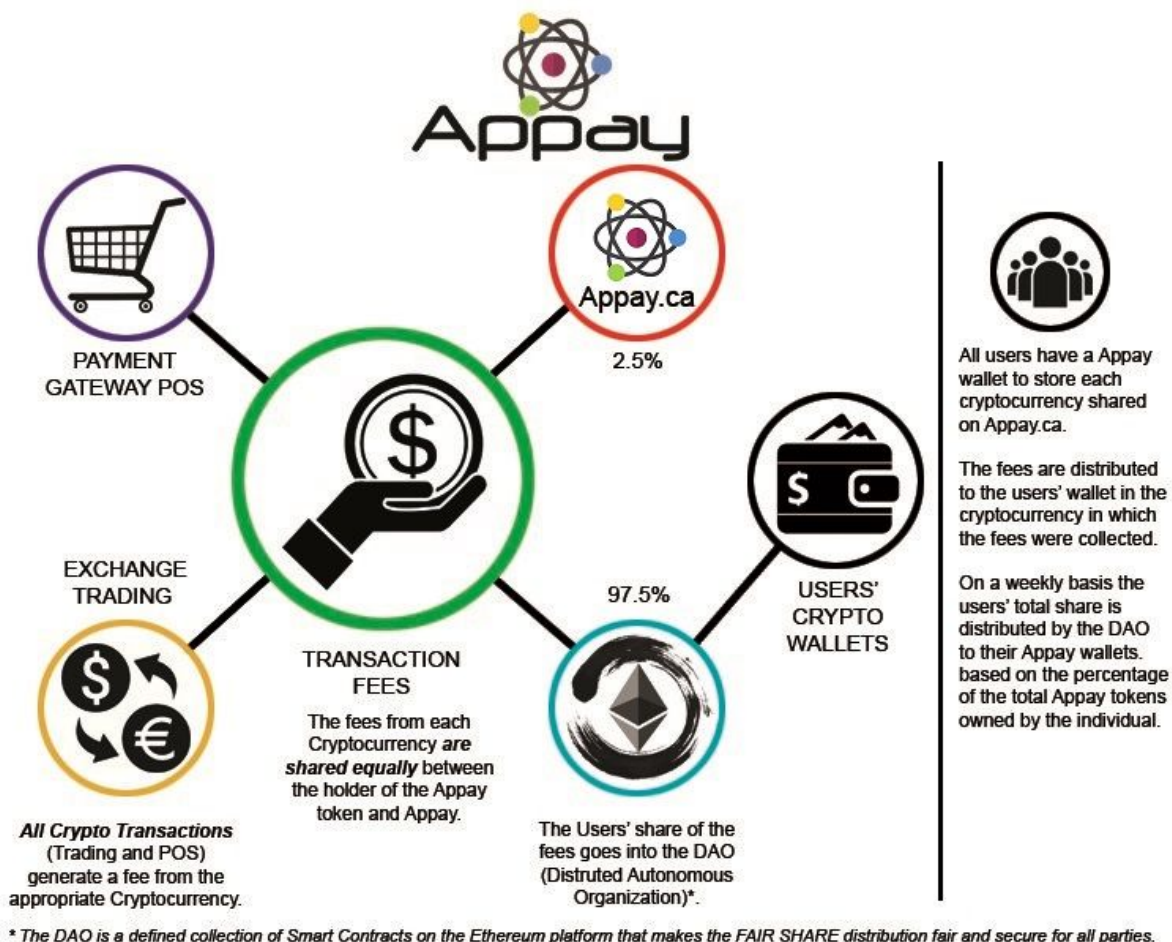
2.1 Drastically reduce payment fee's while instantly passing payment to publishers

Apple currently charges a 30% fee on every transaction. They also make their publishers wait up to 45 days to receive payment even though they collect payment instantly. With Appay publishers will be paid in minutes and instead of paying a 30% fee Appay will only charge them a 2.5% fee.

2.2 Give publishers full control over their funds

Currently publishers are at the mercy of the app store in order to receive payment. At anytime Apple or Google can chargeback publishers for products already sold. With Appay funds are transferred instantly leaving no chance that at a later time someone can come take your money.

2.3 Remove the requirement of needing a credit card to make in app purchases

With Apple the only payment option is to use a credit card. Many people don't want to expose their credit cards to platforms they don't trust. Some people simply don't have credit cards, and others don't want to use their cards. With Appay we remove this requirement. You can anonymously pay for your in app purchases by simply acquiring an APY coin.

