

Introduction

Block: a “block” in the context of a “blockchain” can be thought of as a bundle of transactions that are to be permanently fixed to a ledger. Only so many transactions can fit in each block, and each time a block is completed, it lays the foundation for the next block in the chain.

I’m out of breath, panting heavily.

Sweat is dripping off my face and onto the cold sand.

I look around and find that it’s just me and a few other health-conscious people who are up this early doing morning calisthenics.

My arms are burning from the combination of pull-ups and climbing the 30ft rope at Muscle Beach- the same beach where Arnold Schwarzenegger and other strength-legends made their claim to fame.

I throw my backpack on and begin pedaling my track bike towards our office in anticipation of the launch. Today, we were launching our very own cryptocurrency and making it available for purchase to the entire world.

The entire mile-and-a-half ride was spent thinking about whether or not the launch would be successful, knowing that the immediate future of our company rested largely on the success of today.

I got to the office, threw on my work clothes in the elevator, and arrived at the top level to the sounds of excited voices and sharp smells of champagne effervescent.

Lawyers and industry people were busily munching donuts and co-mingling with our team inside the glass-wall engineering room. The ping-pong table, centerpiece of our office, was adorned with balloons, confetti, donuts, fruits and mimosas eagerly anticipating the big day.

I barely had enough time to scarf down a donut before the team began the countdown. The excitement and anticipation was palpable; it felt like it was New Year’s Eve witnessing the ball drop in the Big Apple.

5..4..3..2..1..

The smart contract written to handle the crowdsale was on a timer or sorts, set to start at a specific block number, which in the blockchain world can be roughly estimated to occur at a time during our day that we all understand; ie, 9am.

I say *roughly estimated* because blocks are produced around every 10-20 seconds, so it's not as exact a number as say 9am sharp is as provided by the world atomic clock by an organization like the NIST, or the National Institute of Standards and Technology.

So to our best guess, the token launch was estimated to be around 9am PST, which meant at this specific block number, the contract effectively "opened its doors" and the sale would begin.

Immediately we began seeing a flood of purchase orders pouring in from people all around the world wanting to get their hands on the token; it was an absolute frenzy, almost like we were selling tickets to Coachella.

Amidst the crowd there were sighs of relief that the code was working as anticipated as well as comments excitedly wondering how much we might actually end up selling of the total 600 million supply that was available.

And just like that, it was all over.

We began noticing errors spewing from the contract signaling purchase orders were no longer being accepted.*

Smiles slid like rain off of peoples' faces and confusion overwhelmed the room while the engineers frantically searched for an explanation to the sudden transaction failures.

A few seconds later, the lead engineer then turns to the CEO and says, "I think we just sold out," as if he didn't believe the words himself. The engineers verified the finding and the entire room exploded in celebration.

We turned around and saw one of our colleagues just getting out of the elevator running up the stairs past the ping-pong table yelling, "Did I miss it?! What happened?!"

Once the dust settled, we accounted for everything and determined that we had sold 600 million tokens raising 33,333ETH (~\$8,455,915.44 USD) in 15 seconds with all the transactions occupying an entire block.

Following this day, our project was forever known as the "One Block Wonder."

We didn't know it, but at the time this was the fastest money generation event in the chain's history.

**Note: sending transactions costs money (gas) which is a non-refundable way to entice the miners in a blockchain to include your transaction in a block ahead of others, and though gas costs are generally as low as a few cents for typical transactions and the price being set by the protocol based on network demand, this can also be adjusted by the user issuing the*

transaction. Should they be in a hurry to get their transaction quickly included in a block, they simply just up the gas they are willing to spend.

Think of this like tipping a doorman at Best Buy to skip the line on Black Friday- you can bribe him with \$100 (Priority Fee; a “tip”) but there’s no guarantee you’ll get in ahead of others; there’s also no guarantee that there will be any of the items that you want in stock and there’s absolutely zero chance of getting the \$100 tip back.