

Engineering Value

A Design for How a Civic Commons Pays for Itself

Joe Hamilton, Cityverse. 2026-09-19. Version 9.2.

The financial lens on Engineering the Commons.

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The argument in ten sentences. Sources.

Abstract. Engineering the Commons said that a city's gathered attention was the product a newspaper sold, and that the gathering was worth more than the journalism cost to produce. Engineering Attention said what keeps people arriving once the gathering exists. Neither paper showed the money, which is what this one is for. It describes what a city costs to stand up, how its first year is funded, how its assembled attention turns into revenue, and how a set of instruments that each run at a loss can be operated together at a profit. The costs fall into two columns that behave differently over time: software that is built once and then deployed to each new city for almost nothing, and a local organization that is built again in every city, never spreads across them, and has its first year paid for by local investors who take a minority stake

in that city. The revenue comes in several families, and they switch on one after another as a city grows large enough to make each one worth running.

Part One

1. Pricing the gravity

Engineering the Commons and Engineering Attention each described a significant platform and argued that it pays for itself. This paper works through how, using a stylized city so the mechanics can be followed without pretending to forecast a real one.

The thing being priced is gravity, a city's attention gathered in one place in a form local parties can act on. It is an asset in the ordinary sense: it costs money to build and it converts to cash in known ways, and the whole question of whether a company can run this at a profit comes down to whether the second figure clears the first.

Nothing here is priced the way a software company prices a product, because the thing being sold is the attention an instrument gathers, not the instrument. That attention is worth more once it is attached to the next instrument than it was on its own. An accountant handed a single feature will price the feature and miss the asset, and most of what follows is an effort to keep the asset in view.

The stylized city has a quarter million people, one organization built to a fixed specification and one membership price. No real city matches it, and two real cities will not match each other. Its figures sit in two exhibits, in chapters 2 and 6, which are the only places the paper does arithmetic; the prose stays with the rules.

2. What it costs

The two costs behave differently over time, and the difference is most of the economics.

The platform and software are bought once, whatever the number of cities. The coaching software that a school uses to run its teams, the artist galleries, the Flow that decides what a resident sees, the classifieds, the fan bars, the payments ledger: each is engineered a single time and then deployed to the next city for a cost close to nothing. This is the ordinary economics of software, and it is the reason a company can consider running this design in more than one place at all. The build is heavy and it is paid in full before the first city earns a dollar. Every city after the first inherits it for the price of a deployment.

The organization is bought every time, because a city needs an operation of its own, staffed for that city, and that cost recurs with each new one and spreads to none of the others. Its parts are

in Exhibit 1. The newsroom is the one Commons described: three people producing local journalism on a daily cadence. The Cityverse staff runs the platform on the ground, with a director for each side of its users (the residents, called Cityzens once they join, and the creators who publish to them) and in time an administrator for sales and events. Creator support and marketing is the work of finding the city's doers and helping them build. Operations is everything else a local business needs to exist. Built to specification, a city runs on about a million dollars a year.

Exhibit 1. What a stylized city costs to run, per year.

	Catalyst newsroom	Partner newspaper
Newsroom (three journalists)	\$250K	Carried by the partner
Platform staff (Cityzen success, creator success, sales and events)	\$300K	\$300K
Creator support and marketing	\$250K	\$250K
Operations	\$200K	\$200K
Organization, total	\$1.0M	\$750K

A stylized city of a quarter million. The partner column shares news advertising with the partner and so earns less as well as costing less.

Where a city already has a newspaper and Cityverse partners with it, the newsroom cost comes off the top, because those three journalists are already paid for, while the Cityverse staff stays. The tradeoff sits on the other side of the ledger, because a news partner keeps its own share of its advertising, so the arrangement carries less cost and earns less revenue at the same time.

Commons named these two costs as one, and the shorthand it used is the line to correct here. It said exactly one link is bought and every link after it is free. The precise version is that the software is bought once and deployed for almost nothing, and the local organization is bought once per city and never amortizes. The software is a fixed cost carried by the whole network and spread thinner with each city added. The organization is a variable cost carried by the single city it serves.