2.4 Give APY rewards for using APY coins

Users of APY coins will be given 10 APY rewards for every 1 APY coin used. These rewards will be stored into an APY reward account accessible via private key. These rewards will be redeemable for merchandise in our APY store. The store will display products from our partners such as Walmart.com, Amazon.com, etc. The points to $ conversion will be 10,000 APY reward points for every $1 usd. We believe this reward system will help to grow our user base of APY coin owners very quickly.

Shop → Earn → Redeem

Appay

Account   Lists

| Furniture | Rugs | Decor | Bed & Bath | Home Improvement | Kitchen | Outdoor | Jewelry | Watches | Women | Men | Kids & Baby | More | **Anniversary Sale** |

Watches Jewelry & Watches

Jewelry & Watch Store / Watches / Men's Watches / Search: watches 1-60 of 9,019 Results

Showing most popular results for your search. Click here to show all results.
Related Searches: watches for men, watches women

| All Filters ∨ | Categories ∨ | Sales & Promotions ∨ | Price ∨ | Avg. Customer Reviews ∨ | Product Features ∨ |

Sort By
Best Matched

SALE

More Options

Sale: APY 100.72

Stuhrling Original Men's Quartz Regatta Stainless Steel Divers Bracelet Watch

★★★★½ 281 Reviews

SALE

More Options

Sale: APY 59.84

Akribos XXIV Men's Multifunction Tachymeter Stainless Steel Bracelet Watch With GIFT BOX

