

Equity Follows Demand

Suppliers are giving customers stock that only vests if the customer keeps buying. History suggests the schedule mostly follows demand the customer already had, and when the arrangement disappoints, the supplier is often the one that gives something up.

What is happening

Qualcomm and Marvell are paying their biggest customers in their own stock

In August and September 2026, Marvell gave Google a warrant on 58,970,907 shares and Qualcomm gave Amazon a warrant on 25,000,000 shares. In both cases the shares only vest as the customer buys. Marvell's vest in 240 tranches, one for every \$500 million of revenue. Qualcomm's vest against purchases running up to \$60 billion.

At first glance that looks like a supplier buying a customer's commitment. The historical record points somewhere narrower.

The structure is not new. Plug Power, Symbotic, ARRIS, Marqeta, Credo and Astera Labs have all run a version of it since 2016, and one of them ran the same instrument twice with two different buyers in the same year. Watching what those buyers actually did, rather than what the announcements said, gives a fairly clear picture of what this instrument buys and what it does not.

PastBehavior Fieldwork 0521
The clearest thing in the study

Plug Power ran the same experiment twice, with two different buyers

In 2017 Plug Power issued warrants to Amazon in April and to Walmart in July. The instruments were essentially identical. Both covered up to 55,286,696 shares. Both vested against payments of up to \$600 million. Both moved in \$50 million increments.

Amazon reached the \$200 million mark in about 3.4 years

By the third quarter of 2020 Amazon had nearly completed the payments required for the second tranche.

Delaware Court of Chancery, and Plug Power filings

Walmart took about 6.3 years to reach the same mark

Walmart's second tranche did not reach final vesting until 30 October 2023.

Plug Power quarterly filings

The incentive was held constant. The supplier was the same, the schedule was the same, the increments were the same. Only the buyer changed, and the buyers differed by a factor of two in how fast they got there.

What differed was each buyer's own programme. Amazon was electrifying warehouse fleets at pace. Walmart was moving more slowly through the same category.

Same incentive, radically different purchasing speeds. Whatever the equity did, the buyer's own demand mattered more.

PastBehavior Fieldwork 0522
Where else this showed up

This is not just Plug Power

Symbotic and Walmart²⁰²¹

Walmart's remaining warrant units vested in May 2022 and it exercised for \$104.0 million. Symbotic's revenue then grew 26 percent in fiscal 2025 and its backlog reached roughly \$22.5 billion, three years after the last unit vested. What holds that relationship is 42 integrated distribution centre deployments, a Walmart-funded development programme, and a business line Symbotic bought from Walmart in January 2025. Not the warrant.

Symbotic annual filings
Credo and Amazon²⁰²¹

Credo issued Amazon a warrant against payments of up to \$201.0 million in December 2021. Fourteen months later, 80,000 of 4,080,000 shares had vested. Amazon then became a very large share of Credo's revenue during fiscal 2025. The timing is more consistent with the later demand cycle than with the warrant itself.

Credo quarterly filings. The fiscal 2025 share is analyst reporting, not a filed figure
Astera Labs and Amazon2022, amended 2023

Two warrants against tranches of payments, with 1,165,513 shares vested by December 2025 and none exercised. Vesting is still running, so this one cannot yet be tested for what happens after the equity stops being earnable.

Astera Labs quarterly filings
Marqeta and Block2020 and 2021

Marqeta had been running Block's Cash App and Square Debit Card programmes since April 2016. Block was already the dominant customer five years before the warrant existed. Roughly 1.3 million of the roughly 1.9 million issued shares had vested when both windows closed in 2025, so about a third of the programme lapsed.

Marqeta annual and quarterly filings
PastBehavior Fieldwork 0523
The counterexample

Two of the most capable buyers in cable left the equity on the table

ARRIS granted Comcast a warrant in June 2016 for up to 8 million shares and Charter a warrant in September 2016 for up to 6 million, both vesting in annual tranches tied to purchases. Vesting above a floor in each year required increased purchases and a set share of those purchases in one ARRIS segment.

