Why Lightning Matters

Alex Leishman, CEO River
River’s Mission

To champion an honest and robust financial system through the use of Bitcoin, the world’s only incorruptible digital money.
About River (River.com)

- Brokerage
- Secure custody
- Hosted mining

Private Client Team

Lightning Integration

Lightning for enterprise
Why Lightning Matters

1. What is the Lightning Network?
2. What are the global implications?
3. What does it mean for your company?
How much value was settled on the Bitcoin blockchain in 2022?

A) $798 billion  
B) $7.6 trillion  
C) $14.9 trillion  
D) $38.8 trillion
$38.8 trillion

$1,205 per second
$4.3 million per hour
$104 billion per day
Fedwire in 2022

$4.2 \text{ trillion / day}$
$38.8 trillion

Bitcoin Value Settled on the Blockchain per Year

Data source: Glassnode
$38.8 \text{ trillion}

$1,205 \text{ per second}

$4.3 \text{ million per hour}

$104 \text{ billion per day}

\text{\rightarrow 7 transactions per second}
Lightning: 40,000,000 tps
Solana: 65,000 tps
Visa: 24,000 tps
Paypal: 193 tps
Ethereum: 15 tps
What is Lightning

Layer 2:
Lightning

Layer 1:
The Blockchain
Transaction routing

Layer 1:
The Blockchain

Layer 2:
Lightning
16k Lightning Nodes

140k Channels

Routing nodes on the highways

Edge nodes in blue
Insights From the 4th Largest Lightning Network Node

October 2022
Lightning data

**PUBLIC LIGHTNING CAPACITY TOPS 5,600 BTC**

**WALLET OF SATOSHI LN PAYMENTS**

**ROBOSATS P2P TRADING VOLUME**

**10,000+ ZAPS ON NOSTR IN A SINGLE DAY**

**THNDR GAMES IN THE PHILIPPINES**

**GEYSER PROJECTS ARE STACKING SATS**

Graphs by @kerooke
The # of Builders ↑

The Lightning Network Ecosystem

Gaming
- TNDRA
- ZEBEDEE
- satoshi’s games
- THDG

Podcast and Streaming
- PodcastIndex
- UnRouter

Social Apps
- Satsback.com
- Microlancer
- Satsback
- Tips

J2P Marketplace Services
- Thunderhub
- Lightning

Nodes as a Service
- myNode
- Blockstream
- LN

Node Management Software
- umbrel
- Greenlight
- Bitmover
- PyBlock

Wallet Interfaces
- Zeus
- Zap
- Alby

Banking aAS
- LNbits
- Ln2Me.com

Banking aAS
- Opennode
- Lightning

Multipurpose Payment Infrastructure
- btc payments
- fiat on/off ramps*

Payment solutions
- Accept btc payments
- flat on/off-ramp*

Accept btc payments
- LNPay
- Zap

Gift cards and payment cards
- Bitrefill
- Spendit

New In 2022
- Lightning
-足

* on/off-ramp refers to automatic conversion as part of the payment solution.
Why Lightning Matters

1. What is the Lightning Network?
2. What are the global implications?
3. What does it mean for your company?
Lightning = TCP/IP For money

- 24/7
- Cheap
- Seamless
- Programmatic
- Permissionless
- Global
- Clients / Workers
- HTTP Status Code 402
- Microtransactions
- No signups
- Automation & AI
- No bottlenecks
Email for money

Michael Saylor (@saylor)

So @MicroStrategy converted my corporate email address into a #Lightning address and people keep sending me 21 sats...❤️

MicroStrategy (36 TRANSACTIONS) $7,895

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<thead>
<tr>
<th>Activity</th>
<th>Time</th>
<th>Type</th>
<th>21</th>
</tr>
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<tr>
<td>To: <a href="mailto:saylor@microstrategy.com">saylor@microstrategy.com</a></td>
<td>15:24</td>
<td>DEPOSIT</td>
<td>21</td>
</tr>
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9:37 pm · 17 Apr 2023 · 852.3K Views

1,076 Retweets  135 Quotes  7,589 Likes  109 Bookmarks
Venmo adds support for buying, holding and selling cryptocurrencies

Square Cash is letting some users buy and sell Bitcoin
Block’s Cash App adopts Lightning Network for free bitcoin payments

PayPal’s new feature allows US consumers to check out using cryptocurrency
No Credit Card fees
No payments fraud
Less sensitive data
U.S. Dollars

for Merchants
There are drawbacks too.

- Not 100% reliable yet
- Network effect still in early stages
- Bitcoin only for now
Why Lightning Matters

1. What is the Lightning Network?
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3. What does it mean for your company?
New / Improved Business Models

Lightning = TCP/IP

- Global → Clients / Workers
- 24/7 → HTTP Status Code 402
- Cheap → Microtransactions
- Seamless → No signups
- Programmatic → Automation & AI
- Permissionless → No bottlenecks

For money
Don’t be late to the internet of money
Why Lightning Matters

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