★★★★½ 372 Reviews

SALE

More Options

Sale: APY 90.09

Stuhrling Original Men's Winchester Advanced Swiss Quartz Strap Watch

★★★★½ 301 Reviews

SALE

More Options

Sale: APY 291.58

Movado 'Juro' Men's 0605023 or Women's 0605024 Stainless Steel Watch

★★★★½ 285 Reviews

SALE

More Options

Sale: APY 53.54

Akribos XXIV Classic Men's Sunray Dial Leather Strap Watch With GIFT BOX

★★★★½ 112 Reviews
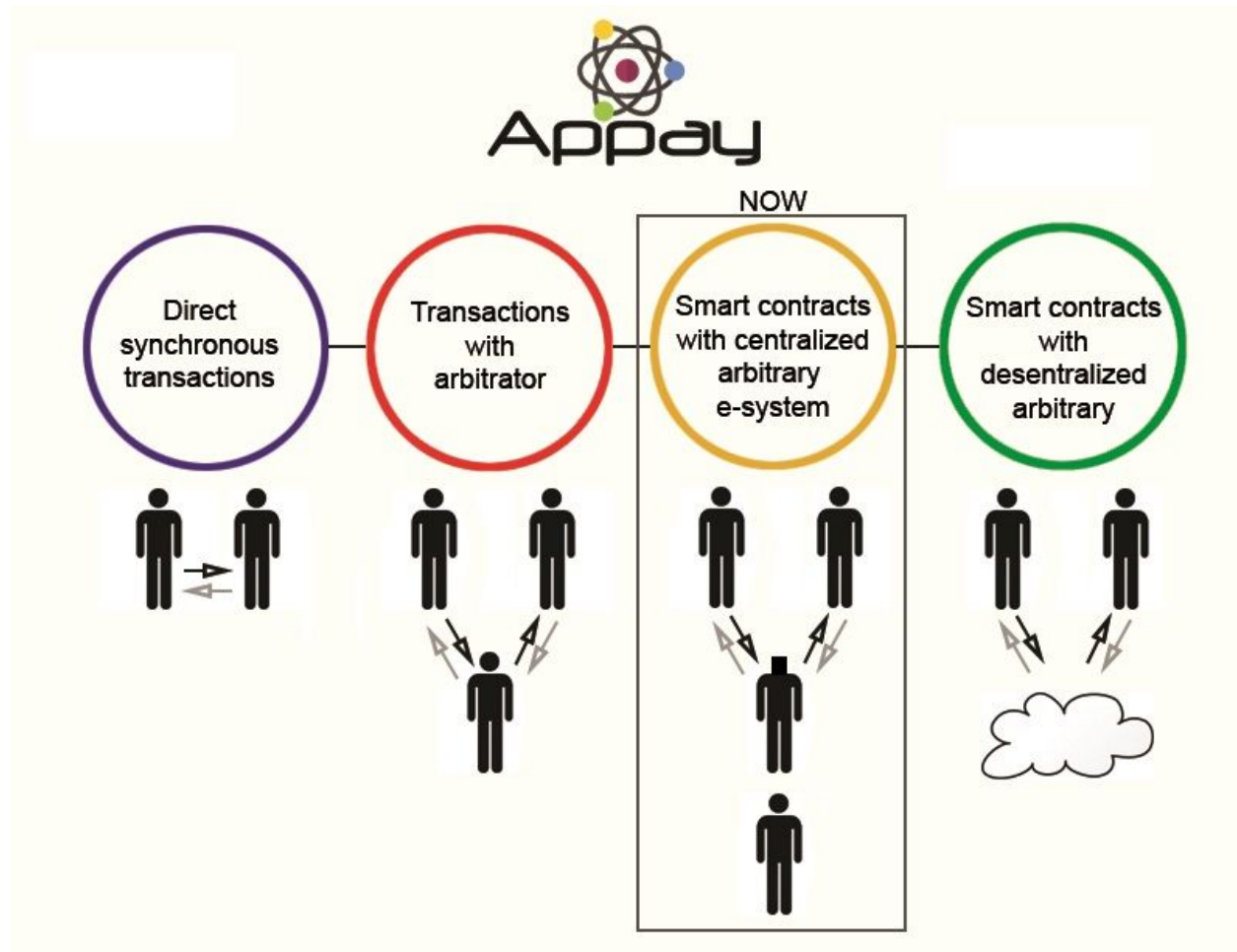

SALE

SALE

SALE

SALE

SALE

# 3. Product architecture and product development timeline

3.1 Smart Contracts & Workflows

Smart contracts will enable us to facilitate the payments solution with a decentralized trust and reputation system between parties. The number of smart contracts, detailed structure, and functionality will be defined and finalized during development.

3.2 Intended Product Architecture

We will build our base libraries using Objective C. An iOS specific SDK will be written entirely in Objective C. While the Android SDK will be written in Java and will incorporate the shared Objective C libraries. We will expand this SDK to Unity, Blackberry, Facebook, etc on subsequent versions.
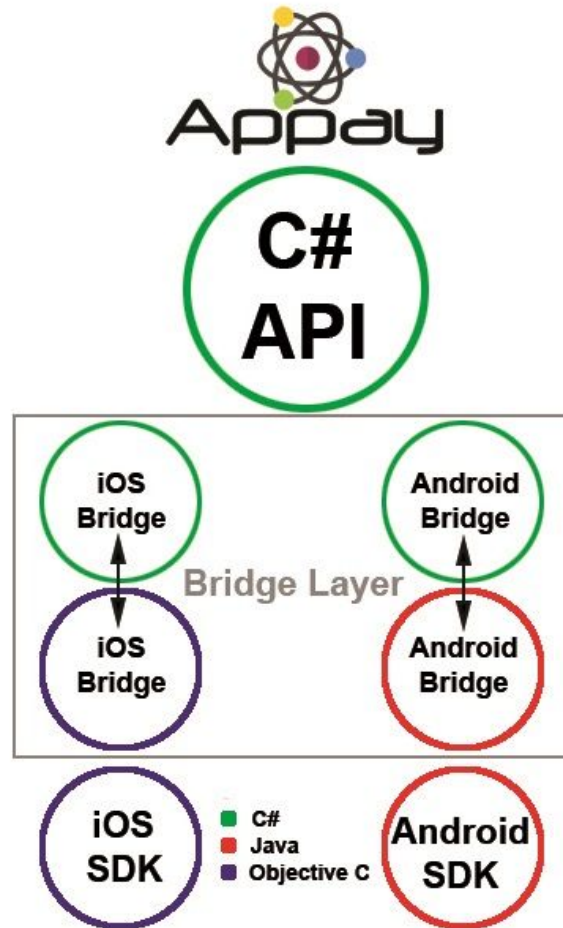
3.3 Launch version of the product

Here is a sample implementation of our SDK into the game Tesoro. When a user wishes to make an in app purchase they would then see the items for sale priced in APY coins. When they select purchase they would then be prompted to enter their private key. Once that was authenticated the designated amount of APY coins minus Appay's 2.5% transaction fee would be transferred from the user's wallet into the publishers wallet completing the sale.

