BLOG 7 — Why "Planning Gas" Doesn't Work (Real Data Breakdown)

Category: Market Insights
Length: ~700 words

****Everyone Thinks They Can "Plan Gas."**

Every Business Eventually Learns They Can't.****

For years, crypto builders have tried to stabilize user experience by "planning gas."

They estimate:

- average gas
- expected traffic
- typical congestion
- normal times of day
- historical fee patterns

On paper, it sounds smart.
In reality, it collapses immediately.

Because gas volatility is **not predictable**, not even in the short term.

This is why:

- merchants refuse to accept crypto
- subscription models fail
- users abandon transactions
- remittance apps can't risk settlement
- cross-border platforms avoid blockchain rails entirely

To understand why "planning gas" is impossible, you must understand what actually moves gas prices.

Spoiler: it's not rational, and it's not stable.

The Hidden Forces That Break Every Gas Estimate

Gas is not driven by a simple supply-and-demand curve.
It is driven by chaotic, unpredictable, and competing forces.

Let's break them down.

1️⃣ Network Congestion Is Not Linear — It's Chaotic

Blockchains process **fixed blockspace**.
Demand, however, is **volatile and spiky**.

A single event can push gas from:

- 8 gwei → 120 gwei
- 30 gwei → 500 gwei
- 2 gwei → 75 gwei

within minutes.

No historical average can predict sudden spikes caused by:

- unexpected news
- mass liquidations
- new token launches
- NFT drops
- chain reorganizations
- airdrop farming waves
- memecoin frenzies

Gas markets respond instantly — businesses can't.

2️⃣ MEV Bots Manipulate Priority Fees Constantly

Miner Extractable Value (MEV) bots compete aggressively for block inclusion.

They cause:

- rapid fee surges

- fake bidding wars
- intentional congestion
- sudden bid spikes
- volatile fee auctions

Your transaction might be competing with:

- arbitrage bots
- sandwich bots
- NFT minting bots
- liquidation bots

These actors behave unpredictably and instantly.
Human-driven businesses cannot react in real time.

3️⃣ Block Demand Is Not User Demand

Businesses often misjudge gas because they assume:

“More users = more gas.”

Wrong.

Gas spikes are often caused by:

- arbitrage loops
- oracle updates
- DEX liquidations
- whales repricing positions
- MEV bot battles
- memecoin snipers
- liquidation cascades

None of these events relate to **real commerce**, yet they destroy the stability needed for real commerce.

4️⃣ Fees Can Spike 5×–40× in Seconds

Real data from the last 24 months shows:

- **Ethereum fees have spiked 7×** during liquidation events
- **Arbitrum fees have spiked 20×** during NFT launches
- **Base fees have spiked 14×** during memecoin waves
- **Polygon PoS saw 30× spikes** during validator rotation events

When volatility exists at this scale, “planning gas” becomes a joke.

No business model can withstand this unpredictability.

5️⃣ Merchants Cannot Quote Variable Costs

Imagine Stripe or Visa telling a business:

“Your transaction fee will be between $0.03 and $8.00 depending on network mood.”

No merchant would use it.

Yet that’s exactly how blockchain payments feel.

Subscriptions? Impossible.
Gig payments? Risky.
Cross-border settlements? Unreliable.
E-commerce? Unusable.

Businesses cannot operate when **transaction fees behave like a lottery**.

Which is why Predictable Gas™ exists.

Predictable Gas™ — The Only Rational Solution

“Planning gas” fails because gas markets are inherently chaotic.

Predictable Gas™ solves this with:

- **Stable, pre-quoted fee bands**

You know the fee before sending.

🔹 **Variance limits**

Fees cannot exceed the upper bound without action.

🔹 **SLA Credits**

If the chain misbehaves, the protocol protects the user.

🔹 **Commercial-grade reliability**

Fees become a known cost — like a payment gateway.

This creates something blockchains never had:

Bounded, predictable, user-friendly fees.

SDK: Developers Get Predictability Instantly

With the SDK, integrating Predictable Gas™ is trivial:

```
const quote = await dendrites.fees.getQuote({
  speed: "instant",    // or "eco"
  chain: "base",
});


const tx = await dendrites.pay.send({
  to: receiver,
  amount: "50 USDC",
  maxFee: quote.upperBound,
});
```

The SDK automatically:

- calculates fee bands
- enforces upper limits
- issues SLA Credits on breach

Nothing else in crypto offers this level of reliability.

****Closing:**

Businesses Don’t Need Cheap Fees — They Need Predictable Fees**

This is why crypto payments failed for 10 years:

- fees spike
- users panic
- merchants lose money
- businesses cannot quote costs
- apps cannot scale
- subscriptions fail

Predictable Gas™ finally brings **infrastructure-grade stability** to blockchain fees.

This is not an optimization — it’s a **prerequisite** for global adoption.

No more “wait for low gas.”
No more “try again later.”
No more “I don’t know why fees jumped.”

Crypto finally becomes reliable.
And when reliability arrives, commerce follows.