84.3% Of available equity never earned
1.12% Implied incentive cost, as a share of 2016 purchases
0.58% Realized value to the buyers, same basis

Roughly 2.2 million of 14 million shares vested, all of them on 2016 purchases. Nothing vested in 2017 or 2018. Over the same stretch Comcast's purchases from ARRIS fell 32.0 percent from the 2016 level and Charter's fell 12.8 percent. The warrants were terminated and cashed out in April 2019 when CommScope acquired the company.

Two things to hold in mind when reading those numbers. ARRIS bought Pace in 2016 and its total sales jumped 42 percent that year, so the rise in 2016 buying is not evidence the warrant worked. And ARRIS never said how the 2.2 million shares split between the two buyers, so we know the total earned but not who earned it.

In the ARRIS case, an incentive around one percent of associated purchases was not enough to overcome the buyers' declining purchasing cycle.

PastBehavior Fieldwork 0524
The rule underneath

The equity appears to follow the buyer's demand rather than create it

Across the historical examples, the vesting schedule mostly recorded what the buyer's own programme was already doing.

Where the buyer had a live programme

The equity vested and the arrangement looked effective. Amazon was electrifying warehouses. Walmart was automating distribution. Block was issuing cards at scale.

We cannot tell whether the equity added some extra purchasing on top of that.

Where the buyer's spending cycle turned down

The equity went unearned regardless of how much was on the table. Comcast and Charter walked away from more than four fifths of the shares available to them.

Credo makes the same point from the other direction. The same warrant sat almost entirely unvested for three years, then vested quickly when an unrelated demand shock arrived.

The two clearest priced cases suggest size affects whether the incentive is worth taking. ARRIS's incentive was about 1 percent of purchases and mostly went unearned. Plug's was roughly 210 percent of associated purchases and was fully earned after Plug waived the remaining conditions. Neither establishes that the incentive created purchasing that would not otherwise have happened.

The evidence suggests the buyer's own programme matters more than the equity incentive. We cannot tell whether the equity added some extra purchasing. We can tell that it did not override the buyer's underlying demand cycle.

PastBehavior Fieldwork 0525
What happens when the deal disappoints

The supplier is usually the one that moves

Plug Power^{2020 and 2022}

Its board authorized management to negotiate acceleration with Amazon, recording that it would cause a substantial charge. On 31 December 2020 Plug waived all remaining vesting conditions. The warrant charge for the year was \$420.0 million and Plug reported negative consolidated revenue of \$93.2 million. Twenty months later it issued Amazon a second and larger warrant, on 16,000,000 shares against \$2.1 billion of spend.

Marqeta²⁰²³

It renewed with Block on terms that allowed reduced pricing and made Block responsible for managing the Cash App programme with respect to the primary card network. Marqeta's net revenue fell 25 percent the following year, primarily driven by that amendment.

Symbotic²⁰²⁵

It bought a business line from its own customer and signed a new master automation agreement.

ARRIS²⁰¹⁹

It terminated the warrants inside its own sale.

Across these historical examples, when the economics disappointed, the supplier was the side that changed the deal. In none of them did the buyer give anything back.

That does not mean the equity caused the supplier's weaker position. In several cases the supplier was already highly dependent on the customer before the equity was issued.

PastBehavior Fieldwork 0526

The catch

The equity may be following weak bargaining power too

The customer equity does not appear to create demand on its own. But there is another problem with the historical record: many of these suppliers were already dependent on the customer before they offered the equity.

Symbotic was already heavily tied to Walmart. Marqeta had been running Cash App for years before Block received a warrant. Plug was already concentrated in a small number of customers.

That means the equity may be less a cause of supplier dependence than a sign that the supplier needed the customer badly enough to offer it in the first place.

The useful conclusion is narrower.

Equity appears better at pricing demand a customer already controls than creating demand that was not already there.