SDK V1

Version 1 of our SDK will be rolled out to our launch partners only. It will be fully functional and will allow for payment of in app purchases by sending APY coins. Publishers will be credited instantly and users will anonymously be able to make their purchases without exposing any personal information

SDK V2

Version 2 will have the same functionality as version 1 with the addition of any product improvements our launch partners ask for. This version will be freely available to all app developers and we will launch it with a big marketing initiative.

SDK V3
Version 3 will include our mobile advertising platform that will allow publishers to earn additional revenue by displaying mobile ads. These ads will be similar to the ads that are available to publishers through ad networks such as admob, vungle, and mopub. What will make our product even more attractive is that we will payout for ads displayed instantly using Ethereum's blockchain. Currently all ad networks pay out Net30, Net45, or Net60. Which leaves publishers waiting for their hard earned advertising revenue. With Appay there will be no wait same as there is no wait for in app purchases.

SDK V4
Version 4 will extend functionality to other app stores such as Blackberry World, BShop, and the Windows Store.

3.4 Product development roadmap
Product development timeline might not be final and is subject to change depending on the feedback we receive from our initial customers.

April 2018 - SDK V1 launches

August 2018 - SDK V2 launches

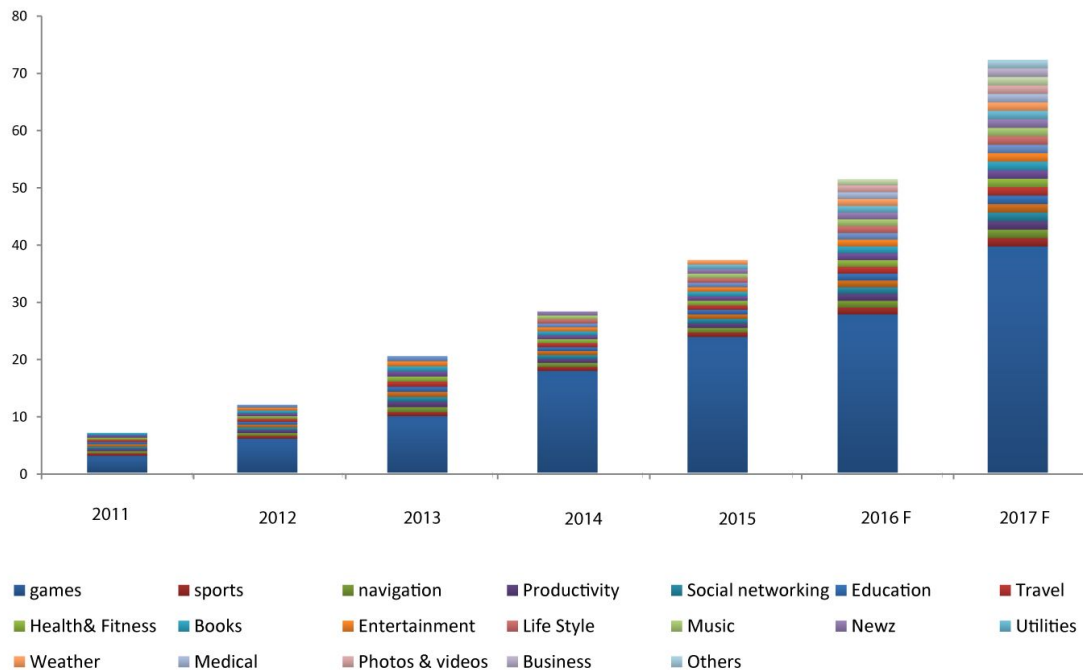**December 2018 - SDK V3 launches**

February 2019 - SDK V4 launches

4. Market opportunity and business model

In 2015, global mobile app revenues amounted to 69.7 billion U.S. dollars. In 2020, mobile apps are projected to generate 188.9 billion U.S. dollars. That's a 300% increase in revenue over 5 years with no end of growth in sight.

Despite this huge growth, app developers and users are still stuck using an antiquated payment processing system. Appay plans to disrupt the mobile application market by introducing a blockchain based in app payment platform.

Global Mobile Apps Sector Revenue ($B)

Legend:
games, sports, navigation, Productivity, Social networking, Education, Travel, Health& Fitness, Books, Entertainment, Life Style, Music, Newz, Utilities, Weather, Medical, Photos & videos, Business, Others

4.1 Market opportunity

In 2015, global mobile app revenues amounted to 69.7 billion U.S. dollars. In 2020, mobile apps are projected to generate 188.9 billion U.S. dollars. Appay will charge a 2.5% flat fee on every transaction. By 2020 we hope to be processing 30% of every in app transaction. This would lead to a yearly revenue of $1.47 billion U.S. dollars.

