In a "vampire attack," a platform tries to directly incentivize its competitor's customers to switch. This isn't a new idea — airlines have had "status match" for ages — but it's much easier in the world of crypto, where transactions are stored publicly on blockchains. With public transaction histories, a new entrant can just simply read its competitors' transaction records and provide direct rewards or other incentives to top customers who switch.

What does this mean for consumers? The short version is that vampire attacks can result in virtuous platform competition that drives down prices. In short, "blood-sucking platform competition" can be good for consumers.

To arrive at this conclusion, in a <u>new paper</u>, we built a simple model in which platforms have some customers who are "captive," and others who are mobile across platforms — and price-sensitive. In the real world, customers might be captive because of, for instance, search costs or lack of information about alternatives.

When platforms are only able to offer a single price to both types of consumers, the price curve declines in the share of the market that's mobile, denoted by λ in the figure below. This makes sense, since the more of those consumers there are, the more firms want to compete for them.

Next, we consider what happens when firms introduce loyalty programs as a way of convincing mobile customers to stay put. Consumers who are part of a platform's loyalty program receive a discount at that platform but have to pay the standard price at a competitor's.

It turns out that loyalty programs are actually bad for all consumers — even the ones who get the discount. Why? First, firms now charge their captive consumers more, since they can protect their mobile consumers with a loyalty program. The resulting captive consumer price is the dashed green line in the figure below.

But if the platforms are monopolizing their captive customers, that means they have to drop their price a lot — and take a big loss — if they want to attract their competitors' loyal customers... which reduces the likelihood that a platform will try to steal its competitor's loyal customers. As a result, firms can charge even their loyal customers more; this is the solid green line in the figure below.

But when each firm can see who its competitors' loyal customers are, vampire attacks are possible — that is, each firm can offer a competitor's loyal customers the same price it's giving its own loyal customers. This in turn leads to much more competition over those customers, driving the price they face down far below even the price before loyalty programs were introduced. This is the solid red line in the figure below.

In short: Vampire attacks restore competition for loyal customers.

This theory broadly accords with what we've seen among NFT trading platforms, with vampire attacks leading to intense competition for customer loyalty. A caveat, however, is that it's not clear how sustainable the current vampire attack models are, especially since the legality and regulatory statuses of the strategies that many of them rely on are uncertain, and the relative success of such attacks may be different in scenarios where regulatory clarity and consistent enforcement exists.

Moreover, as Shai Bernstein and one of us (Kominers) discussed in a recent <u>Harvard Business Review</u> article, the competition induced by vampire attacks can only benefit consumers if it doesn't incentivize firms to engage in malbehavior (such as with centralized crypto finance platforms taking on excessive risk in order to offer higher rates of return).

That said, overall, our analysis suggests that vampire attacks may contribute to increased — and hopefully virtuous — platform competition. This has the potential to <u>reshape the digital platform landscape</u> in a way that's better for everyone.

* * *

P.S. Any ideas for alternate names for the "vampire attack" concept? The name is evocative, but doesn't on its face sound like something you'd necessarily want to help enable.

P.P.S. There is in fact an economics literature on that other type of vampire attack.

This article is an adaptation of a recent <u>Twitter thread</u> summarizing our new economic theory paper, "<u>A Simple Theory of Vampire Attacks</u>."

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