



# The World's First Scalable blockchain protocol for the digital advertising ecosystem

## Digital Advertising: An Inefficient Economy

Digital Marketing currently brings in \$229bn a year and is projected to grow to \$335bn by 2020. Unfortunately, rapid, uncontrolled growth in the digital advertising ecosystem sparked by the rise of programmatic (automated) advertising has created an opaque, fractured and problematic supply chain.

The details are not pretty: \$6.5bn (USD) lost to fraud in 2017, auction manipulation and hidden fees, kickbacks, slow payment as high as 120 days, and brand safety threatened by posting ads next to objectional content. The end result is a broken system which is currently estimated to deliver only 30 to 40 cents on the dollar of working media. It encourages further reliance on Facebook and Google duopoly and lack of healthy ecosystem growth.

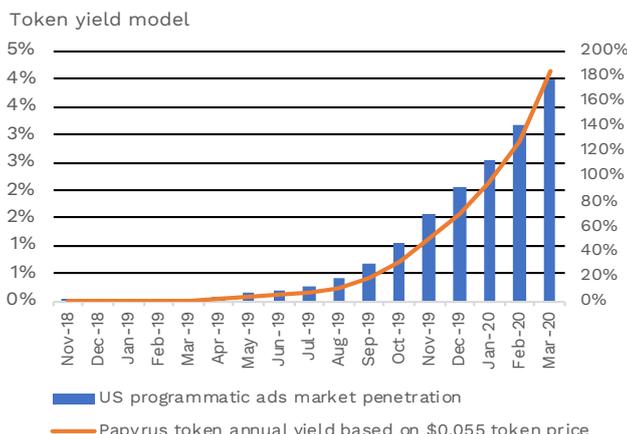
An inefficient digital supply chain is negatively distorting the advertising economy.

## Papyrus Blockchain Solution

Papyrus is designed to address these inefficiencies and restore trust by providing transparency to all transactions in the system. Exposing bad actors and providing better means for tracking campaign success. It will do this by creating a blockchain protocol that provides a unifying infrastructure layer for all current parties in the ecosystem, from the supply side to the demand side to the middle players that facilitate them both. By tracking and safely recording all transactions, and by providing automatic payment and reconciliation through smart contracts, Papyrus will restore efficiencies within the digital advertising ecosystem.

## Dynamics & Value

1. Verification and validation of all transactions between supply chain partners
2. Custom and flexible smart contracts for campaign parameters, fees, dispute resolution and payment conditions
3. Smart contract automation of payment providing significantly lower legal and administrative costs
4. Secure end-to-end payment controls, fraud reduction, targeting accuracy and safety and ad-viewability enforcement.
5. GDPR compliancy as all private data is held and managed off-chain
6. Improved brand safety by integrating 3rd party verifiers



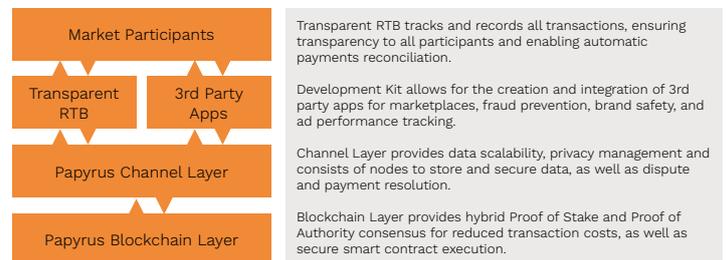
## Papyrus scalable & stable Protocol

Existing blockchain protocols will struggle to scale in order to handle the volume of transactions necessary to execute smart contracts within the digital advertising ecosystem. Papyrus is developing its own blockchain protocol that is focused on delivering solutions specifically in the B2B sector. Although its initial focus is digital advertising, the protocol is not category specific, and can be used to create blockchain solutions for any high frequency transaction industry.

Our solution has the following advantages:

1. **Data intense scalability** while maintaining low transactional costs. The Papyrus protocol can handle large volumes of data as an input for executing smart contracts, scaling to handle millions of queries per second.
2. **Channel intermediary Layer** that processes data from market participants, securely reconciling billable performance metrics and preparing transactions for the blockchain layer. The Channel Layer provides the backbone that enables our solution to deal with the volume and speed of data, while preserving privacy.
3. **Flexible privacy controls** that allow businesses to control which data they expose publicly.
4. **Seamless bank integrations** that provide the option of token-based or fiat-based payment, allowing for minimal disruption to existing financial models.
5. **Highly decentralized governance framework** managed by ecosystem participants with the help of industrial consortium of Advertising industry trade associations

## Papyrus Blockchain Protocol



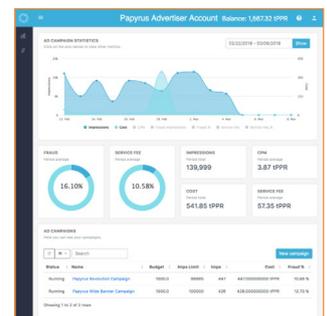
## Ahead of the Pack

Our MVP was released in March 2018, and has passed tests for both performance and scalability. Now we are piloting MVP with partners from the industry. Our full release should be available by the end of the year.