- Worldwide mobile app store downloads to exceed 352 billion in 2021, with gross consumer spend across all app stores to surpass $139 billion.

- Gross consumer spend on games via all mobile app stores should exceed $105 billion in 2021. Spend on apps (excluding games) in categories like news, media and dating apps is forecast to grow significantly faster and hit $34 billion in 2021.

- Google Play and third-party Android stores are forecast to see downloads grow at an annualized rate of 23% to 299.9 billion by 2021, thanks to growing smartphone and app adoption in emerging markets, particularly India, Mexico, Brazil and Indonesia.

According to the comScore report, the number of mobile users surpassed desktop users in 2014. Gartner's prediction narrates that over 268 billion mobile downloads will generate an income of $77 billion in 2017. The estimated global mobile app revenue was $35 billion in 2014, $45 billion in 2015, $58 billion in 2016, and a predicted $77 billion in 2017, as stated above. The statistics indicate that people who fall in the age group of 18 to 24 years of age use more mobile apps than any other group. They are followed closely by 25 to 34 years, 35 to 44 years, 45 to 54 years, and then over 55 years, respectively. The implication is that businesses that use mobile applications will target the middle generation more than the younger and older generations.

4.2 Business model

Appay will be a free to use SDK our revenue comes from a 2.5% fee on each transaction. This is a reduction of 27.5% compared to what Apple and Google currently charge on in app purchases. This will leave more incentive for developers to keep developing and earning more revenue thus increasing Appay's revenue.

The App Store as a Digital Business Model
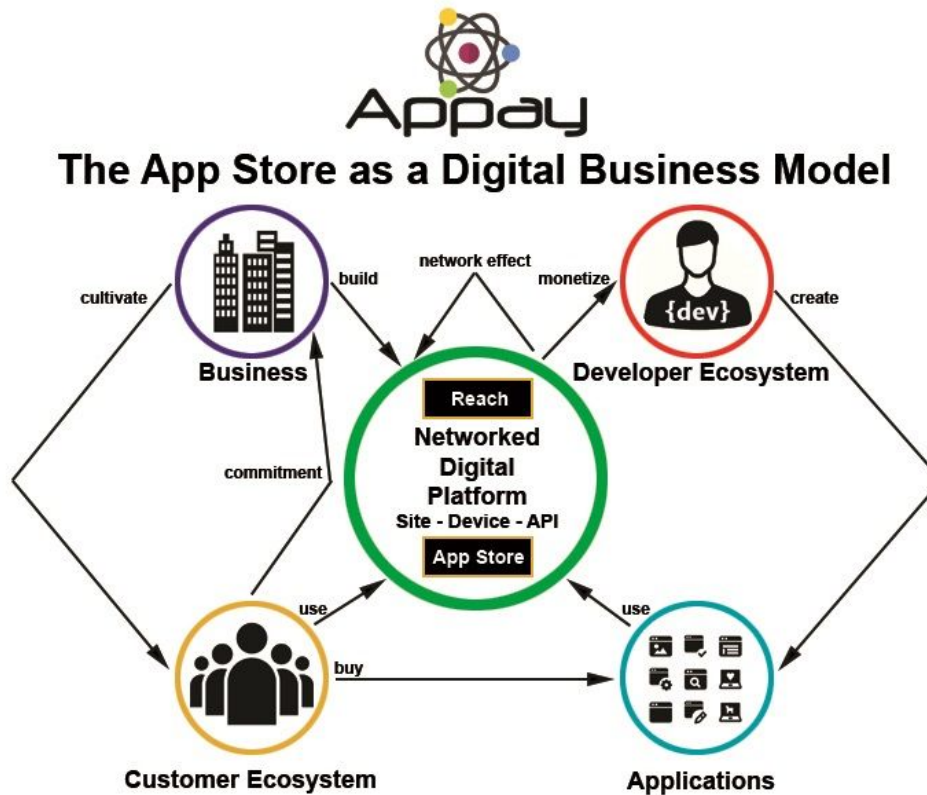
5. Marketing and Strategy