PastBehavior Fieldwork 0527

What to do about it

Three decisions, depending on which side of the table you sit

If you are the supplier

- Price the incentive against the buyer's decision, not against your own willingness to issue equity.
- Calculate its value as a percentage of the purchasing it is attached to.
- Compare that number with the gross profit on those purchases.
- Assume the incentive may follow the buyer's programme rather than accelerate it, and forecast accordingly.
- Decide in advance what happens if the purchasing thresholds are missed. In these examples that is the moment the supplier ends up conceding.

If you are the buyer

- Treat it as a discount denominated in someone else's stock, and value it that way.
- Understand exactly what behavior earns it. The ARRIS warrants required a mix shift as well as more volume, which made the hurdle harder than the headline.
- Do not let the incentive distort purchases your own business does not need.

If you are advising either side

- Calculate what the incentive is actually worth before discussing whether it is a good idea.
- The supplier's filings often show what the incentive actually cost the business. Use that figure where it exists.
- Keep the supplier's commercial cost separate from later stock appreciation. Mixing the two flatters the arrangement.

If this customer's own programme paused tomorrow, would the incentive change their spending?

When this arrangement disappoints, who is expected to move?

In none of these examples could we establish that the incentive changed what the buyer otherwise would have purchased. On the second question, it was the supplier every time.

PastBehavior Fieldwork 0528

The one unresolved question

Qualcomm and Marvell are the test, and it has not run yet

The historical examples mostly involved very large buyers dealing with smaller or highly concentrated suppliers. Qualcomm and Marvell are different. They are much larger suppliers with more bargaining power.

That gives us a useful test.

If the old pattern was mostly about weak suppliers rather than the equity itself, Qualcomm and Marvell should stay much less dependent on Amazon and Google.

Supplier stays independent

Supports the prediction.
The old pattern was about
weak suppliers, not the equity.

Supplier starts conceding

Proves us wrong.
The equity itself is
doing the work.

Neither outcome is known. The arrangements were struck in August and September 2026.

What would support that prediction

- Amazon and Google stay normal-sized customers relative to the rest of the business.
- No dedicated capacity or unusual customer-specific investment.
- No major waiver or acceleration of the warrant.
- Purchasing follows the customer's own spending cycle.
- Renewal economics stay balanced.

What would prove us wrong

- Amazon or Google becomes a major concentration risk.
- The supplier builds capacity that is hard to use elsewhere.
- The supplier waives or reprices the vesting terms.
- A second, larger warrant is issued.
- Pricing moves materially toward the customer.

One difference is worth noting now. Amazon and Google also have to pay real money to exercise these warrants, at \$161.26 and \$206.58 a share. Most of the historical examples were priced at a token amount or a deep discount. That makes these two less generous than what came before.

The historical record does not show equity creating demand on its own. It shows suppliers attaching equity to demand the customer already controls. The next test is whether that changes when the supplier has more bargaining power.

PastBehavior Fieldwork 0529

Research notes

How the study was run, for readers who want it

This section explains how the work was tested for readers who want to go deeper. Nothing in it is needed to use the findings above.

How the study was built and tested

PastBehavior Fieldwork 05210

Classifications

Empirical verdict PLAUSIBLE BUT UNPROVEN, on the registered primary mechanism of reverse dependence. Portfolio contribution NEW EVIDENCE, downgraded after completion from NEW MECHANISM because attribution succeeded in only one independent case of four.