That gives the design its unit of account. A city has to pay back its own organization out of the attention it gathers. The network carries the build, and its margin improves every time another city is added, because the heaviest cost is already paid and now divides across one more place.

A young city can still be losing money while the network as a whole is sound, so a reader who wants to know whether this works should ask at both levels.

3. Financing the build

A city's organization costs about a million dollars in its first year, and the city earns very little of that back while it is being stood up. Something has to cover the gap, and how it gets covered shapes the way the whole company scales.

Cityverse is built as a series LLC. Each city is its own LLC, and it begins wholly owned by the parent company. When a city is opened, the parent sells a minority piece of that city's LLC, a target of about ten percent, to people who live there. The raise runs on the order of five hundred thousand to a million dollars and covers the gap while the city gets established. At ten percent the buyers are strategic minority investors, not people who run anything.

This takes the cost of expansion off the parent's balance sheet, so how fast the company can grow is not governed by how much cash the center is holding. Each city is paid for by the people who will use it, before it has to earn. It also seats a group of invested local stakeholders in the city from the start. The company keeps ownership and control of the city and sells only a small stake, to people chosen for who they are in the city, so Cityverse arrives with local backers who have a reason to see it take root.

The parent holds the platform and the majority of every city's LLC, and the software it licenses to each city is the asset that compounds across all of them. A local investor is buying into one city, while the company is building the network those cities sit inside.

4. What makes a utility valuable

The products are the utilities: the classifieds where a city buys and sells, the galleries where it sees local art, the dating feature where residents meet, the fan bar a team runs for its fans, the ad inventory a business buys. These are the things people use and the things that earn.

Each of them is worth almost nothing empty. A classifieds section that nobody reads sells nothing, because a listing is only worth posting where buyers are, a dating product with a thin population is a product people leave, and a fan bar with no fans is a dead page. What makes any of them valuable is the attention around it, and attention is the thing this whole design exists to build.

Building the attention is the subject the earlier papers spent themselves on. Engineering Attention describes the Flow, the system that finds what a resident will care about and puts it in front of them, and the Flow is what builds the attention. The utilities are where the attention becomes money, and it helps to keep two groups of people separate.

The first group is readers, meaning anyone in the city who opens the news, browses the classifieds or the galleries, checks a listing or looks up an event. None of that requires an account or costs anything, and the size of this group is what most of the revenue depends on. Advertisers pay to reach it. Sellers pay to feature a listing or promote an event so that more eyes see what they are offering. And the readers themselves buy things: a painting from a gallery, a couch from the classifieds, a ticket to a show. Each of those sales carries a small commission, and the more people are browsing, the more sales there are. A city's advertising, its featured placements and its commissions all rise and fall with the number of people looking, and most of those people never pay the platform a cent directly.

The second group is Cityzens, the residents who pay seven dollars a month. The membership buys the ability to participate: to post to the classifieds, to open a gallery and sell from it, to hold a fan bar and a Homespace, to publish. There is no separate charge for any of those tools. When a Cityzen sells through the platform, a small commission comes off the sale, the same commission a reader's purchase generates, so a member's only cost beyond the monthly fee is a small slice of money they have already made. Members supply what is for sale, and readers supply the buyers, and the fee is collected where the two meet.

This is why the value of any instrument cannot be read off the instrument. A classifieds product built by a company with no audience is a weak business, and several exist. Put the same product inside a city where the attention is already assembled and it is a strong one, with nothing about the code changed. The difference is the attention flowing through it.

This gets more true as software gets cheaper to build. When it took a large team a year to build a listings marketplace, the software itself was a real barrier and a real asset. As AI drives the cost of building it toward zero, anyone can stand up a Zillow, and the code stops being what separates a winner from an also-ran. Attention is what separates them, and attention is the one input that does not commoditize. The advantage moves to whoever assembles it.

5. The snowball

The attention a city gathers builds on itself, and several parts of the design are shaped to speed that up.

It starts with a fact no other social platform can claim. Cityverse makes content of its own, and content is what turns the wheel on the first day. A new platform's hardest problem is that it is empty, and an empty social product gives no one a reason to arrive. A platform that publishes the news of the city has a reason on day one, before a single resident has posted anything. The cold start is solved by production, and production is infrastructure like any other.