In order for Appay to be successful we need to get the word out to app developers. To do that we plan to target Ad networks, mobile ad platforms, and developers. In order to target these people we will use demand side platforms. facebook, google, and linkedIn.
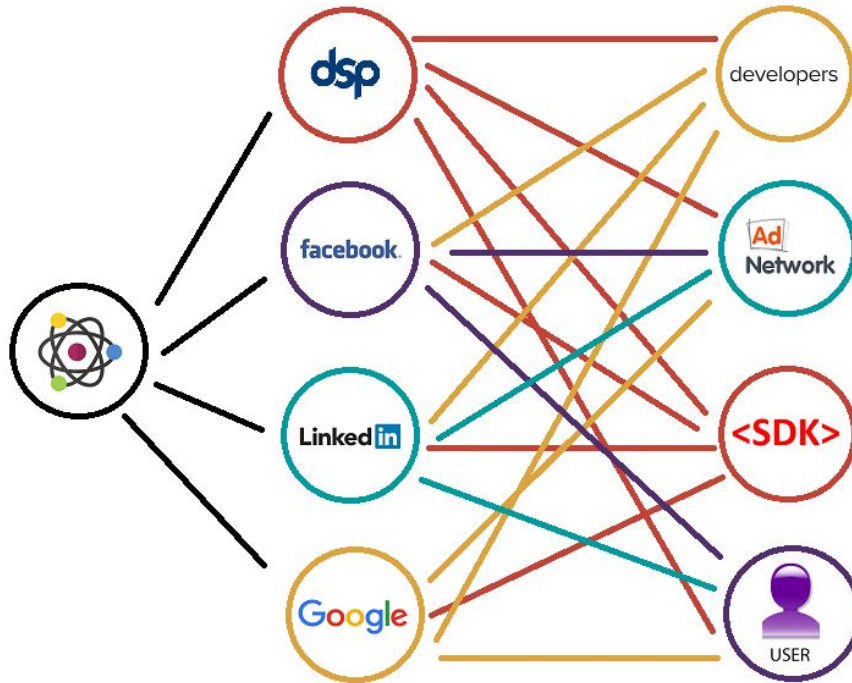
5.1 Launch Partners
We have already signed on many app publishers and when we launch our SDK will be integrated into thousands of mobile apps. Some of these partners that have already signed up to Appay are.
- EvaMedia Corp

- EverythingAmped Corp

- AiDataSoft Inc

- Adflare LLC

5.2 Integrating with existing SDK's

We will aim to integrate our SDK directly into large SDK platforms such as Mopub, Conversant, Smaato, TapJoy, AirPush, Vungle, Etc. This will give all of those publishers direct access to our payment gateway.

6. Crowdsale details

The Crowdsale of Appay and the corresponding token creation process will be organized around the smart contracts running on Ethereum. Participants willing to support the development of the Appay Project can do so by sending Ether currency to the designated address. By doing so, they are purchasing Appay Tokens (APY) at the rate of 5000 APY per 1 ETH which are sent instantly to their wallet.

- Accepted currency during the ICO is Ether.

- The creation will be capped ("Soft Cap") upon receipt of ETH equivalent to USD 5m. This amount is subject to change before the Token Creation event.

- The Token Creation period will last 60 days max if Soft Cap is not reached sooner.

- If the Soft Cap is reached before the end of fourteen days, additional contributions will be accepted for 84 hours in case some contributors missed the very short window for APY creation.

- If the Crowdsale campaign does not reach its minimal capital goal of USD 70.000 all funds will be returned automatically to the APY holders by the Ethereum smart contracts.

- Token Creation has a hard cap: upon achieving this cap, token creation will stop and no further contributions will be accepted. The hard cap amount will be announced.

- Tokens that are not sold during the Crowdsale will be burned automatically by smart contract

APY created per ether	5000 APY
Minimum Goal	USD 70k
Soft Cap	USD 5m
Hard Cap	To Be Announced
Additional	84h if soft cap is reached
Maximum number of tokens generated	To Be Announced
% of tokens generated to bounty, partners, advisors and loyalty program	10%
% of tokens generated to Crowdsale participants	75%
Date of crowdsale start	December 1, 2017
Date of crowdsale end	60 days or until soft cap is reached
Additional time if soft cap is reached	84H

6.1 APY Creation Ratios

- 1st price batch until the soft cap is reached: 1 ETH = 6000 APY

- 2nd price batch after the soft cap is reached: 1 ETH = 5000 APY.

The contribution amount limits for each price batch will be announced.

