

[OVERVIEW](#) · [PLAIN LANGUAGE](#)

Data that defends itself: the bstack, explained simply

This is the gentle version. No Bitcoin knowledge, no networking knowledge, no homework. It explains, in plain words, why we build applications on a public ledger and a broadcast network, what that changes about who owns data, who pays for it, and who you have to trust, and why we think it is worth fifteen minutes of your curiosity. When you want the rigorous version, the engineering papers at 1bsv.net are the next step.

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Audience: curious readers. If you have never touched Bitcoin and never want to, you are exactly who this is for.

We = Lightweb Inc.; **you** = someone deciding whether this is worth learning.

The two jobs your apps do behind your back

Every app you use spends most of its energy on two jobs you never asked for.

Job one is copying. Your message, your photo, your order has to be copied to data centers, to backups, to the other people who need to see it, over and over, forever. Somebody builds all that plumbing, and somebody pays for it. Usually, in the end, you.

Job two is trust. Because all those copies live in other people's buildings, you have to trust the people. Trust that they show you the real data. Trust that they did not edit it. Trust that they will not lock you out, sell your attention, or quietly disappear next year with your account, your history and your name.

Most of what feels wrong about today's internet is one of those two jobs going badly. So we built a family of applications, the bstack, where neither job exists.

The part of Bitcoin worth stealing

Forget the price charts. Underneath, Bitcoin got three things right that have nothing to do with speculation, and we use all three.

- **A ledger nobody can rewrite.** Think of it as a notary that never sleeps: events go in, in order, and no one, including us, can quietly change yesterday. That is the one thing a shared ledger does better than any database in any building.
- **Signatures anyone can check.** A signed record proves who wrote it, by mathematics rather than by asking a company. Checking one is free, instant, and needs nobody's permission.
- **Cash that fits in an envelope.** Bitcoin SV payments can be tiny and direct, person to person, with no signup and no bank details. Pay the author you just verified, in one step.

Here is the twist that makes this practical: **we keep your data off the ledger.** The ledger holds only a tiny receipt, a few hundred bytes that prove your record exists, who signed it, and which version is current. The record itself travels separately, and because of that it can be taken back. Publish, correct, or retract: the receipt makes it provable, and the retraction is real, not a polite request. We call this "mine the state, not the data."

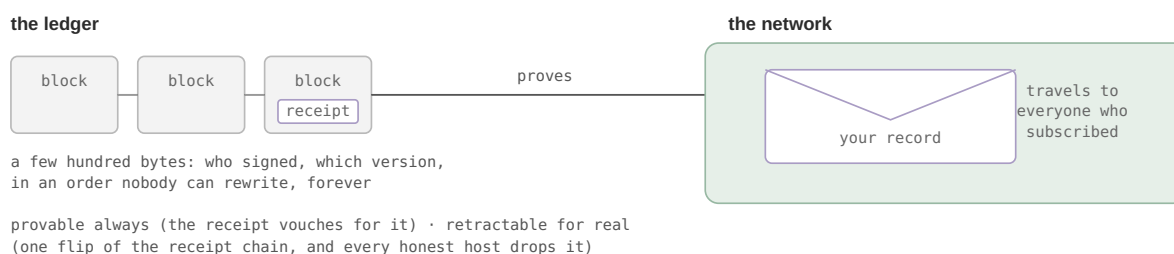


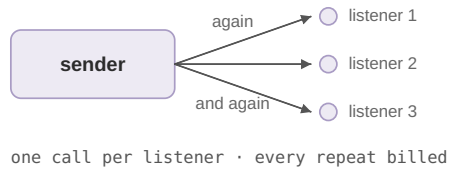
Figure 1 - the receipt and the letter: the ledger keeps a tiny, permanent receipt, and your actual content travels beside it, provable always, retractable for real.

Say it once

Now the second ingredient. Today's internet mostly works like phone calls: to tell a thousand people something, your provider repeats it a thousand times, and someone pays for every repeat. That is why serving a big audience is expensive, and why the companies that can afford it end up owning the room.