From there the wheel turns by attaching. Each new instrument and each new kind of content rides along with the content people already want. The best of it joins the set of things people

come for, and that set is now larger than it was, which makes the next instrument easier to attach than the last.

Take the person who runs a local birdwatching club, who today keeps a mailing list and little else. Cityverse gives her a room for the club, the Createspace, and the affinity bar, here configured as a 'birder bar'. Birders attach the birder bar to their Homespaces, the page every member has. She builds the bar up with challenges and gamification and other fun elements because it makes her club better run and more interesting to belong to. When her club is better the platform has gained a reason for a few hundred more people to pay attention. Her success is the platform's, and the platform never had to imagine a birding club or the birder bar. It gave her the tools and the audience and stayed out of the way.

Several parts of the design are built to make that spread faster, and the clubhouse from Engineering Attention is the clearest of them. A team runs a live event with its players, and the fans who hold that team's fan bar, another variation of the affinity bar, get to take part up front, while everyone else watches from the back. The people in the back see what the fan bar gets them, and go get one of their own. The same pull works through Cityzens: when a Cityzen puts an affinity bar on their Homepage, everyone in their network sees it, and some share of them join. That is because the real draw of most clubs is not the specialist subject. It is belonging, the friendships already there, the thrill of the chase, time spent outdoors. The average person might get as much from the birding club as from the snorkeling club, for those reasons and not the birds. Each affinity bar on a page advertises its subject to a whole network, each new member adds another page doing the same, and the loop feeds itself, so the snowball grows faster than it would if the platform sat back and waited for people to find things on their own.

The growth clears a series of hurdles, and each one is an incentive. A person who will not bring their work to an audience of ten thousand will bring it to fifty thousand. A business that will not build a presence for a small room will build one for a large one. Every increase in size crosses a threshold that pulls in a cohort that would not have moved for the smaller number, and that cohort adds the content and activity that carry the platform to the next threshold. The same growth switches on revenue, because a marketplace needs a certain liquidity before its fees matter and an ad system needs a certain density before a business will buy. Growth and revenue clear their hurdles on the same ladder.

The beauty of the design is that success does not depend on any particular group, or on any particular tool working in any particular city. The whole library of utilities is available in every city, and a city's own doers reach for whatever serves them. A tool does not have to earn its place city by city. It has to earn its place across the network, and a tool that finds no use in one city can be the backbone of another. The design wants the church, the yoga teacher and the ball team to all find a reason to take part, and it does not need any specific one of them in any specific city. It needs some of them, everywhere, and it needs the number to keep climbing. A city that starts with its artists and one that starts with its team reach the same place by different

first steps. No single kind of participant is load-bearing, which is what lets the model run in cities that share almost nothing.

6. When the money closes

Commons described how value moves through a chain: a producer makes something it cannot sell, a middle step changes its form, and a captor at the end turns it into money and pays the producer back. Commons gave a test for whether such a chain was worth building. This paper needs the money version of that test, because a chain can run and still not pay.

The question is whether a city's gathered attention throws off enough revenue to cover the organization that gathers it, plus that city's share of the build. Below that line a city is a subsidy no matter how much activity it shows. Above it the city funds itself and begins to contribute to the network. The line is the thing to watch, and it moves as the city grows, because the revenue families switch on in sequence while the organization's cost holds roughly flat.

The accounting has to be done at the right level or it gives the wrong answer. Costs land on an instrument and on the city, while revenue lands across the network, and the coaching software shows what that does to a ledger. Cityverse gives a high school free software to run its teams' plays, statistics and schedules. The school pays nothing, and the software earns nothing on its own line. The data from that software, the scores entered in real time, are converted to reporting and distributed as content through Cityverse. That chain brings the school, its athletes, and several hundred parents into the city's attention, and that attention pays out through advertising, memberships and fees that sit on entirely different lines. Read the software on its own books and it is pure cost, and the instinct is to cut it. The cut improves one line on the page and removes the attention that several other lines were living on. So no instrument here is judged on its own ledger. The ledger that tells the truth is the city's, and above that, the network's. The snowball grows here too as strong story lines emerge and some of the attention lost to national platforms finds its way back to the team, drawing more people into the stands.