6.2 APY Tokens

Appay tokens will be an Ethereum-based token of value. The tokens are a digital asset, bearing value by themselves based on their underlying assets, properties and/or associated rights.

Appay tokens represent percentage share of revenue of Appay project.

Ethereum-based tokens rely on a well-established Ethereum infrastructure, benefiting from several advantages:

- Security and predictability (as opposed to, for example, having to run an independent blockchain network).

- Use of robust and well-supported clients (Ethereum-based tokens can be managed with official Ethereum clients).

- High liquidity (interchangeable with other Ethereum- based tokens or Ether), easier listing on exchanges with infrastructure already in place.

Ethereum smart contracts enable a very transparent and secure way of profit sharing among the token holders.

Our Ethereum-based token contract complies with the ERC20 standard, which means that it is extremely easy for exchanges involving trading edgeless tokens to happen. More detailed info about the ERC20 standard can be obtained from: https://github.com/ethereum/EIPs/issues/20
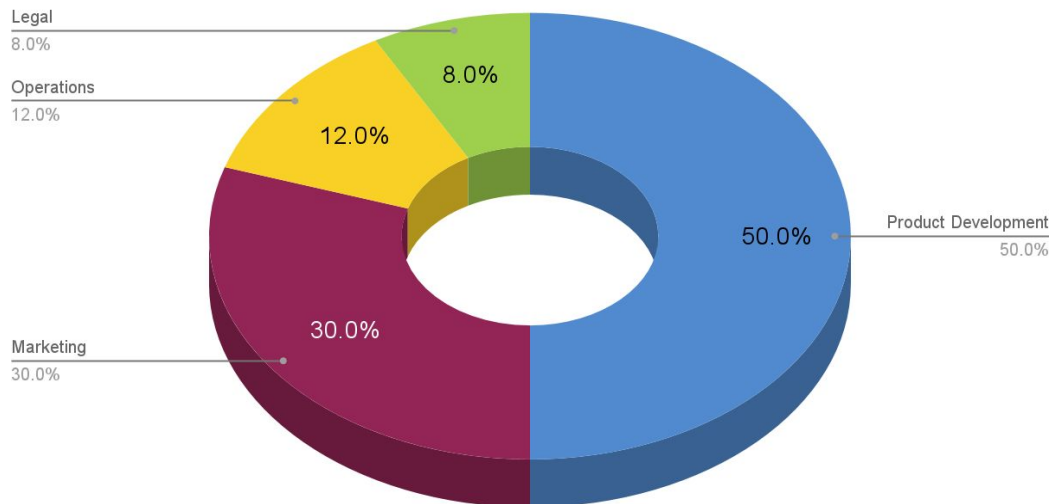
6.3 Budget

Field	Portion of budget	Activities
Legal	8%	Company establishment, contracts with publishers, etc.
Product Development	50%	Product development according to development roadmap
Operations	12%	Management, employee salaries.
Marketing, merchant acquisition & partnerships	30%	Expenses for attracting publishers, making partnerships with sdk providers, ad exchanges

7. Team

We have founded our company in the middle of the best computer science talent pool in the world. The University of Waterloo is a world renowned center for computer science and our team consists of developers hand picked from that school. With a direct connection into the school we intend to continue to hire and grow the team with only the best developers. Our management team has 30+ years of experience creating and succeeding at business. With many startups under their belt and our award winning development team, Appay is setup to succeed.

7.1 Appay Team

David Boulette: co-founder, business.
David has a computer science degree from WLU along with 20+ years of software development experience. He has started several successful startups including one that has gone public. His passion for perfection and pushing the limits of technology will be invaluable at Appay.

Faizal Jamal: co-founder, product.
Faizal has been VP of product development with a main focus in the digital ad space for 10+ years. He has also established many businesses that run in the local area and generates long term residuals from various investments. He is a visionary and strives to make the world wide web a better place for everyone.

Ravikumar Anghan: Lead Developer
Ravikumar has a masters degree in computer science. He has worked in the research space along with more recently the mobile development space. With his exceptional development skills he will work directly with management to guide our amazing team of developers.

Puskar Pandey: Software Engineer
Puskar is a self proclaimed blockchain guru who has recently graduated from UofW. He brings his passion for the blockchain to Appay where he intends to leverage his skills to make APY coins a reality.

7.1 Appay Advisory Team

Michael Schmidt: Legal Consultant

Peter Serra: Finance Advisor

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