Plug Power
What was examined

• [Annual report 2018, Walmart warrant tranche structure](#)
The study examined four independent adoptions of supplier equity vesting on a buyer's own commercial activity: Amazon, Walmart, the ARRIS cable programme covering Comcast and Charter, and the Marqeta customer programme. Independence was defined as an independent commercial adoption of the mechanism, so buyers receiving substantially the same instrument from one supplier during one contracting programme count as one case with internal replications.
• [Annual report 2020, waiver and negative consolidated revenue](#)
• [Annual report 2021, Amazon at 40.8 percent of revenue](#)
• [Annual report 2022, Amazon at 13.0 percent of revenue](#)
• [Annual report 2023, the 2022 Amazon transaction agreement](#)
• [Annual report 2024, second warrant vesting and provisions](#)
The cohort was closed before the fieldwork ran, and ARRIS was designated the counterexample in advance. Instruments vesting on time, on deployment milestones, or on conditions that a supplier share price could independently block were excluded. Primary sources were preferred throughout. Findings and exhibits, warrant and commercial agreements, investor relations material, and court records.
• [Annual report 2025, Walmart at 24.2 percent of revenue](#)
• [2022 Amazon warrant announcement](#)
• [In re Plug Power Inc. Stockholder Derivative Litigation, Delaware Court of Chancery](#)

Verdict thresholds were fixed before coding and applied mechanically to the coded evidence before any narrative was written.

Symbotic

The five registered mechanisms

• [Annual report 2025, backlog and the 2025 Walmart agreement](#)
• [Annual financial statements 2023, customer concentration](#)
Registered for the fieldwork run, and the evidence was mutually exclusive where the evidence supported more than one.
• [Acquisition of Walmart's Advanced Systems and Robotics business](#)

Mechanism	Amazon	Walmart	ARRIS	Marqeta
ARRIS incremental demand	UNRESOLVED	UNRESOLVED	NO	UNRESOLVED
Expensive rebate	YES	UNRESOLVED	YES	UNRESOLVED
Temporary lock	YES	NO	NO	UNRESOLVED
Operational lock-in	NO	YES	NO	YES
Marqeta Reverse dependence	YES	YES on measures, attribution UNRESOLVED	NO	YES on measures, attribution UNRESOLVED

• [Annual report 2025, warrant note and the Block agreement](#)
Scroll [Quarterly report, September 2021, case 2020 warrant terms](#)
• [Quarterly report, June 2023, vested warrants and fair values](#)

Attribution and the case-by-case record
Other suppliers examined

The attribution rule required that timing and contractual structure connect a dependence shift to the instrument. Concentration on its own was ruled out as [Evidence of the work the gap, January 2023](#) moved Walmart and Marqeta to unresolved.

• Astera Labs warrant note, March 2025 • Air Transport Services Group Amazonpndence with the SEC • Atlas Air Worldwide proxy statement, 2016		Walmart	ARRIS cable	Marqeta
Buyer importance before issuance	Large. Two customers at 66.8 percent combined in 2018	Symbotic already 66.9 percent	Comcast 21 percent, Charter 20 percent	Block dominant since 2016
Prospective cases Incentive cost	About 210 percent of associated purchases	Not comparable. Booked as share-based expense	1.12 percent of associated purchases	Under 1 percent of associated revenue
Activity during vesting	Qualcomm current report, September 2026. Warrant on 25,000,000 shares at \$161.26. Marvell Technology Rose, \$200m in 6.3 years on identical terms	Warrant on 58,970,907 shares at \$206.58.	Fell in both threshold years	Unresolved at buyer level
Past Behavior Fieldwork 05211	100 percent, by waiver	100 percent Symbotic. About 68 percent Plug by 2024	15.7 percent	About 68 percent of the programme
Post-incentive persistence	052. Evidence to 9 September 2026. Empirical verdict PLAUSIBLE BUT UNPROVEN. Portfolio contribution NEW EVIDENCE. Claims are stated at the strength the evidence supports and no further. Where the record is silent, this briefing says so rather than filling the gap.	Rose	Not applicable	Unresolved
Concentration, before to after	40.8 percent peak, then 13.0 percent	66.9 percent, peak 94.4, then 84 plus percent	24.0 and 15.6, then 16.5 and 13.8	68 percent, then 45 percent
Customer-specific	Registration working title: <i>When the Customer Owns a Piece of the Supplier</i> . Retained as historical metadata. Hydrogen supply commitment 42 distribution centre deployments			