Our protocol is currently the only one that can handle the sheer volume of transactions necessary to track real time auctions in digital advertising.

Our strategy of inclusion, not disruption, of all the existing market participants should facilitate both the speed and ease of market adoption.

Our industry alliances, and the governance consortium we are forming with industry trade associations, together with our seasoned team and advisors, create a genuine opportunity to restore trust and efficiency to the digital advertising ecosystem.



## OUR MANAGEMENT TEAM



### Abeer Janmohamed – CEO

With over 18 years in commercial development for start-ups, turnarounds and high growth businesses across the Martech landscape, startups and commercial growth are in Abeer's DNA.



### Igor Alferov – Founder and CTO

As founder and CTO, Igor is in charge of Papyrus' technological vision. He holds a Ph.D. in information security, has over 15 years of experience in research and development, product management, and digital advertising, and has been a miner and blockchain researcher since 2015.



### Elena Obukhova - COO

With over 17 years of experience in Media, IT, and Infrastructure, Elena is a proven top manager for executing sophisticated business-processes and marketing strategies.



### Addie Conner, SVP Product Evangelist

An expert at the intersection in advertising, technology and data, Addie is currently a partner and CIO of Decoded Advertising. Addie co-founded Social Code, and has served on Facebook's Product Council.



### Alexander Shvets - Product Director

With over 7 years of experience in ad tech and over 12 years in software development, Alexander also co-founded Marilyn, one of the most powerful advertising automation systems in Europe.



### Svetlana Lukianova – CFO

Svetlana has over 5 years of experience as CFO of Private Equity funds, including DST, the leading private equity Russian tech investor. She also has more than 10 years of experience at four large audit companies and Russian international banks.



### George Odysseos

#### Business Development Director

CCO of YorMedia Solutions and ex-General Manager of Aloqui Limited, George is an expert with 10 years of experience in business development within the digital advertising space.

## OUR ADVISORS

<p><b>Jeremy Levitan</b> <b>Product Strategy</b> PhD, Director of Global Advertising Performance at Twitter. He has helped scale startups to exits of over \$500m and \$1bn in valuation.</p>	<p><b>Tim Brown.</b> <b>Business Strategy</b> Director of Global Agency Strategy and Partnerships at SAP. 20 years of experience and a great network of top-level ad market connections.</p>	<p><b>Richard Titus.</b> <b>Business Strategy</b> Senior executive (CxO) with 20+ years in digital transformation, globally. Cofounded multiple startups including Prompt.ly, Razorfish &amp; Schematic.</p>	<p><b>Mike Costache.</b> <b>Blockchain Advisor</b> Founder of Blockchain Investors Consortium, Co-chair of d10e conference, Cofounder and Managing Partner at KrowdMentor.</p>
<p><b>Patrick Dawson.</b> <b>Business Strategy</b> CEO of Bionic, a Facebook Marketing Partner which won the global 2017 Facebook Spotlight Innovation Award</p>	<p><b>Paul Frampton.</b> <b>Agency Strategy</b> Over 20 years of media experience previous UK CEO of Havas Media and on their European Executive Board.</p>	<p><b>Dmitry Lee.</b> <b>Technology Advisor</b> Over 15 years experience in software engineering of large-scale B2B and B2C enterprise solutions at Netcracker.</p>	<p><b>Jeremy Epstein.</b> <b>Marketing Advisor</b> CEO of Never Stop Marketing, with 20 years of international marketing experience.</p>
<p><b>Gareth Fenney,</b> <b>Legal Advisor</b> Extensive experience of structuring and contractual issues, having worked at some of the world's top law firms. Gareth is an avid investor blockchain projects.</p>		<p><b>Alexander Shishov.</b> <b>Technology Advisor</b> Founder and CEO of BotScanner, an anti fraud company for programmatic ads. 5 years experience in building antifraud systems for the real-time bidding stack.</p>	<p><b>Eyal Hertzog.</b> <b>Blockchain Advisor</b> Foundation Council at Bancor. Venture-backed technology entrepreneur for over 20 years. Founder of MetaCafe, Israel's fastest growing video sharing site.</p>

## PRODUCT ROADMAP

Business Goal	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
<b>Channel Layer</b>	Dispute resolution protocol	Smart contracts processing module	Preparation for main net launch	Storage marketplace support	TBC
<b>Blockchain Layer</b>	Research on zero-knowledge proofs for access control, PoA+PoS consensus	Governance, token economy, and smart contracts	Shielded transactions Proof-of-Concept, Bug bounty	ain net launch Network access tools	Main net upgrade to support shielded transactions
<b>Supply Chain Verification</b>	Papyrus Insights alpha interface	Transparent RTB partnerships Insights Beta	Papyrus Insights release	TBC	TBC
<b>Payments &amp; Reconciliation</b>	Transparent RTB protocol draft	Banking bridge and stable tokens research	Papyrus Payments alpha	Papyrus Payments beta, Integrations with trading desks	Papyrus Payments release
<b>3rd party Apps</b>			Knowledgebase portal for app developers	App developers partnership program	TBC

## CURRENT PARTNERS