A broadcast network works like a megaphone with perfect manners. You say it once. The network itself carries it to everyone who subscribed, checks that nothing got lost along the way, and repairs anything that did. Your cost does not grow with your audience. Reaching ten listeners and reaching a million is the same single act of publishing.

phone calls



one shout, every ear

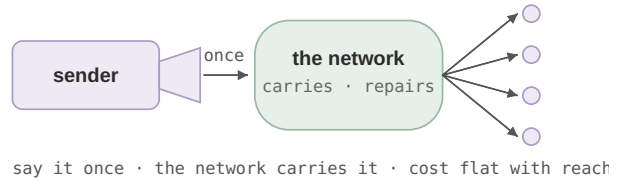


Figure 2 - unicast repeats itself and bills every repeat; broadcast says it once and the network does the carrying.

Everything published this way lands, with its proof attached, at every independent host that chose to carry it. Which brings us to the part that quietly changes the economics of the whole game.

When everyone holds the goods, data becomes a commodity

Today, whoever holds your data holds you. Holding the only copy is the business model: it is why you cannot leave, why you cannot check, and why the data is worth more to the holder than to its author.

On the bstack, the network hands the same records, proofs attached, to every host that subscribes. No host holds anything the others lack, and a host that tampers produces answers that fail the math. So the data itself stops being anyone's hostage and becomes a commodity, like grain or electricity: abundant, checkable, held by many.

And when the goods are a commodity, the competition moves to service. Hosts compete to answer you faster, keep more history, answer richer questions, and earn your business. Asking a question is free and anonymous at the basic level, on every honest host, by design. That is a market working for readers instead of around them.

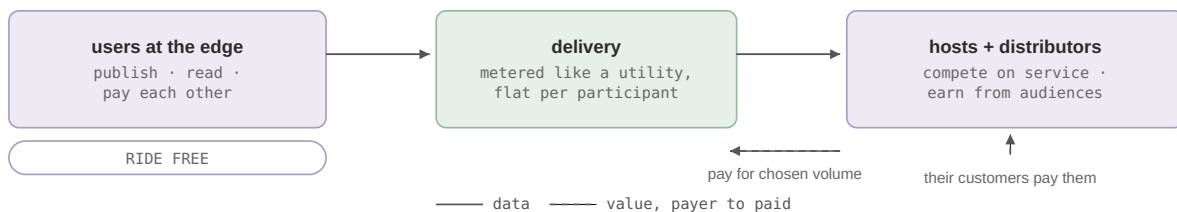


Figure 3 - who pays: users ride free at the edge, businesses pay utility-style rates for the flows they choose, and every tier earns from the audience it serves.

The money, in one breath: **users ride free**. Publishing costs a few hundred bytes of ledger receipt; reading the basics costs nothing and names nobody. The businesses that receive data flows pay for exactly the volume they choose, at rates that do not depend on how many others participate. Anyone can become a host, a distributor, or a re-broadcaster to an audience of their own, and payments between people ride the same rails the identities do.

Seven things this buys you

- **Privacy.** Reading is anonymous by design. The ledger shows a receipt, not your name, not your content, not even its size.
- **Trustworthiness.** Every answer carries its own proof. A wrong or tampered answer does not need to be suspected; it fails arithmetic.
- **Control.** You publish, correct and retract with a key you hold. Deletion stops being a customer-service ticket and becomes a mechanism.
- **Ownership.** Your identity is a key, not an account. There is no operator who can close it, rename it, or hold it hostage.
- **Accountability.** Actions leave provable trails that an auditor, a partner or a court can verify against public records, without asking anyone's permission, ours included.
- **Reach.** Publishing once reaches everyone who cares to listen, and your costs do not grow with your audience.
- **Opportunity.** Free users, paying flows, competing hosts and native payments make room for businesses at every layer, not just at the platform's throne.

What gets built on this

The first application is deliberately humble: bfinger, a little tool that answers "what does this name say about itself right now?" with an answer that proves itself. Four lines of output, every idea above visible in them. The same patterns then carry, unchanged, into bigger things: tamper-evident logs, message boxes, organizations whose membership actually revokes, secrets vaults whose hosts learn nothing. Each ships in its own time, on its own merits.

Where to look next

The rigorous version of everything here lives in the engineering papers at <https://1bsv.net/papers.html>, starting with the pattern paper for the bstack and the overlay object plane paper beneath it. The network is built and operated by Lightweb Inc. on open, published standards, and the application family grows in the open as each member ships.

Cash moves fast. Users always free. The rest is engineering, and we wrote it down.

1BSV - BSV Layered Multicast - cash moves fast on 1BSV. · 1bsv.net

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