Exhibit 2 puts the line in view for the stylized city, using the two groups from chapter 4. A Cityzen is worth about a hundred dollars a year across the membership (seven dollars a month, close to seventy-eight dollars a year after card processing), the creator and organization tools, the treasury and the fan goods. A reader is worth something over ten dollars a year in advertising, featured placement and commissions, and the stylized city assumes ten readers for every Cityzen. Set against an organization of a million dollars, the city covers its own organization at roughly four thousand Cityzens and the readers who arrive alongside them, under two percent of the population. At the target of ten thousand Cityzens, four percent of the city, the surplus is larger than the organization costs. The design does not have to win a city to pay for itself; it needs a few thousand people who find the membership worth seven dollars a month, plus the far larger number who read for free, and it earns the rest on top of them.

Exhibit 2. Where the line sits.

A. One stylized city of a quarter million, organization at \$1.0M a year.

	Stylized city
Cityzens (paying members)	10,000, 4% of the city
Readers (Cityzens plus non-paying)	10 per Cityzen, 100,000, 40% of the city
Revenue per Cityzen per year (membership, tools, treasury, fan goods)	about \$105
Revenue per reader per year (advertising, placement, commissions)	about \$14
City revenue	about \$2.4M
Organization cost	\$1.0M
Cityzens needed to cover the organization, with their readers	about 4,100, under 2% of the city

B. The network, with every city built to the same specification.

	1 city	5 cities	10 cities
Cityzens per city	8,000	11,000	14,000
Revenue per city	\$2.1M	\$3.5M	\$5.1M
Organization cost per city	\$1.0M	\$1.0M	\$1.0M
City surplus after its organization	\$1.1M	\$2.5M	\$4.1M
Platform cost, whole network	\$1.5M	\$3.0M	\$4.5M
Platform cost per city	\$1.5M	\$0.6M	\$0.45M
Network net	(\$0.4M)	\$9.5M	\$36.3M

Revenue per city is the sum of the five families described in Part Two: membership and what it enables, advertising and placement, fees and commissions, treasury, and fan goods. The

reader multiple in Panel A is an assumption, and the per-reader figure moves with it. Platform cost is the software build, the central team and headquarters. Figures are rounded and describe identical cities at one specification. They illustrate the mechanics and are not a forecast for any city.

Panel B shows the two ledgers at once. Every city in it covers its own organization with room to spare. The network as a whole loses money with one city, because one city is carrying the entire build, and turns to profit as cities are added and the build divides among them. That is the shape the whole design is built to produce, and it is the reason the question in chapter 2 has to be asked at both levels.

Part Two

7. Selling what gravity enables

Start with the family that matters most, because it is the one that could not exist anywhere else. These are the lines that only work because a large number of local people are already in one place. Assemble the attention first and they open up.

The membership is the anchor. A resident pays a few dollars a month, on the order of seven, to be a full participant in the city: a Homespace, all the publishing and monetization tools on the platform, the classifieds, dating, discounts with local businesses, and the standing a visitor does not have. The content itself stays open to everyone, because a fence around it would shrink the assembly and the assembly is the product. What the membership sells is standing in the city, the difference between passing through and belonging.

The membership's power is the size of the pile it puts behind one price, and that pile keeps growing, in the way Amazon Prime's does. A Prime member pays once and gets shipping, then video streaming, then discounts at Whole Foods, then no-fee food delivery, more of it every year, all behind the single decision to join. The value a member sees climbs while the price holds, and Cityverse works the same way: every new tool and feature the platform builds falls inside the one membership, so a Cityzen watches the pile of what they already pay for grow month after month. That growing pile is what makes the membership worth keeping and easy to join.

Transaction fees are the second piece, and the plainest form of the value proposition. The art marketplace, the classifieds and ticketing each take a small percentage of a sale. Cityverse gives a Cityzen the shop and the tools to sell, and then delivers the customers to it out of the attention the platform has already gathered. Only when a sale actually happens does the platform take a small fee. The seller gets the storefront and the traffic for nothing and pays only on money that changed hands.

Affiliate commissions are the third. When the platform sends a resident to a purchase somewhere else and earns a cut, it is being paid again for the attention it holds and can point. None of these could be sold by a company that had to gather the audience fresh for each sale. Here the audience is already standing there, and reaching it costs nothing, because everything else in the design brought it in.

8. Selling the gravity directly

The oldest way to sell attention is to sell it as attention, and it still works: a local business buys access to the assembly the way it once bought a half page in the paper, with two things better than they were in print.

The buying is self-serve. A restaurant owner can run a campaign at eleven at night without calling a sales rep, which is the mechanism that first opened advertising to the smallest businesses. And everyone on both sides is a verified local, which strips out the abuses that made platform advertising miserable for small operators: clicks from bot farms, competition from out-of-region knockoffs, suspensions handed down by a distant staff nobody can reach. A business here is buying the attention of people who live within a few miles and can walk in the door.

The inventory comes in three kinds. The newsroom's own inventory is the advertising sold against its site and its daily edition, the direct descendant of the half page, and where the newsroom is a partner that inventory stays largely the partner's. Platform display is the advertising that runs inside the Flow itself, across everything the platform shows, and because the Flow reaches the whole city it should in time exceed the newsroom's inventory by a wide margin. Boosting is the third: the classifieds, the real estate listings, the art and the events calendar are free to post to, and a seller who wants to rise above the rest can pay to feature a listing or promote an event. Larger regional sponsorships, a bank across several cities for instance, sit in the same kind. Boosting is priced the ordinary way, because the free tier is what assembles the sellers and the paid tier is a convenience on top of an audience that already exists.

Larger organizations that keep their own ad staff get the tools to sell their own inventory. A team, a venue, a newsroom with a sales desk already has relationships. Handing them the instrument earns more than competing with them would, and serves them better.

One rule protects all of this, and it is stated plainly so it can be held to. An ad or a boosted listing sits in its own fixed, disclosed slot on a set cadence, kept separate from the organic Flow. Inside those slots the ads are still tailored to the viewer, because a person should see the ads most relevant to them. What paid placement never does is buy its way into the organic ranking. The Flow that decides what a resident sees is ranked on whether people found things worth their time, and money cannot move an item up it. Keeping the two apart is what lets the platform promise the Flow is not for sale and mean it.

9. The currency

Cash is the base rail, meaning anything for sale on the platform can be bought with dollars and the currency is never a gate a resident has to pass to spend. On top of cash the platform runs its own currency, called Fluents, an additional way to pay for some things and the rail that makes creator earning work. Now and then the platform may make a single item buyable only with Fluents, purely to give people a reason to buy them, but that is the exception, and everywhere else dollars work.

Fluents are the most carefully built of the revenue families, because their shape is what keeps the company out of a business it does not want to be in. A buyer pays dollars and receives Fluents, which are a limited license to spend on the platform and nothing more. A creator who earns Fluents can convert an earned balance back to dollars through a licensed payments partner. The fee the platform takes is the mint spread, the gap between what a buyer pays per Fluent and the fixed, published rate at which a creator's earned balance converts back to cash. Twitch runs this exactly, with a viewer paying a little more per Bit than the creator receives. The creator-facing rate is one number, stated in one sentence, because a creator who cannot say what they earn will not trust the platform they are earning on.

The instrument is deliberately one-way: a buyer can put money in and spend it, and can never take money back out. Only balances a creator has earned have a path to dollars, and balances that were purchased never leave the system as cash for anyone, which is a property of the ledger's structure and not a policy enforced case by case. The reason for the care is specific: a currency that converts in both directions turns its operator into a money transmitter, with the licenses, the lockups and the compliance function that come with that, and every comparable platform, Roblox, Twitch and Second Life among them, avoids all of it by keeping the loop closed and one-way.

Cityverse sells its own goods at full margin, for cash or Fluents, because there is no creator on the other side of those sales to pay. Third-party merchants who sell real goods do not take Fluents at all; that commerce runs on ordinary card rails with the merchant as merchant of record and the platform taking a percentage, which keeps the tax and licensing weight of real-world goods away from the Fluent ledger. And the float, the pool of purchased Fluents sitting unspent, is the platform's own money from the moment of sale and earns a little while it waits. The float is working capital and a small amount at plausible balances. It is never a pillar of the plan, and it is never spent on what the platform owes creators. Together the spread and the float are the treasury line in Exhibit 2.

10. Selling to the fans gravity creates

The platform manufactures fans, and fans buy things, so the affinity bars described in chapter 5, the strips of tools a resident attaches to a Homespace around a team, a congregation, a club, a

side business, matter to the money as well: they turn a passive audience into people with an identity on the platform, and an identity wants to be furnished.

The first line is the platform's own goods. A resident can decorate a Homespace or a personal DASH and buy upgrades, frames and access, all delivered by Cityverse so the whole price is margin, and all payable with cash or with Fluents. These are small purchases and there are a great many of them, which is the shape of every successful platform that sells cosmetics.

The second line is the goods that belong to the fandom itself. Merchandise, collectibles, jerseys, the things a supporter buys to show what they support. Because the fan bars already gather the fans and mark who they are, the platform is selling into a room full of self-identified buyers instead of hunting for them. Gaming leagues sit here too, a way to turn the followers of a team or a game into recurring events with goods attached.

The rule that governs standing in Engineering Attention governs the money here, which is that paid standing is kept separate from earned. A person can buy decorations and merchandise all day and none of it moves them up the ladder of standing the platform confers for real participation. Sponsors can fund a recognition and name it, and they can never hand one out. The airlines put paid status and earned status on one ladder and spent a decade accused of selling the ladder. This design keeps the two apart on purpose, so the belonging a fan can buy and the standing a resident earns are never confused for each other.

11. Data as trade

The platform sits on a record of a city that exists nowhere else: what local people, verified as real and local, actually respond to, and where local money actually moves. That record has value, and the design treats it with restraint, because it is the one asset that can do the most damage if it is sold badly.

The record is held as leverage and never sold as a product. Engineering the Commons described the valve on what leaves the platform for outside answer engines, a setting that can run from wide open to closed, held so the platform has something to bargain with when the terms of that exchange change. The same posture applies to the data at large. What the platform will do is trade it, in specific bounded arrangements, for something the city gets back.

The clearest case is the arrangement with the St. Petersburg Foundation, a single defined trade of civic data for a civic return, done in the open and scoped to what it is for. That is the model for any data arrangement the platform enters: named, bounded and reciprocal, never a pipe selling residents' behavior to whoever will pay.

The payments layer feeds a version of this that is safe by construction. Every transaction contributes a record of local economic activity to the city's knowledge layer, carrying the city, the type of activity, an amount band and a rough location, and never an individual identity tied to an

individual amount. A reader of that record can see where a city's money moves, and no reader can reconstruct what any one person spent. That is a genuine piece of civic intelligence and it costs no one their privacy, which is the only form in which this data is worth having.

The civic language model is the larger version of the same idea and it has its own paper. It is named here only to place it. The model layer is where a city's own record becomes a tool the city can use, and the terms on which it is built and shared are a subject in their own right, not a revenue line to be booked here.

12. What this does not solve

The floor

Suppose the ambitious version does not arrive, the memberships stay thin, the marketplaces stay quiet, and the currency never turns into a habit. What is left is a modern local news operation with an audience and an advertising business attached, run more efficiently than a newspaper could and earning in ways a newspaper never had. That is a real business, the one that funded American cities' information for a century, and it is profitable at a size a mid-sized city can support. It is smaller than what this paper describes and it is not a failure.

The limits

The per-city organization never gets cheaper. The software spreads across the network and the organization does not. Every new city is a real local cost that its own attention has to cover, and a city that never gets there does not work, whatever the network is doing around it.

Dead utility is a cost, not a neutral. The whole library of tools is available in every city, and a tool sitting unused is not harmless. An empty room signals deadness to everyone who passes it, and deadness spreads. The freedom to offer everything carries a duty to prune or hide what a city has not taken up, because leaving failures on display teaches residents that the place is quiet.

The revenue families are unproven at small scale. Each one switches on only above a certain size, and until a city reaches that size the family earns little and the accounting looks worse than the design says it ends up. A reader should expect the early numbers in any city to lag the model, and should not mistake the lag for the ceiling.

The Fluent currency may not take. People may not buy Fluents, or may spend a balance the moment they load it and never hold one. Cash covers every purchase regardless, so the platform loses no sale, but it loses the mint spread and the float that Fluents were meant to add. If that happens the answer is to lean on the cash rail and let the Fluent layer stay small.

The closed loop has to be defended. A one-way currency erodes into a two-way one the moment a resale market appears for it, and a two-way currency is the regulated business the design is built to avoid. Holding the loop closed is ongoing work, not a setting flipped once.

The app stores are a standing tax. Selling the currency inside a mobile app invites a store commission that dwarfs every other economic decision in the design, which is why Fluents sell on the web at launch. The rules that make that viable are the platforms' rules, and they change.

What would prove this wrong

A design should say what evidence would count against it. This one makes four predictions that can be checked once a city has run long enough to matter.

A free instrument that is later priced should lose most of its adoption, and the loss should show up downstream in coverage, attention and revenue. If a priced instrument keeps its adoption, then pricing was not costing the assembly the way this paper claims.

Each revenue family should switch on near the size this paper predicts for it. If advertising or the marketplaces or the currency earn well at a small size, or fail to earn well past the size where they should, the hurdle model is wrong.

Blended margin should improve with each city added, because the build is already paid and now spreads over one more place. If adding cities does not improve network margin, the software is not the shared asset the design claims.

A mature city should cover its own organization out of its own attention. If a city that has run for years, with the families switched on, still cannot pay for its own operation, then the city is the wrong unit and the design rests on a boundary that does not hold.

The argument in ten sentences

Each sentence is defended in the chapter it names, and a reader who remembers only these has the paper.

1. Gravity is an asset with a cost to build and known ways to convert, and whether a company can run it comes down to whether the second figure clears the first. (Chapter 1)
2. The software is bought once and deployed for almost nothing. The local organization is bought again in every city and never amortizes. (Chapter 2)
3. A city's first year is funded by a minority stake sold to local investors, which pays for expansion and seats aligned stakeholders in the city. (Chapter 3)
4. The products are the utilities, and what makes a utility valuable is the attention around it, which only matters more as software gets cheap to build. (Chapter 4)

5. The attention compounds, and the design is built to speed it, so the snowball grows faster than waiting would. (Chapter 5)
6. No instrument is judged on its own ledger, because the ledger that tells the truth is the city's, and above that, the network's. A city breaks even on a small slice of its population, and the network turns to profit as cities are added. (Chapter 6)
7. The lines that pay best are the ones that only work because the crowd is already there, and the membership sells a pile of value that keeps growing behind one price. (Chapter 7)
8. Attention is sold directly as advertising and placement, and paid placement never buys its way into the organic Flow. (Chapter 8)
9. Cash buys everything, and the Fluent currency layered on top earns on the mint spread while staying one-way and closed, because two-way convertibility is the regulated business to avoid. (Chapter 9)
10. Fans buy belonging, data is traded and never sold, and what a resident can buy is never the standing a resident has to earn. (Chapters 10 and 11)

Sources

Companion documents. Hamilton, Engineering the Commons and Engineering Attention, Cityverse, 2026, which carry the gravity, chain and behavioral arguments this paper prices.

The stylized figures in Exhibits 1 and 2 are drawn from Cityverse's internal mid-case projection (September 2026), rounded and reduced to the family level. The projection is a working model and is revised as cities are opened; the exhibits describe its shape and are not a forecast for any city.

External comparables named in the text, listed here for confirmation before publication: Amazon Prime for the bundle effect, Twitch Bits for the mint spread, and the closed-loop, one-way currencies run by Roblox, Twitch and Second Life. Company documents describing Cityverse's own design, including the Payments specification, are not cited; the design is described as it is.